



06/25/14

## Technical Report for

### Confluence Energy

Confluence

EE3

Accutest Job Number: D58837

Sampling Dates: 06/09/14 - 06/11/14

#### Report to:

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Total number of pages in report: **89**



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.

# Table of Contents

-1-

<b>Section 1: Sample Summary .....</b>	<b>3</b>
<b>Section 2: Case Narrative/Conformance Summary .....</b>	<b>4</b>
<b>Section 3: Summary of Hits .....</b>	<b>7</b>
<b>Section 4: Sample Results .....</b>	<b>9</b>
<b>4.1:</b> D58837-1: COALMONT .....	10
<b>4.2:</b> D58837-1A: COALMONT .....	16
<b>4.3:</b> D58837-2: HEBRON 3-12H .....	18
<b>4.4:</b> D58837-2A: HEBRON 3-12H .....	24
<b>4.5:</b> D58837-3: HEBRON 2-07H .....	26
<b>4.6:</b> D58837-3A: HEBRON 2-07H .....	32
<b>Section 5: Misc. Forms .....</b>	<b>34</b>
<b>5.1:</b> Chain of Custody .....	35
<b>Section 6: GC/MS Volatiles - QC Data Summaries .....</b>	<b>36</b>
<b>6.1:</b> Method Blank Summary .....	37
<b>6.2:</b> Blank Spike Summary .....	38
<b>6.3:</b> Matrix Spike Summary .....	40
<b>6.4:</b> Duplicate Summary .....	42
<b>Section 7: GC/MS Semi-volatiles - QC Data Summaries .....</b>	<b>43</b>
<b>7.1:</b> Method Blank Summary .....	44
<b>7.2:</b> Blank Spike Summary .....	45
<b>7.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	46
<b>Section 8: GC Volatiles - QC Data Summaries .....</b>	<b>47</b>
<b>8.1:</b> Method Blank Summary .....	48
<b>8.2:</b> Blank Spike Summary .....	49
<b>8.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	50
<b>Section 9: GC Semi-volatiles - QC Data Summaries .....</b>	<b>51</b>
<b>9.1:</b> Method Blank Summary .....	52
<b>9.2:</b> Blank Spike Summary .....	53
<b>9.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	54
<b>Section 10: Metals Analysis - QC Data Summaries .....</b>	<b>55</b>
<b>10.1:</b> Prep QC MP13209: Hg .....	56
<b>10.2:</b> Prep QC MP13227: Ca,Mg,Na,Sodium Adsorption Ratio .....	60
<b>10.3:</b> Prep QC MP13236: Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn .....	70
<b>10.4:</b> Prep QC MP13237: As .....	80
<b>Section 11: General Chemistry - QC Data Summaries .....</b>	<b>85</b>
<b>11.1:</b> Method Blank and Spike Results Summary .....	86
<b>11.2:</b> Duplicate Results Summary .....	87
<b>11.3:</b> Matrix Spike Results Summary .....	88
<b>11.4:</b> Matrix Spike Duplicate Results Summary .....	89



Sample Summary

Confluence Energy

Job No: D58837

Confluence  
Project No: EE3

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D58837-1	06/09/14	15:00 MJM	06/17/14	SO	Soil	COALMONT
D58837-1A	06/09/14	15:00 MJM	06/17/14	SO	Soil	COALMONT
D58837-2	06/10/14	15:30 MJM	06/17/14	SO	Soil	HEBRON 3-12H
D58837-2A	06/10/14	15:30 MJM	06/17/14	SO	Soil	HEBRON 3-12H
D58837-3	06/11/14	16:00 MJM	06/17/14	SO	Soil	HEBRON 2-07H
D58837-3A	06/11/14	16:00 MJM	06/17/14	SO	Soil	HEBRON 2-07H

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

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Confluence Energy

**Job No** D58837

**Site:** Confluence

**Report Date** 6/25/2014 4:45:50 PM

On 06/17/2014, 3 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 22.7 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D58837 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

**Matrix:** SO

**Batch ID:** V5V1921

- All samples were analyzed within the recommended method holding time.
- Sample(s) D58737-1MS, D58814-3DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

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

**Matrix:** SO

**Batch ID:** OP10099

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D58837-1MS, D58837-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- The RPD(s) for the MS and MSD recoveries of Fluoranthene are outside control limits for sample OP10099-MSD. Variability of recovery may be due to sample matrix/homogeneity.
- D58837-3: Elevated reporting limit due to insufficient sample.
- D58837-2: Elevated reporting limit due to insufficient sample.

### Volatiles by GC By Method SW846 8015B

**Matrix:** SO

**Batch ID:** GGB1382

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58907-1BMS, D58907-1BMSD were used as the QC samples indicated.

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

**Matrix:** SO

**Batch ID:** OP10100

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D58915-1MS, D58915-1MSD 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:** MP13227

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58837-1AMSD, D58837-1ASDL, D58837-1AMS were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Calcium, Magnesium, Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

**Matrix:** SO

**Batch ID:** MP13236

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58907-1MS, D58907-1MSD, D58907-1SDL were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Chromium, Nickel, Silver, Zinc are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- The matrix spike duplicate (MSD) recovery(s) of Nickel, Zinc are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- The serial dilution RPD(s) for Cadmium, Lead are outside control limits for sample MP13236-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP13236-SD1 for Barium, Chromium, Copper, Nickel, Zinc: Serial dilution indicates possible matrix interference.

## Metals By Method SW846 6020A

**Matrix:** SO

**Batch ID:** MP13237

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58907-1MS, D58907-1MSD, D58907-1SDL were used as the QC samples for the metals analysis.

## Metals By Method SW846 7471B

**Matrix:** SO

**Batch ID:** MP13209

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58776-1MSD, D58776-1MS were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Mercury are outside control limits. Spike recovery indicates possible matrix interference.
- The RPD(s) for the MS and MSD recoveries of Mercury are outside control limits for sample MP13209-S2. High RPD due to possible sample matrix or nonhomogeneity.

## Wet Chemistry By Method ASTM D1498-76M

**Matrix:** SO

**Batch ID:** GN25214

- Sample(s) D58907-1DUP were used as the QC samples for the Redox Potential Vs H2 analysis.

## Wet Chemistry By Method SM2540G-2011 M

**Matrix:** SO

**Batch ID:** GN25153

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

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

<b>Matrix:</b> SO	<b>Batch ID:</b> GP12841
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- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58542-1DUP, D58542-1MS, D58542-1MSD were used as the QC samples for the Chromium, Hexavalent analysis.

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

<b>Matrix:</b> SO	<b>Batch ID:</b> R22193
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- The data for SW846 3060A/7196A M meets quality control requirements.
- D58837-1, -2, -3 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

<b>Matrix:</b> SO	<b>Batch ID:</b> R22194
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- The data for SW846 3060A/7196A M meets quality control requirements.

<b>Matrix:</b> SO	<b>Batch ID:</b> R22195
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- The data for SW846 3060A/7196A M meets quality control requirements.

### Wet Chemistry By Method SW846 9045D

<b>Matrix:</b> SO	<b>Batch ID:</b> GN25179
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- The following samples were run outside of holding time for method SW846 9045D: D58837-1, D58837-2, D58837-3

### Wet Chemistry By Method USDA HANDBOOK 60

<b>Matrix:</b> SO	<b>Batch ID:</b> MP13227
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- D58837-1A, -2A, -3A for Sodium Adsorption Ratio: Calculated as:  $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$

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.

## Summary of Hits

**Job Number:** D58837  
**Account:** Confluence Energy  
**Project:** Confluence  
**Collected:** 06/09/14 thru 06/11/14



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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### D58837-1 COALMONT

Chrysene	21.1	5.8	2.8	ug/kg	SW846 8270C BY SIM
Fluorene	24.0	5.8	4.2	ug/kg	SW846 8270C BY SIM
Naphthalene	33.9	5.8	3.5	ug/kg	SW846 8270C BY SIM
Pyrene	12.6	5.8	3.4	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)	231	54	40	mg/kg	SW846-8015B
Arsenic	6.6	0.068		mg/kg	SW846 6020A
Barium	2010	6.8		mg/kg	SW846 6010C
Cadmium	0.75	0.68		mg/kg	SW846 6010C
Chromium	13.5	0.68		mg/kg	SW846 6010C
Copper	25.5	0.68		mg/kg	SW846 6010C
Nickel	17.3	2.0		mg/kg	SW846 6010C
Zinc	51.9	2.0		mg/kg	SW846 6010C
Specific Conductivity	33900	1.0		umhos/cm	SM 2510B-2011 MOD
Chromium, Trivalent <sup>a</sup>	13.5	1.7		mg/kg	SW846 3060A/7196A M
Redox Potential Vs H2	407			mv	ASTM D1498-76M
pH	7.72			su	SW846 9045D

### D58837-1A COALMONT

Calcium	1800	2.0		mg/l	SW846 6010C
Magnesium	742	1.0		mg/l	SW846 6010C
Sodium	2920	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio <sup>b</sup>	14.6			ratio	USDA HANDBOOK 60

### D58837-2 HEBRON 3-12H

Benzo(a)anthracene <sup>c</sup>	33.8 J	39	19	ug/kg	SW846 8270C BY SIM
Benzo(b)fluoranthene <sup>c</sup>	28.5 J	39	24	ug/kg	SW846 8270C BY SIM
Chrysene <sup>c</sup>	134	39	19	ug/kg	SW846 8270C BY SIM
Fluorene <sup>c</sup>	197	39	28	ug/kg	SW846 8270C BY SIM
Pyrene <sup>c</sup>	128	39	23	ug/kg	SW846 8270C BY SIM
TPH-GRO (C6-C10)	25.5	23	11	mg/kg	SW846 8015B
TPH-DRO (C10-C28)	1330	64	48	mg/kg	SW846-8015B
Arsenic	7.4	0.079		mg/kg	SW846 6020A
Barium	1670	7.9		mg/kg	SW846 6010C
Cadmium	1.3	0.79		mg/kg	SW846 6010C
Chromium	7.2	0.79		mg/kg	SW846 6010C
Copper	18.3	0.79		mg/kg	SW846 6010C
Nickel	22.1	2.4		mg/kg	SW846 6010C
Zinc	55.1	2.4		mg/kg	SW846 6010C
Specific Conductivity	19000	1.0		umhos/cm	SM 2510B-2011 MOD
Chromium, Trivalent <sup>a</sup>	7.2	1.8		mg/kg	SW846 3060A/7196A M
Redox Potential Vs H2	473			mv	ASTM D1498-76M

## Summary of Hits

**Job Number:** D58837  
**Account:** Confluence Energy  
**Project:** Confluence  
**Collected:** 06/09/14 thru 06/11/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
pH		8.01			su	SW846 9045D
<b>D58837-2A</b>	<b>HEBRON 3-12H</b>					
Calcium		493	2.0		mg/l	SW846 6010C
Magnesium		72.6	1.0		mg/l	SW846 6010C
Sodium		1200	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio <sup>b</sup>		13.3			ratio	USDA HANDBOOK 60
<b>D58837-3</b>	<b>HEBRON 2-07H</b>					
Benzo(a)anthracene <sup>c</sup>		19.4 J	35	17	ug/kg	SW846 8270C BY SIM
Chrysene <sup>c</sup>		59.3	35	17	ug/kg	SW846 8270C BY SIM
Fluoranthene <sup>c</sup>		29.2 J	35	20	ug/kg	SW846 8270C BY SIM
Naphthalene <sup>c</sup>		206	35	21	ug/kg	SW846 8270C BY SIM
Pyrene <sup>c</sup>		109	35	21	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)		357	57	42	mg/kg	SW846-8015B
Arsenic		6.0	0.063		mg/kg	SW846 6020A
Barium		1060	0.63		mg/kg	SW846 6010C
Cadmium		1.5	0.63		mg/kg	SW846 6010C
Chromium		9.1	0.63		mg/kg	SW846 6010C
Copper		47.2	0.63		mg/kg	SW846 6010C
Lead		3.2	3.1		mg/kg	SW846 6010C
Nickel		12.6	1.9		mg/kg	SW846 6010C
Zinc		55.8	1.9		mg/kg	SW846 6010C
Specific Conductivity		8690	1.0		umhos/cm	SM 2510B-2011 MOD
Chromium, Trivalent <sup>a</sup>		9.1	1.6		mg/kg	SW846 3060A/7196A M
Redox Potential Vs H2		128			mv	ASTM D1498-76M
pH		7.90			su	SW846 9045D
<b>D58837-3A</b>	<b>HEBRON 2-07H</b>					
Calcium		287	2.0		mg/l	SW846 6010C
Magnesium		53.8	1.0		mg/l	SW846 6010C
Sodium		790	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio <sup>b</sup>		11.2			ratio	USDA HANDBOOK 60

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

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

(c) Elevated reporting limit due to insufficient sample.



Sample Results

Report of Analysis

## Report of Analysis

<b>Client Sample ID:</b>	COALMONT	<b>Date Sampled:</b>	06/09/14
<b>Lab Sample ID:</b>	D58837-1	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	74.3
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V32347.D	1	06/17/14	JL	n/a	n/a	V5V1921
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	84	32	ug/kg	
108-88-3	Toluene	ND	170	84	ug/kg	
100-41-4	Ethylbenzene	ND	170	32	ug/kg	
1330-20-7	Xylene (total)	ND	340	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	101%		64-130%
460-00-4	4-Bromofluorobenzene	83%		62-131%
17060-07-0	1,2-Dichloroethane-D4	91%		70-130%

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

<b>Client Sample ID:</b>	COALMONT	<b>Date Sampled:</b>	06/09/14
<b>Lab Sample ID:</b>	D58837-1	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	74.3
<b>Method:</b>	SW846 8270C BY SIM SW846 3546		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G20195.D	1	06/24/14	JL	06/19/14	OP10099	E3G1003
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 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	5.8	4.5	ug/kg	
120-12-7	Anthracene	ND	5.8	4.0	ug/kg	
56-55-3	Benzo(a)anthracene	ND	5.8	2.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	5.8	3.6	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	5.8	2.9	ug/kg	
50-32-8	Benzo(a)pyrene	ND	5.8	2.8	ug/kg	
218-01-9	Chrysene	21.1	5.8	2.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	5.8	2.8	ug/kg	
206-44-0	Fluoranthene	ND	5.8	3.3	ug/kg	
86-73-7	Fluorene	24.0	5.8	4.2	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.8	2.8	ug/kg	
91-20-3	Naphthalene	33.9	5.8	3.5	ug/kg	
129-00-0	Pyrene	12.6	5.8	3.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		10-159%
321-60-8	2-Fluorobiphenyl	76%		31-130%
1718-51-0	Terphenyl-d14	81%		48-139%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

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J = Indicates an estimated value

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N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	COALMONT	<b>Date Sampled:</b>	06/09/14
<b>Lab Sample ID:</b>	D58837-1	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	74.3
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB25252.D	1	06/19/14	EP	n/a	n/a	GGB1382
Run #2							

	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	17	8.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	91%		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

Page 1 of 1

<b>Client Sample ID:</b>	COALMONT		
<b>Lab Sample ID:</b>	D58837-1	<b>Date Sampled:</b>	06/09/14
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	06/17/14
<b>Method:</b>	SW846-8015B SW846 3546	<b>Percent Solids:</b>	74.3
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD32578.D	1	06/21/14	JS	06/19/14	OP10100	GFD1553
Run #2							

	Initial Weight	Final Volume
Run #1	5.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	231	54	40	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	102%		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

<b>Client Sample ID:</b>	COALMONT	<b>Date Sampled:</b>	06/09/14
<b>Lab Sample ID:</b>	D58837-1	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	74.3
<b>Project:</b>	Confluence		

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.6	0.068	mg/kg	5	06/19/14	06/23/14 NT	SW846 6020A <sup>3</sup>	SW846 3050B <sup>7</sup>
Barium	2010	6.8	mg/kg	10	06/19/14	06/24/14 KV	SW846 6010C <sup>4</sup>	SW846 3050B <sup>6</sup>
Cadmium	0.75	0.68	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Chromium	13.5	0.68	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Copper	25.5	0.68	mg/kg	1	06/19/14	06/23/14 KV	SW846 6010C <sup>4</sup>	SW846 3050B <sup>6</sup>
Lead	< 3.4	3.4	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Mercury	< 0.061	0.061	mg/kg	1	06/18/14	06/18/14 KV	SW846 7471B <sup>1</sup>	SW846 7471B <sup>5</sup>
Nickel	17.3	2.0	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Selenium	< 3.4	3.4	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Silver	< 2.0	2.0	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Zinc	51.9	2.0	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>

(1) Instrument QC Batch: MA4888

(2) Instrument QC Batch: MA4899

(3) Instrument QC Batch: MA4908

(4) Instrument QC Batch: MA4910

(5) Prep QC Batch: MP13209

(6) Prep QC Batch: MP13236

(7) Prep QC Batch: MP13237

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	COALMONT	<b>Date Sampled:</b>	06/09/14
<b>Lab Sample ID:</b>	D58837-1	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	74.3
<b>Project:</b>	Confluence		

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>%solids</b>							
Solids, Percent	74.3		%	1	06/17/14	SWT	SM2540G-2011 M
<b>prep: DEPT.OF AG, BOOK N9</b>							
Specific Conductivity	33900	1.0	umhos/cm	1	06/19/14	AK	SM 2510B-2011 MOD
Chromium, Hexavalent	< 1.0	1.0	mg/kg	1	06/17/14	RW	SW846 3060A/7196A
Chromium, Trivalent <sup>a</sup>	13.5	1.7	mg/kg	1	06/20/14 01:06	KV	SW846 3060A/7196A M
Redox Potential Vs H2	407		mv	1	06/20/14	JD	ASTM D1498-76M
pH	7.72		su	1	06/18/14 16:00	RW	SW846 9045D

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

RL = Reporting Limit

Report of Analysis

Client Sample ID: COALMONT  
Lab Sample ID: D58837-1A  
Matrix: SO - Soil  
Project: Confluence

Date Sampled: 06/09/14  
Date Received: 06/17/14  
Percent Solids: 74.3

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	1800	2.0	mg/l	1	06/19/14	06/19/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Magnesium	742	1.0	mg/l	1	06/19/14	06/19/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Sodium	2920	2.0	mg/l	1	06/19/14	06/20/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>

(1) Instrument QC Batch: MA4899  
(2) Prep QC Batch: MP13227

RL = Reporting Limit

4.2  
4



Report of Analysis

Client Sample ID: COALMONT  
Lab Sample ID: D58837-1A  
Matrix: SO - Soil  
Project: Confluence

Date Sampled: 06/09/14  
Date Received: 06/17/14  
Percent Solids: 74.3

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio <sup>a</sup>	14.6		ratio	1	06/20/14 10:01	KV	USDA HANDBOOK 60

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

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V32348.D	1	06/17/14	JL	n/a	n/a	V5V1921
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	110	43	ug/kg	
108-88-3	Toluene	ND	230	110	ug/kg	
100-41-4	Ethylbenzene	ND	230	43	ug/kg	
1330-20-7	Xylene (total)	ND	450	230	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		64-130%
460-00-4	4-Bromofluorobenzene	92%		62-131%
17060-07-0	1,2-Dichloroethane-D4	102%		70-130%

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

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Method:</b>	SW846 8270C BY SIM SW846 3546		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	3G20198.D	1	06/25/14	JL	06/19/14	OP10099	E3G1003
Run #2							

	Initial Weight	Final Volume
Run #1	5.44 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	39	30	ug/kg	
120-12-7	Anthracene	ND	39	27	ug/kg	
56-55-3	Benzo(a)anthracene	33.8	39	19	ug/kg	J
205-99-2	Benzo(b)fluoranthene	28.5	39	24	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	39	19	ug/kg	
50-32-8	Benzo(a)pyrene	ND	39	19	ug/kg	
218-01-9	Chrysene	134	39	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	19	ug/kg	
206-44-0	Fluoranthene	ND	39	22	ug/kg	
86-73-7	Fluorene	197	39	28	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	19	ug/kg	
91-20-3	Naphthalene	ND	39	23	ug/kg	
129-00-0	Pyrene	128	39	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		10-159%
321-60-8	2-Fluorobiphenyl	83%		31-130%
1718-51-0	Terphenyl-d14	82%		48-139%

(a) Elevated reporting limit due to insufficient sample.

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

Page 1 of 1

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB25253.D	1	06/19/14	EP	n/a	n/a	GGB1382
Run #2							

	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)	25.5	23	11	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	107%		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

Page 1 of 1

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Method:</b>	SW846-8015B SW846 3546		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD32580.D	1	06/21/14	JS	06/19/14	OP10100	GFD1553
Run #2							

	Initial Weight	Final Volume
Run #1	5.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1330	64	48	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	108%		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

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Project:</b>	Confluence		

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	7.4	0.079	mg/kg	5	06/19/14	06/23/14 NT	SW846 6020A <sup>3</sup>	SW846 3050B <sup>7</sup>
Barium	1670	7.9	mg/kg	10	06/19/14	06/24/14 KV	SW846 6010C <sup>4</sup>	SW846 3050B <sup>6</sup>
Cadmium	1.3	0.79	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Chromium	7.2	0.79	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Copper	18.3	0.79	mg/kg	1	06/19/14	06/23/14 KV	SW846 6010C <sup>4</sup>	SW846 3050B <sup>6</sup>
Lead	< 3.9	3.9	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Mercury	< 0.072	0.072	mg/kg	1	06/18/14	06/18/14 KV	SW846 7471B <sup>1</sup>	SW846 7471B <sup>5</sup>
Nickel	22.1	2.4	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Selenium	< 3.9	3.9	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Silver	< 2.4	2.4	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Zinc	55.1	2.4	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>

(1) Instrument QC Batch: MA4888

(2) Instrument QC Batch: MA4899

(3) Instrument QC Batch: MA4908

(4) Instrument QC Batch: MA4910

(5) Prep QC Batch: MP13209

(6) Prep QC Batch: MP13236

(7) Prep QC Batch: MP13237

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Project:</b>	Confluence		

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>%solids</b>							
Solids, Percent	61.2		%	1	06/17/14	SWT	SM2540G-2011 M
<b>prep: DEPT.OF AG, BOOK N9</b>							
Specific Conductivity	19000	1.0	umhos/cm	1	06/19/14	AK	SM 2510B-2011 MOD
Chromium, Hexavalent	< 1.0	1.0	mg/kg	1	06/17/14	RW	SW846 3060A/7196A
Chromium, Trivalent <sup>a</sup>	7.2	1.8	mg/kg	1	06/20/14 01:18	KV	SW846 3060A/7196A M
Redox Potential Vs H2	473		mv	1	06/20/14	JD	ASTM D1498-76M
pH	8.01		su	1	06/18/14 16:00	RW	SW846 9045D

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

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2A	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Project:</b>	Confluence		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	493	2.0	mg/l	1	06/19/14	06/19/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Magnesium	72.6	1.0	mg/l	1	06/19/14	06/19/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Sodium	1200	2.0	mg/l	1	06/19/14	06/20/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>

(1) Instrument QC Batch: MA4899  
(2) Prep QC Batch: MP13227

RL = Reporting Limit



Report of Analysis

<b>Client Sample ID:</b>	HEBRON 3-12H	<b>Date Sampled:</b>	06/10/14
<b>Lab Sample ID:</b>	D58837-2A	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	61.2
<b>Project:</b>	Confluence		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio <sup>a</sup>	13.3		ratio	1	06/20/14 10:58	KV	USDA HANDBOOK 60

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

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b>	HEBRON 2-07H	<b>Date Sampled:</b>	06/11/14
<b>Lab Sample ID:</b>	D58837-3	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.5
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V32349.D	1	06/17/14	JL	n/a	n/a	V5V1921
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	92	35	ug/kg	
108-88-3	Toluene	ND	180	92	ug/kg	
100-41-4	Ethylbenzene	ND	180	35	ug/kg	
1330-20-7	Xylene (total)	ND	370	180	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		64-130%
460-00-4	4-Bromofluorobenzene	92%		62-131%
17060-07-0	1,2-Dichloroethane-D4	95%		70-130%

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

<b>Client Sample ID:</b>	HEBRON 2-07H	<b>Date Sampled:</b>	06/11/14
<b>Lab Sample ID:</b>	D58837-3	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.5
<b>Method:</b>	SW846 8270C BY SIM SW846 3546		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	3G20199.D	1	06/25/14	JL	06/19/14	OP10099	E3G1003
Run #2							

	Initial Weight	Final Volume
Run #1	5.21 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	35	27	ug/kg	
120-12-7	Anthracene	ND	35	25	ug/kg	
56-55-3	Benzo(a)anthracene	19.4	35	17	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	35	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	35	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	35	17	ug/kg	
218-01-9	Chrysene	59.3	35	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	17	ug/kg	
206-44-0	Fluoranthene	29.2	35	20	ug/kg	J
86-73-7	Fluorene	ND	35	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	35	17	ug/kg	
91-20-3	Naphthalene	206	35	21	ug/kg	
129-00-0	Pyrene	109	35	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		10-159%
321-60-8	2-Fluorobiphenyl	75%		31-130%
1718-51-0	Terphenyl-d14	79%		48-139%

(a) Elevated reporting limit due to insufficient sample.

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

Page 1 of 1

<b>Client Sample ID:</b>	HEBRON 2-07H	<b>Date Sampled:</b>	06/11/14
<b>Lab Sample ID:</b>	D58837-3	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.5
<b>Method:</b>	SW846 8015B		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB25254.D	1	06/19/14	EP	n/a	n/a	GGB1382
Run #2							

	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	18	9.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	106%		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

<b>Client Sample ID:</b>	HEBRON 2-07H	<b>Date Sampled:</b>	06/11/14
<b>Lab Sample ID:</b>	D58837-3	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.5
<b>Method:</b>	SW846-8015B SW846 3546		
<b>Project:</b>	Confluence		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD32582.D	1	06/21/14	JS	06/19/14	OP10100	GFD1553
Run #2							

	Initial Weight	Final Volume
Run #1	5.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	357	57	42	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	96%		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: HEBRON 2-07H

Lab Sample ID: D58837-3

Matrix: SO - Soil

Project: Confluence

Date Sampled: 06/11/14

Date Received: 06/17/14

Percent Solids: 70.5

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.0	0.063	mg/kg	5	06/19/14	06/23/14 NT	SW846 6020A <sup>3</sup>	SW846 3050B <sup>7</sup>
Barium	1060	0.63	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Cadmium	1.5	0.63	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Chromium	9.1	0.63	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Copper	47.2	0.63	mg/kg	1	06/19/14	06/23/14 KV	SW846 6010C <sup>4</sup>	SW846 3050B <sup>6</sup>
Lead	3.2	3.1	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Mercury	< 0.064	0.064	mg/kg	1	06/18/14	06/18/14 KV	SW846 7471B <sup>1</sup>	SW846 7471B <sup>5</sup>
Nickel	12.6	1.9	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Selenium	< 3.1	3.1	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Silver	< 1.9	1.9	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>
Zinc	55.8	1.9	mg/kg	1	06/19/14	06/20/14 KV	SW846 6010C <sup>2</sup>	SW846 3050B <sup>6</sup>

(1) Instrument QC Batch: MA4888

(2) Instrument QC Batch: MA4899

(3) Instrument QC Batch: MA4908

(4) Instrument QC Batch: MA4910

(5) Prep QC Batch: MP13209

(6) Prep QC Batch: MP13236

(7) Prep QC Batch: MP13237

RL = Reporting Limit

## Report of Analysis

Client Sample ID: HEBRON 2-07H

Lab Sample ID: D58837-3

Matrix: SO - Soil

Project: Confluence

Date Sampled: 06/11/14

Date Received: 06/17/14

Percent Solids: 70.5

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	70.5		%	1	06/17/14	SWT	SM2540G-2011 M
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	8690	1.0	umhos/cm	1	06/19/14	AK	SM 2510B-2011 MOD
Chromium, Hexavalent	< 1.0	1.0	mg/kg	1	06/17/14	RW	SW846 3060A/7196A
Chromium, Trivalent <sup>a</sup>	9.1	1.6	mg/kg	1	06/20/14 01:29	KV	SW846 3060A/7196A M
Redox Potential Vs H2	128		mv	1	06/20/14	JD	ASTM D1498-76M
pH	7.90		su	1	06/18/14 16:00	RW	SW846 9045D

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

RL = Reporting Limit

Report of Analysis

<b>Client Sample ID:</b>	HEBRON 2-07H	<b>Date Sampled:</b>	06/11/14
<b>Lab Sample ID:</b>	D58837-3A	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.5
<b>Project:</b>	Confluence		

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	287	2.0	mg/l	1	06/19/14	06/19/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Magnesium	53.8	1.0	mg/l	1	06/19/14	06/19/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Sodium	790	2.0	mg/l	1	06/19/14	06/20/14 KV	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>

(1) Instrument QC Batch: MA4899  
(2) Prep QC Batch: MP13227

RL = Reporting Limit



Report of Analysis

<b>Client Sample ID:</b>	HEBRON 2-07H	<b>Date Sampled:</b>	06/11/14
<b>Lab Sample ID:</b>	D58837-3A	<b>Date Received:</b>	06/17/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.5
<b>Project:</b>	Confluence		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio <sup>a</sup>	11.2		ratio	1	06/20/14 11:04	KV	USDA HANDBOOK 60

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

RL = Reporting Limit

## Misc. Forms

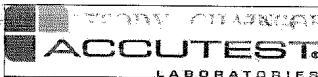
5

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## CHAIN OF CUSTODY

PAGE

PAGE \_\_\_\_ OF \_\_\_\_

4036 Youngfield Street, Wheat Ridge, CO 80033  
TEL: 303-425-6021 FAX: 303-425-6854  
www.accutest.com

FED-EX Tracking #		Bottle Order Control #	
Accutest Quota #		Accutest Job # <b>D58837</b>	
Client / Reporting Information		Project Information	
Company Name <b>Confluence Energy</b>		Project Name: <b>EE3</b>	
Street Address <b>1809 Hwy 9 - PO Box 1387</b>		Street	
City <b>Kremmling Colorado</b>		City	
Project Contact <b>Mark</b>		Project #	
Phone # <b>970-724-9839</b>		Client Purchase Order #	
Sampler(s) Name(s)		Project Manager	
Field ID / Point of Collection		Attention:	
MECH/DI Vial #		Collection	
Date		Time	
Sampled by		Matrix	
# of bottles		Number of preserved bottles	
H2O		H2O2	
H2O3		H2O4	
H2O5		H2O6	
H2O7		H2O8	
H2O9		H2O10	
H2O11		H2O12	
H2O13		H2O14	
H2O15		H2O16	
H2O17		H2O18	
H2O19		H2O20	
H2O21		H2O22	
H2O23		H2O24	
H2O25		H2O26	
H2O27		H2O28	
H2O29		H2O30	
H2O31		H2O32	
H2O33		H2O34	
H2O35		H2O36	
H2O37		H2O38	
H2O39		H2O40	
H2O41		H2O42	
H2O43		H2O44	
H2O45		H2O46	
H2O47		H2O48	
H2O49		H2O50	
H2O51		H2O52	
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H2O55		H2O56	
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H2O59		H2O60	
H2O61		H2O62	
H2O63		H2O64	
H2O65		H2O66	
H2O67		H2O68	
H2O69		H2O70	
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H2O73		H2O74	
H2O75		H2O76	
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H2O137		H2O138	
H2O139		H2O140	
H2O141		H2O142	
H2O143		H2O144	
H2O145		H2O146	
H2O147		H2O148	
H2O149		H2O150	
H2O151		H2O152	
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H2O221		H2O222	
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H2O663		H2O664	
H2O665		H2O666	
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H2O669		H2O670	
H2O671		H2O672	
H2O673		H2O674	
H2O675		H2O676	
H2O677		H2O678	
H2O679		H2O680	
H2O681		H2O682	
H2O683		H2O684	
H2O685		H2O686	
H2O687		H2O688	
H2O689		H2O690	
H2O691		H2O692	
H2O693		H2O694	
H2O695		H2O696	
H2O697		H2O698	
H2O699		H2O700	
H2O701		H2O702	
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H2O707		H2O708	
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H2O715		H2O716	
H2O717		H2O718	
H2O719		H2O720	
H2O721		H2O722	
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H2O725		H2O726	
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H2O729		H2O730	
H2O731		H2O732	
H2O733		H2O734	
H2O735		H2O736	
H2O737		H2O738	

## GC/MS Volatiles

### QC Data Summaries

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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:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1921-MB	5V32333.D	1	06/17/14	JL	n/a	n/a	V5V1921

The QC reported here applies to the following samples:

Method: SW846 8260B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	50	19	ug/kg	
100-41-4	Ethylbenzene	ND	100	19	ug/kg	
108-88-3	Toluene	ND	100	50	ug/kg	
1330-20-7	Xylene (total)	ND	200	100	ug/kg	

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	101% 64-130%
460-00-4	4-Bromofluorobenzene	85% 62-131%
17060-07-0	1,2-Dichloroethane-D4	97% 70-130%

## Blank Spike Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1921-BS	5V32334.D	1	06/17/14	JL	n/a	n/a	V5V1921

The QC reported here applies to the following samples:

Method: SW846 8260B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	2500	2720	109	70-130
100-41-4	Ethylbenzene	2500	2950	118	70-130
108-88-3	Toluene	2500	2780	111	70-130
1330-20-7	Xylene (total)	7500	8960	119	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	98%	64-130%
460-00-4	4-Bromofluorobenzene	109%	62-131%
17060-07-0	1,2-Dichloroethane-D4	89%	70-130%

\* = Outside of Control Limits.

## Blank Spike Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V1921-BS	5V32335.D	1	06/17/14	JL	n/a	n/a	V5V1921

The QC reported here applies to the following samples:

Method: SW846 8260B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	102%	64-130%
460-00-4	4-Bromofluorobenzene	99%	62-131%
17060-07-0	1,2-Dichloroethane-D4	91%	70-130%

\* = Outside of Control Limits.

## Matrix Spike Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D58737-1MS	5V32336.D	1	06/17/14	JL	n/a	n/a	V5V1921
D58737-1	5V32338.D	1	06/17/14	JL	n/a	n/a	V5V1921

The QC reported here applies to the following samples:

Method: SW846 8260B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	D58737-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Limits
71-43-2	Benzene	120		3400	3750	107	64-139
100-41-4	Ethylbenzene	2320		3400	5940	107	68-136
108-88-3	Toluene	ND		3400	3550	104	60-130
1330-20-7	Xylene (total)	ND		10200	10800	106	58-142

CAS No.	Surrogate Recoveries	MS	D58737-1	Limits
2037-26-5	Toluene-D8	98%	99%	64-130%
460-00-4	4-Bromofluorobenzene	97%	104%	62-131%
17060-07-0	1,2-Dichloroethane-D4	79%	82%	70-130%

\* = Outside of Control Limits.



## Matrix Spike Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D58737-1MS	5V32337.D	1	06/17/14	JL	n/a	n/a	V5V1921
D58737-1	5V32338.D	1	06/17/14	JL	n/a	n/a	V5V1921

The QC reported here applies to the following samples:

Method: SW846 8260B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	D58737-1 ug/kg	Spike Q	MS ug/kg	MS %	Limits
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CAS No.	Surrogate Recoveries	MS	D58737-1	Limits
2037-26-5	Toluene-D8	96%	99%	64-130%
460-00-4	4-Bromofluorobenzene	106%	104%	62-131%
17060-07-0	1,2-Dichloroethane-D4	80%	82%	70-130%

\* = Outside of Control Limits.

## Duplicate Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D58814-3DUP	5V32340.D	1	06/17/14	JL	n/a	n/a	V5V1921
D58814-3	5V32339.D	1	06/17/14	JL	n/a	n/a	V5V1921

The QC reported here applies to the following samples:

Method: SW846 8260B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	D58814-3 ug/kg	DUP Q	ug/kg	Q	RPD	Limits
71-43-2	Benzene	ND		ND		nc	30
100-41-4	Ethylbenzene	ND		ND		nc	30
108-88-3	Toluene	ND		ND		nc	30
1330-20-7	Xylene (total)	ND		ND		nc	30

CAS No.	Surrogate Recoveries	DUP	D58814-3	Limits
2037-26-5	Toluene-D8	97%	94%	64-130%
460-00-4	4-Bromofluorobenzene	100%	104%	62-131%
17060-07-0	1,2-Dichloroethane-D4	82%	84%	70-130%

\* = Outside of Control Limits.

## GC/MS Semi-volatiles

### QC Data Summaries

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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:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10099-MB	3G20088.D	1	06/20/14	JL	06/19/14	OP10099	E3G999

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.3	3.3	ug/kg	
120-12-7	Anthracene	ND	4.3	3.0	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4.3	2.1	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.3	2.7	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.3	2.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.3	2.1	ug/kg	
218-01-9	Chrysene	ND	4.3	2.1	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.3	2.1	ug/kg	
206-44-0	Fluoranthene	ND	4.3	2.4	ug/kg	
86-73-7	Fluorene	ND	4.3	3.1	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.3	2.1	ug/kg	
91-20-3	Naphthalene	ND	4.3	2.6	ug/kg	
129-00-0	Pyrene	ND	4.3	2.5	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	92% 10-159%
321-60-8	2-Fluorobiphenyl	60% 31-130%
1718-51-0	Terphenyl-d14	83% 48-139%

## Blank Spike Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10099-BS	3G20089.D	1	06/20/14	JL	06/19/14	OP10099	E3G999

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	83.3	57.5	69	69-130
120-12-7	Anthracene	83.3	68.2	82	57-130
56-55-3	Benzo(a)anthracene	83.3	86.9	104	60-131
205-99-2	Benzo(b)fluoranthene	83.3	85.6	103	48-139
207-08-9	Benzo(k)fluoranthene	83.3	55.4	66	51-136
50-32-8	Benzo(a)pyrene	83.3	71.7	86	66-130
218-01-9	Chrysene	83.3	76.8	92	70-130
53-70-3	Dibenzo(a,h)anthracene	83.3	79.3	95	70-130
206-44-0	Fluoranthene	83.3	76.0	91	62-130
86-73-7	Fluorene	83.3	68.5	82	62-130
193-39-5	Indeno(1,2,3-cd)pyrene	83.3	78.6	94	70-130
91-20-3	Naphthalene	83.3	68.9	83	63-130
129-00-0	Pyrene	83.3	78.0	94	61-130

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	96%	10-159%
321-60-8	2-Fluorobiphenyl	63%	31-130%
1718-51-0	Terphenyl-d14	86%	48-139%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10099-MS	3G20196.D	1	06/24/14	JL	06/19/14	OP10099	E3G1003
OP10099-MSD	3G20197.D	1	06/24/14	JL	06/19/14	OP10099	E3G1003
D58837-1	3G20195.D	1	06/24/14	JL	06/19/14	OP10099	E3G1003

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D58837-1, D58837-2, D58837-3

CAS No.	Compound	D58837-1 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	112	103	92	112	95.2	85	8	10-161/30
120-12-7	Anthracene	ND	112	99.7	89	112	94.9	85	5	10-194/30
56-55-3	Benzo(a)anthracene	ND	112	110	99	112	113	101	3	17-165/30
205-99-2	Benzo(b)fluoranthene	ND	112	142	127	112	149	133	5	18-149/30
207-08-9	Benzo(k)fluoranthene	ND	112	90.5	81	112	73.4	65	21	12-153/30
50-32-8	Benzo(a)pyrene	ND	112	107	96	112	99.6	89	7	21-144/30
218-01-9	Chrysene	21.1	112	132	99	112	114	83	15	13-160/30
53-70-3	Dibenzo(a,h)anthracene	ND	112	106	95	112	101	90	5	24-145/30
206-44-0	Fluoranthene	ND	112	150	134	112	106	95	34* a	21-153/30
86-73-7	Fluorene	24.0	112	137	101	112	123	88	11	10-232/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND	112	108	97	112	101	90	7	19-148/30
91-20-3	Naphthalene	33.9	112	163	116	112	131	87	22	10-214/30
129-00-0	Pyrene	12.6	112	148	121	112	119	95	22	10-173/30

CAS No.	Surrogate Recoveries	MS	MSD	D58837-1	Limits
4165-60-0	Nitrobenzene-d5	78%	71%	71%	10-159%
321-60-8	2-Fluorobiphenyl	85%	79%	76%	31-130%
1718-51-0	Terphenyl-d14	80%	80%	81%	48-139%

(a) Variability of recovery may be due to sample matrix/homogeneity.

\* = Outside of Control Limits.

## GC Volatiles

### QC Data Summaries

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Includes the following where applicable:

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

Method Blank Summary

Job Number: D58837  
Account: CONECOK Confluence Energy  
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1382-MB	GB25244.D	1	06/19/14	EP	n/a	n/a	GGB1382

The QC reported here applies to the following samples: Method: SW846 8015B

D58837-1, D58837-2, D58837-3

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	101% 60-140%



## Blank Spike Summary

Page 1 of 1

**Job Number:** D58837  
**Account:** CONECOK Confluence Energy  
**Project:** Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1382-BS	GB25243.D	1	06/19/14	EP	n/a	n/a	GGB1382

The QC reported here applies to the following samples:

Method: SW846 8015B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	109	105	97	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	104%	60-140%

\* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D58837  
Account: CONECOK Confluence Energy  
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D58907-1BMS	GB25246.D	1	06/19/14	EP	n/a	n/a	GGB1382
D58907-1BMSD	GB25247.D	1	06/19/14	EP	n/a	n/a	GGB1382
D58907-1B	GB25245.D	1	06/19/14	EP	n/a	n/a	GGB1382

The QC reported here applies to the following samples: Method: SW846 8015B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	D58907-1B 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)	13.9		143	145	92	143	150	95	3	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D58907-1B	Limits
120-82-1	1,2,4-Trichlorobenzene	101%	108%	105%	60-140%

\* = Outside of Control Limits.

## GC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

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

Method Blank Summary

Job Number: D58837  
Account: CONECOK Confluence Energy  
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10100-MB	FH021967.D	1	06/19/14	JS	06/19/14	OP10100	GFH1016

The QC reported here applies to the following samples: Method: SW846-8015B  
D58837-1, D58837-2, D58837-3

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	60% 20-130%

9.1.1  
9

Blank Spike Summary

Job Number: D58837  
Account: CONECOK Confluence Energy  
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10100-BS	FH021969.D	1	06/19/14	JS	06/19/14	OP10100	GFH1016

The QC reported here applies to the following samples: Method: SW846-8015B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	167	84.6	51	42-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	71%	20-130%

\* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D58837  
Account: CONECOK Confluence Energy  
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP10100-MS	FD32489.D	10	06/20/14	JS	06/19/14	OP10100	GFD1552
OP10100-MSD	FD32491.D	10	06/20/14	JS	06/19/14	OP10100	GFD1552
D58915-1	FD32493.D	10	06/20/14	JS	06/19/14	OP10100	GFD1552

The QC reported here applies to the following samples: Method: SW846-8015B

D58837-1, D58837-2, D58837-3

CAS No.	Compound	D58915-1 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)	1120		169	1230	65	169	1300	107	6	20-150/30

CAS No.	Surrogate Recoveries	MS	MSD	D58915-1	Limits
84-15-1	o-Terphenyl	92%	99%	90%	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: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13209  
Matrix Type: SOLID

Methods: SW846 7471B  
Units: mg/kg

Prep Date: 06/18/14

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.083	.00088	.0067	-0.00062	<0.083

Associated samples MP13209: D58837-1, D58837-2, D58837-3

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: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13209  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 06/18/14

Metal	D58776-1 Original MS	Spikelot HGWSR1	% Rec	QC Limits
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Mercury 1.1 2.0 0.424 212.3N(a) 75-125

Associated samples MP13209: D58837-1, D58837-2, D58837-3

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  
 (a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13209  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 06/18/14

Metal	D58776-1 Original	MSD	Spikelot HGWSR1	% Rec	MSD RPD	QC Limit
Mercury	1.1	1.6	0.445	112.4	22.2 (a)	20

Associated samples MP13209: D58837-1, D58837-2, D58837-3

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  
 (a) High RPD due to possible sample matrix or nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13209  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 06/18/14

Metal	BSP Result	Spikelot HGWSR1	% Rec	QC Limits
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Mercury	0.31	0.333	93.0	80-120
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Associated samples MP13209: D58837-1, D58837-2, D58837-3

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

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13227  
Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

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	-11	<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	39.0	<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	-14	<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 MP13227: D58837-1A, D58837-2A, D58837-3A

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

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

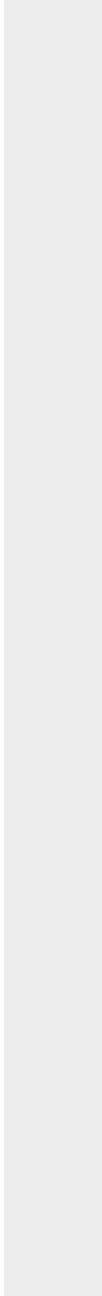
QC Batch ID: MP13227  
Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

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



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13227  
Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

Metal	D58837-1A Original MS		Spikelot ICPAL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	1800000	2120000	125000	256.0(a)	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	742000	980000	125000	190.4(a)	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	2920000	3240000	125000	256.0(a)	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP13227: D58837-1A, D58837-2A, D58837-3A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13227  
 Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

Metal	D58837-1A Original MS	SpikeLot ICPALL2	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13227  
Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

Metal	D58837-1A Original	MSD	Spikelot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium	1800000	2030000	125000	184.0(a)	4.3	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium	742000	922000	125000	144.0(a)	6.1	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium	2920000	3290000	125000	296.0(a)	1.5	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP13227: D58837-1A, D58837-2A, D58837-3A

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



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13227  
 Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

Metal	D58837-1A Original MSD	Spike lot ICPALL2 % Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D58837

Account: CONECOK - Confluence Energy

Project: Confluence

QC Batch ID: MP13227

Methods: SW846 6010C, USDA HANDBOOK 60

Matrix Type: AQUEOUS

Units: ug/l

Prep Date:

06/19/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	119000	125000	95.2	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	127000	125000	101.6	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	119000	125000	95.2	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP13227: D58837-1A, D58837-2A, D58837-3A

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

## 10.2.3 10

Account: CONECOK - Confluence Energy  
Project: Confluence

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

Prep Date: 06/19/14

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

# SERIAL DILUTION RESULTS SUMMARY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13227  
Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

Metal	D58837-1A Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	361000	381000	5.7	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	148000	156000	4.9	0-10
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	626000	632000	8.1	0-10
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP13227: D58837-1A, D58837-2A, D58837-3A

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

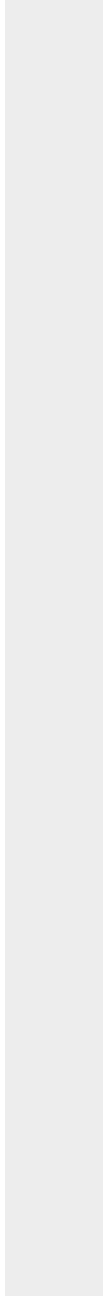
QC Batch ID: MP13227  
Matrix Type: AQUEOUS

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

Prep Date: 06/19/14

	D58837-1A		QC
Metal	Original SDL 1:5	%DIF	Limits

(anr) Analyte not requested



BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13236  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 06/19/14

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	0.070	<1.0
Beryllium	1.0	.09	.06		
Boron	5.0	.08	.16		
Cadmium	1.0	.02	.28	-0.010	<1.0
Calcium	40	.24	6.8		
Chromium	1.0	.03	.03	0.020	<1.0
Cobalt	0.50	.05	.039		
Copper	1.0	.08	.13	0.010	<1.0
Iron	7.0	.15	1.8		
Lead	5.0	.21	.25	0.0	<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	0.020	<3.0
Phosphorus	10	1.5	1.2		
Potassium	200	9.9	12		
Selenium	5.0	.71	1.1	-0.010	<5.0
Silicon	5.0	.47	1.1		
Silver	3.0	.03	.05	-0.020	<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	0.17	<3.0

Associated samples MP13236: D58837-1, D58837-2, D58837-3

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

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13236  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 06/19/14

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13236  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 06/19/14

Metal	D58907-1 Original MS		Spikelot ICPALL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium	158	389	224	102.9	75-125
Beryllium					
Boron					
Cadmium	0.21	44.3	56.1	78.6	75-125
Calcium					
Chromium	43.1	81.8	56.1	69.0N(a)	75-125
Cobalt					
Copper	9.9	56.4	56.1	82.9	75-125
Iron					
Lead	4.6	90.9	112	76.9	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	13.1	51.6	56.1	68.6N(a)	75-125
Phosphorus	anr				
Potassium	anr				
Selenium	0.0	95.3	112	84.9	75-125
Silicon					
Silver	0.0	16.5	22.4	73.5N(a)	75-125
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	38.5	75.1	56.1	65.2N(a)	75-125

Associated samples MP13236: D58837-1, D58837-2, D58837-3

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



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13236  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 06/19/14

Metal	D58907-1 Original MS	Spikelot ICPALL2	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13236  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 06/19/14

Metal	D58907-1 Original	MSD	Spikelot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	158	372	227	94.4	4.5	20
Beryllium						
Boron						
Cadmium	0.21	46.0	56.7	80.8	3.8	20
Calcium						
Chromium	43.1	86.9	56.7	77.3	6.0	20
Cobalt						
Copper	9.9	58.5	56.7	85.8	3.7	20
Iron						
Lead	4.6	94.7	113	79.5	4.1	20
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	13.1	55.3	56.7	74.5N(a)	6.9	20
Phosphorus	anr					
Potassium	anr					
Selenium	0.0	98.0	113	86.5	2.8	20
Silicon						
Silver	0.0	17.1	22.7	75.4	3.6	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	38.5	78.6	56.7	70.8N(a)	4.6	20

Associated samples MP13236: D58837-1, D58837-2, D58837-3

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13236  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 06/19/14

Metal	D58907-1 Original MSD	Spielot ICPALL2 % Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D58837

Account: CONECOK - Confluence Energy

Project: Confluence

QC Batch ID: MP13236

Methods: SW846 6010C

Matrix Type: SOLID

Units: mg/kg

Prep Date:

06/19/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	193	200	96.5	80-120
Beryllium				
Boron				
Cadmium	48.6	50	97.2	80-120
Calcium				
Chromium	49.8	50	99.6	80-120
Cobalt				
Copper	47.1	50	94.2	80-120
Iron				
Lead	99.9	100	99.9	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	47.0	50	94.0	80-120
Phosphorus	anr			
Potassium	anr			
Selenium	106	100	106.0	80-120
Silicon				
Silver	19.5	20	97.5	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	46.3	50	92.6	80-120

Associated samples MP13236: D58837-1, D58837-2, D58837-3

Results &lt; IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

## 10.3.3 10

Account: CONECOK - Confluence Energy  
Project: Confluence

Methods: SW846 6010C  
Units: mg/kg

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

# SERIAL DILUTION RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13236  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 06/19/14

Metal	D58907-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	1450	1710	17.7*(a)	0-10
Beryllium				
Boron				
Cadmium	1.90	0.00	100.0(b)	0-10
Calcium				
Chromium	395	468	18.4*(a)	0-10
Cobalt				
Copper	91.2	81.0	11.2*(a)	0-10
Iron				
Lead	42.2	57.0	35.1 (b)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	121	151	25.3*(a)	0-10
Phosphorus	anr			
Potassium	anr			
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	353	446	26.1*(a)	0-10

Associated samples MP13236: D58837-1, D58837-2, D58837-3

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13236  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 06/19/14

	D58907-1		QC
Metal	Original SDL 1:5	%DIF	Limits

(anr) Analyte not requested

(a) Serial dilution indicates possible matrix interference.

(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

QC Batch ID: MP13237  
Matrix Type: SOLID

Methods: SW846 6020A  
Units: mg/kg

Prep Date: 06/19/14

Metal	RL	IDL	MDL	MB	
				raw	final
Arsenic	0.10	.0085	.024	-0.0019	<0.10

Associated samples MP13237: D58837-1, D58837-2, D58837-3

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: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13237  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 06/19/14

Metal	D58907-1 Original MS	Spikelot ICPALL2	% Rec	QC Limits
Arsenic	3.1	122	112	106.1 75-125

Associated samples MP13237: D58837-1, D58837-2, D58837-3

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

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

Methods: SW846 6020A  
Units: mg/kg

06/19/14

Associated samples MP13237: D58837-1, D58837-2, D58837-3

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: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13237  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 06/19/14

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

Associated samples MP13237: D58837-1, D58837-2, D58837-3

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D58837  
 Account: CONECOK - Confluence Energy  
 Project: Confluence

QC Batch ID: MP13237  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: ug/l

Prep Date: 06/19/14

Metal	D58907-1			QC Limits
	Original	SDL 5:25	%DIF	

Arsenic	28.1	26.0	7.4	0-10
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Associated samples MP13237: D58837-1, D58837-2, D58837-3

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

## 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: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP12841/GN25158	1.0	0.0	mg/kg	205	187	91.2	80-120%
Specific Conductivity	GP12853/GN25187			umhos/cm	9994	9940	99.4	90-110%
pH	GN25179			su	8.00	8.05	100.6	99.1-100.9%

Associated Samples:  
Batch GN25179: D58837-1, D58837-2, D58837-3  
Batch GP12841: D58837-1, D58837-2, D58837-3  
Batch GP12853: D58837-1, D58837-2, D58837-3  
(\*) Outside of QC limits

11.1  
11

DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP12841/GN25158	D58542-1	mg/kg	0.0	0.0	0.0	0-20%
Redox Potential Vs H2	GN25214	D58907-1	mv	361	361	0.0	0-20%

Associated Samples:

Batch GN25214: D58837-1, D58837-2, D58837-3

Batch GP12841: D58837-1, D58837-2, D58837-3

(\*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP12841/GN25158	D58542-1	mg/kg	0.0	40.0	38.1	95.0	75-125%

Associated Samples:

Batch GP12841: D58837-1, D58837-2, D58837-3

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



MATRIX SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D58837  
Account: CONECOK - Confluence Energy  
Project: Confluence

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chromium, Hexavalent	GP12841/GN25158	D58542-1	mg/kg	0.0	40.0	40.5	6.1	20%

Associated Samples:  
Batch GP12841: D58837-1, D58837-2, D58837-3  
(\*) Outside of QC limits  
(N) Matrix Spike Rec. outside of QC limits

11.4  
11