



08/07/15

Technical Report for

Confluence Energy

Confluence

Accutest Job Number: D52612

Sampling Date: 11/12/13

Report to:

rmcclure@ee3llc.com

Total number of pages in report: 61



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

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY

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Test results relate only to samples analyzed.

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Sample Summary

Confluence Energy

Job No: D52612

Confluence

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D52612-1	11/12/13	09:00 WJ	11/15/13	SO	Soil	HEBRON 3-12H 90 DAY
D52612-1A	11/12/13	09:00 WJ	11/15/13	SO	Soil	HEBRON 3-12H 90 DAY
D52612-2	11/12/13	09:30 WJ	11/15/13	SO	Soil	HEBRON 2-07H 60 DAY
D52612-2A	11/12/13	09:30 WJ	11/15/13	SO	Soil	HEBRON 2-07H 60 DAY
D52612-3	11/12/13	10:00 WJ	11/15/13	SO	Soil	DANFINO 2-06H FIRST
D52612-3A	11/12/13	10:00 WJ	11/15/13	SO	Soil	DANFINO 2-06H FIRST

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



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Confluence Energy

Job No D52612

Site: Confluence

Report Date 11/22/2013 9:47:16 AM

On 11/15/2013, 3 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 20 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D52612 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.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO

Batch ID: OP8975

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D52704-1MS, D52704-1MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015B

Matrix SO

Batch ID: GGB1261

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D52638-1MS, D52638-1MSD were used as the QC samples indicated.
- Sample(s) D52612-1 have surrogates outside control limits. Probable cause due to matrix interference.
- D52612-1 for 1,2,4 Trichlorobenzene: Outside control limits due to possible matrix interference.

Extractables by GC By Method SW846-8015B

Matrix SO

Batch ID: OP8956

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D52632-1MS, D52632-1MSD 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: MP11744

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D52612-1AMS, D52612-1AMSD, D52612-1ASDL were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Metals By Method SW846 6020A

Matrix SO	Batch ID: MP11738
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- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D52612-1MS, D52612-1MSD, D52612-1SDL were used as the QC samples for the metals analysis.

Wet Chemistry By Method SM2540G-2011 M

Matrix SO	Batch ID: GN22740
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- The data for SM2540G-2011 M meets quality control requirements.

Wet Chemistry By Method SW846 9045D

Matrix SO	Batch ID: GN22743
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- The following samples were run outside of holding time for method SW846 9045D: D52612-1, D52612-2, D52612-3

Wet Chemistry By Method USDA HANDBOOK 60

Matrix SO	Batch ID: MP11744
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- D52612-3A for Sodium Adsorption Ratio: Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$
- D52612-1A for Sodium Adsorption Ratio: Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$
- D52612-2A 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: D52612
Account: Confluence Energy
Project: Confluence
Collected: 11/12/13



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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D52612-1 HEBRON 3-12H 90 DAY

TPH-GRO (C6-C10)	41.5	14	6.8	mg/kg	SW846 8015B
TPH-DRO (C10-C28)	3250	79	59	mg/kg	SW846-8015B
Arsenic	6.1	0.13		mg/kg	SW846 6020A
Specific Conductivity	14600	1.0		umhos/cm	SM 2510B-2011 MOD
pH	8.70			su	SW846 9045D

D52612-1A HEBRON 3-12H 90 DAY

Calcium	110	2.0		mg/l	SW846 6010C
Magnesium	34.1	1.0		mg/l	SW846 6010C
Sodium	796	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a	17.0			ratio	USDA HANDBOOK 60

D52612-2 HEBRON 2-07H 60 DAY

Benzo(a)pyrene	23.1	10	5.2	ug/kg	SW846 8270C BY SIM
TPH-GRO (C6-C10)	42.4	14	6.9	mg/kg	SW846 8015B
TPH-DRO (C10-C28)	886	79	60	mg/kg	SW846-8015B
Arsenic	6.0	0.12		mg/kg	SW846 6020A
Specific Conductivity	7510	1.0		umhos/cm	SM 2510B-2011 MOD
pH	8.33			su	SW846 9045D

D52612-2A HEBRON 2-07H 60 DAY

Calcium	259	2.0		mg/l	SW846 6010C
Magnesium	40.9	1.0		mg/l	SW846 6010C
Sodium	661	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio ^a	10.1			ratio	USDA HANDBOOK 60

D52612-3 DANFINO 2-06H FIRST

Benzo(a)pyrene	117	10	5.4	ug/kg	SW846 8270C BY SIM
TPH-GRO (C6-C10)	564	30	15	mg/kg	SW846 8015B
TPH-DRO (C10-C28)	728	83	62	mg/kg	SW846-8015B
Arsenic	10.9	0.11		mg/kg	SW846 6020A
Specific Conductivity	2280	1.0		umhos/cm	SM 2510B-2011 MOD
pH	9.27			su	SW846 9045D

D52612-3A DANFINO 2-06H FIRST

Calcium	21.2	2.0		mg/l	SW846 6010C
Magnesium	1.85	1.0		mg/l	SW846 6010C
Sodium	292	2.0		mg/l	SW846 6010C

Summary of Hits

Page 2 of 2

Job Number: D52612
Account: Confluence Energy
Project: Confluence
Collected: 11/12/13



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						
Sodium Adsorption Ratio ^a		16.3			ratio	USDA HANDBOOK 60

(a) Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$

Sample Results

Report of Analysis

Report of Analysis

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Client Sample ID:	HEBRON 3-12H 90 DAY	Date Sampled:	11/12/13
Lab Sample ID:	D52612-1	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	83.9
Method:	SW846 8270C BY SIM SW846 3546		
Project:	Confluence		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G17189.D	1	11/21/13	DC	11/20/13	OP8975	E3G852
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
50-32-8	Benzo(a)pyrene	ND	9.9	5.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		10-175%
321-60-8	2-Fluorobiphenyl	71%		25-130%
1718-51-0	Terphenyl-d14	86%		41-133%

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

Client Sample ID:	HEBRON 3-12H 90 DAY			Date Sampled:	11/12/13
Lab Sample ID:	D52612-1			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	83.9
Method:	SW846 8015B				
Project:	Confluence				

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB22839.D	1	11/18/13	EV	n/a	n/a	GGB1261
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	41.5	14	6.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	559% ^a		60-140%		

(a) Outside control limits due to possible matrix interference.

ND = Not detected MDL = Method Detection Limit
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 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 3-12H 90 DAY			Date Sampled:	11/12/13
Lab Sample ID:	D52612-1			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	83.9
Method:	SW846-8015B SW846 3546				
Project:	Confluence				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH015298.D	10	11/19/13	JS	11/19/13	OP8956	GFH781
Run #2							

	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)	3250	79	59	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		20-130%		

ND = Not detected MDL = Method Detection Limit
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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 3-12H 90 DAY	Date Sampled:	11/12/13
Lab Sample ID:	D52612-1	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	83.9
Project:	Confluence		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.1	0.13	mg/kg	5	11/19/13	11/20/13 JB	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA4220
(2) Prep QC Batch: MP11738

RL = Reporting Limit

Report of Analysis

Client Sample ID: HEBRON 3-12H 90 DAY

Lab Sample ID: D52612-1

Matrix: SO - Soil

Project: Confluence

Date Sampled: 11/12/13

Date Received: 11/15/13

Percent Solids: 83.9

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	83.9		%	1	11/18/13	SWT	SM2540G-2011 M
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	14600	1.0	umhos/cm	1	11/20/13	JD	SM 2510B-2011 MOD
pH	8.70		su	1	11/18/13 13:25	AK	SW846 9045D

RL = Reporting Limit

Report of Analysis

Client Sample ID: HEBRON 3-12H 90 DAY

Lab Sample ID: D52612-1A

Matrix: SO - Soil

Project: Confluence

Date Sampled: 11/12/13

Date Received: 11/15/13

Percent Solids: 83.9

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	110	2.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²
Magnesium	34.1	1.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²
Sodium	796	2.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²

(1) Instrument QC Batch: MA4219

(2) Prep QC Batch: MP11744

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HEBRON 3-12H 90 DAY	Date Sampled:	11/12/13
Lab Sample ID:	D52612-1A	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	83.9
Project:	Confluence		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	17.0		ratio	1	11/20/13 00:53	JM	USDA HANDBOOK 60

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

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	HEBRON 2-07H 60 DAY			Date Sampled:	11/12/13
Lab Sample ID:	D52612-2			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	83.7
Method:	SW846 8270C BY SIM SW846 3546				
Project:	Confluence				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G17190.D	1	11/21/13	DC	11/20/13	OP8975	E3G852
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
50-32-8	Benzo(a)pyrene	23.1	10	5.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		10-175%
321-60-8	2-Fluorobiphenyl	72%		25-130%
1718-51-0	Terphenyl-d14	79%		41-133%

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 60 DAY			Date Sampled:	11/12/13
Lab Sample ID:	D52612-2			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	83.7
Method:	SW846 8015B				
Project:	Confluence				

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB22841.D	1	11/18/13	EV	n/a	n/a	GGB1261
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	42.4	14	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	120%		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

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Client Sample ID:	HEBRON 2-07H 60 DAY			Date Sampled:	11/12/13
Lab Sample ID:	D52612-2			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	83.7
Method:	SW846-8015B SW846 3546				
Project:	Confluence				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH015300.D	10	11/19/13	JS	11/19/13	OP8956	GFH781
Run #2							

	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)	886	79	60	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	60%		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 60 DAY	Date Sampled:	11/12/13
Lab Sample ID:	D52612-2	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	83.7
Project:	Confluence		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.0	0.12	mg/kg	5	11/19/13	11/20/13 JB	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA4220
(2) Prep QC Batch: MP11738

RL = Reporting Limit

Report of Analysis

Client Sample ID: HEBRON 2-07H 60 DAY

Lab Sample ID: D52612-2

Matrix: SO - Soil

Project: Confluence

Date Sampled: 11/12/13

Date Received: 11/15/13

Percent Solids: 83.7

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	83.7		%	1	11/18/13	SWT	SM2540G-2011 M
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	7510	1.0	umhos/cm	1	11/20/13	JD	SM 2510B-2011 MOD
pH	8.33		su	1	11/18/13 13:25	AK	SW846 9045D

RL = Reporting Limit

Report of Analysis

Client Sample ID: HEBRON 2-07H 60 DAY

Lab Sample ID: D52612-2A

Matrix: SO - Soil

Project: Confluence

Date Sampled: 11/12/13

Date Received: 11/15/13

Percent Solids: 83.7

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	259	2.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²
Magnesium	40.9	1.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²
Sodium	661	2.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²

(1) Instrument QC Batch: MA4219

(2) Prep QC Batch: MP11744

RL = Reporting Limit

Report of Analysis

Client Sample ID:	HEBRON 2-07H 60 DAY	Date Sampled:	11/12/13
Lab Sample ID:	D52612-2A	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	83.7
Project:	Confluence		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	10.1		ratio	1	11/20/13 01:24	JM	USDA HANDBOOK 60

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

RL = Reporting Limit

Report of Analysis

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Client Sample ID:	DANFINO 2-06H FIRST			Date Sampled:	11/12/13
Lab Sample ID:	D52612-3			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	79.8
Method:	SW846 8270C BY SIM SW846 3546				
Project:	Confluence				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G17191.D	1	11/21/13	DC	11/20/13	OP8975	E3G852
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
50-32-8	Benzo(a)pyrene	117	10	5.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		10-175%
321-60-8	2-Fluorobiphenyl	76%		25-130%
1718-51-0	Terphenyl-d14	87%		41-133%

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	DANFINO 2-06H FIRST			Date Sampled:	11/12/13
Lab Sample ID:	D52612-3			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	79.8
Method:	SW846 8015B				
Project:	Confluence				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB22846.D	1	11/19/13	EV	n/a	n/a	GGB1261
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	50.0 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	564	30	15	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	128%		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:	DANFINO 2-06H FIRST			Date Sampled:	11/12/13
Lab Sample ID:	D52612-3			Date Received:	11/15/13
Matrix:	SO - Soil			Percent Solids:	79.8
Method:	SW846-8015B SW846 3546				
Project:	Confluence				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FH015302.D	10	11/19/13	JS	11/19/13	OP8956	GFH781
Run #2							

	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)	728	83	62	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	77%		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:	DANFINO 2-06H FIRST	Date Sampled:	11/12/13
Lab Sample ID:	D52612-3	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	79.8
Project:	Confluence		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	10.9	0.11	mg/kg	5	11/19/13	11/20/13 JB	SW846 6020A ¹	SW846 3050B ²

(1) Instrument QC Batch: MA4220
(2) Prep QC Batch: MP11738

RL = Reporting Limit

Report of Analysis

Client Sample ID: DANFINO 2-06H FIRST
Lab Sample ID: D52612-3
Matrix: SO - Soil
Project: Confluence

Date Sampled: 11/12/13
Date Received: 11/15/13
Percent Solids: 79.8

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	79.8		%	1	11/18/13	SWT	SM2540G-2011 M
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	2280	1.0	umhos/cm	1	11/20/13	JD	SM 2510B-2011 MOD
pH	9.27		su	1	11/18/13 13:25	AK	SW846 9045D

RL = Reporting Limit

Report of Analysis

Client Sample ID: DANFINO 2-06H FIRST
Lab Sample ID: D52612-3A
Matrix: SO - Soil
Project: Confluence

Date Sampled: 11/12/13
Date Received: 11/15/13
Percent Solids: 79.8

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	21.2	2.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²
Magnesium	1.85	1.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²
Sodium	292	2.0	mg/l	1	11/19/13	11/20/13 JM	SW846 6010C ¹	SW846 3010A/M ²

(1) Instrument QC Batch: MA4219

(2) Prep QC Batch: MP11744

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DANFINO 2-06H FIRST	Date Sampled:	11/12/13
Lab Sample ID:	D52612-3A	Date Received:	11/15/13
Matrix:	SO - Soil	Percent Solids:	79.8
Project:	Confluence		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	16.3		ratio	1	11/20/13 01:53	JM	USDA HANDBOOK 60

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

RL = Reporting Limit

Misc. Forms

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Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GC/MS 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: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8975-MB	3G17180.D	1	11/21/13	DC	11/20/13	OP8975	E3G852

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D52612-1, D52612-2, D52612-3

CAS No.	Compound	Result	RL	MDL	Units	Q
50-32-8	Benzo(a)pyrene	ND	8.3	4.3	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	83% 10-175%
321-60-8	2-Fluorobiphenyl	86% 25-130%
1718-51-0	Terphenyl-d14	89% 41-133%

Blank Spike Summary

Page 1 of 1

Job Number: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8975-BS	3G17181.D	1	11/21/13	DC	11/20/13	OP8975	E3G852

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D52612-1, D52612-2, D52612-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
50-32-8	Benzo(a)pyrene	83.3	75.6	91	64-130

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	79%	10-175%
321-60-8	2-Fluorobiphenyl	88%	25-130%
1718-51-0	Terphenyl-d14	84%	41-133%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8975-MS	3G17183.D	1	11/21/13	DC	11/20/13	OP8975	E3G852
OP8975-MSD	3G17184.D	1	11/21/13	DC	11/20/13	OP8975	E3G852
D52704-1	3G17182.D	1	11/21/13	DC	11/20/13	OP8975	E3G852

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D52612-1, D52612-2, D52612-3

CAS No.	Compound	D52704-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
50-32-8	Benzo(a)pyrene	ND	105	92.1	88	105	89.7	85	3	10-168/30

CAS No.	Surrogate Recoveries	MS	MSD	D52704-1	Limits
4165-60-0	Nitrobenzene-d5	75%	76%	78%	10-175%
321-60-8	2-Fluorobiphenyl	75%	79%	82%	25-130%
1718-51-0	Terphenyl-d14	73%	74%	81%	41-133%

* = Outside of Control Limits.

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: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1261-MB	GB22826.D	1	11/18/13	EV	n/a	n/a	GGB1261

The QC reported here applies to the following samples:

Method: SW846 8015B

D52612-1, D52612-2, D52612-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	92% 60-140%

Blank Spike Summary

Page 1 of 1

Job Number: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1261-BS	GB22827.D	1	11/18/13	EV	n/a	n/a	GGB1261

The QC reported here applies to the following samples:

Method: SW846 8015B

D52612-1, D52612-2, D52612-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	112	102	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	108%	60-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D52638-1MS	GB22829.D	1	11/18/13	EV	n/a	n/a	GGB1261
D52638-1MSD	GB22830.D	1	11/18/13	EV	n/a	n/a	GGB1261
D52638-1	GB22828.D	1	11/18/13	EV	n/a	n/a	GGB1261

The QC reported here applies to the following samples:

Method: SW846 8015B

D52612-1, D52612-2, D52612-3

CAS No.	Compound	D52638-1 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		129	126	97	129	126	97	0	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D52638-1	Limits
120-82-1	1,2,4-Trichlorobenzene	102%	100%	96%	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: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8956-MB	FH015280.D	1	11/19/13	JS	11/19/13	OP8956	GFH781

The QC reported here applies to the following samples:

Method: SW846-8015B

D52612-1, D52612-2, D52612-3

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	72% 20-130%

8.1.1

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Blank Spike Summary

Page 1 of 1

Job Number: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8956-BS	FH015282.D	1	11/19/13	JS	11/19/13	OP8956	GFH781

The QC reported here applies to the following samples:

Method: SW846-8015B

D52612-1, D52612-2, D52612-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	667	449	67	42-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	81%	20-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D52612
Account: CONECOK Confluence Energy
Project: Confluence

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8956-MS	FH015284.D	10	11/19/13	JS	11/19/13	OP8956	GFH781
OP8956-MSD	FH015286.D	10	11/19/13	JS	11/19/13	OP8956	GFH781
D52632-1	FH015288.D	10	11/19/13	JS	11/19/13	OP8956	GFH781

The QC reported here applies to the following samples:

Method: SW846-8015B

D52612-1, D52612-2, D52612-3

CAS No.	Compound	D52632-1 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)	672		740	1580	123	739	1330	89	17	20-150/30

CAS No.	Surrogate Recoveries	MS	MSD	D52632-1	Limits
84-15-1	o-Terphenyl	73%	66%	50%	20-130%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

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: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11738
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 11/19/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.55	.75		
Antimony	0.20	.0011	.029		
Arsenic	0.10	.0085	.024	-0.0050	<0.10
Barium	1.0	.008	.16		
Beryllium	0.10	.008	.049		
Boron	20	.25	.07		
Cadmium	0.050	.018	.038		
Calcium	200	2.8	13		
Chromium	1.0	.027	.11		
Cobalt	0.10	.0025	.0085		
Copper	1.0	.03	.1		
Iron	5.0	1.8	1.8		
Lead	0.25	.004	.0075		
Magnesium	50	.65	.65		
Manganese	0.50	.06	.07		
Molybdenum	0.50	.025	.046		
Nickel	1.0	.0044	.17		
Phosphorus	30	1.3	4.9		
Potassium	100	1.5	2.5		
Selenium	0.20	.03	.13		
Silver	0.050	.00095	.01		
Sodium	250	2.5	5.5		
Strontium	10	.005	.027		
Thallium	0.10	.0012	.0075		
Tin	5.0	.032	2.3		
Titanium	1.0	.03	.085		
Uranium	0.25	.00085	.0015		
Vanadium	2.0	.019	.11		
Zinc	5.0	.11	1.4		

Associated samples MP11738: D52612-1, D52612-2, D52612-3

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: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11738
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 11/19/13

Metal	D52612-1 Original MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	6.1	117	123	90.3
Barium				75-125
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP11738: D52612-1, D52612-2, D52612-3

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11738
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 11/19/13

Metal	D52612-1 Original	MSD	SpikeLot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	6.1	108	118	86.3	8.0	20
Barium						
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	anr					
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	anr					

Associated samples MP11738: D52612-1, D52612-2, D52612-3

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: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11738
Matrix Type: SOLID

Methods: SW846 6020A
Units: mg/kg

Prep Date: 11/19/13

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	87.3	100	87.3	80-120
Barium				
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Phosphorus				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP11738: D52612-1, D52612-2, D52612-3

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11738
Matrix Type: SOLID

Methods: SW846 6020A
Units: ug/l

Prep Date: 11/19/13

Metal	D52612-1 Original	SDL	5:25	%DIF	QC Limits
Aluminum					
Antimony	anr				
Arsenic	52.3	46.7		2.8	0-10
Barium					
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt					
Copper	anr				
Iron					
Lead	anr				
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Phosphorus					
Potassium					
Selenium	anr				
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Uranium					
Vanadium					
Zinc	anr				

Associated samples MP11738: D52612-1, D52612-2, D52612-3

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: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11744
Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

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	11.0	<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	11.0	<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	-83	<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 MP11744: D52612-1A, D52612-2A, D52612-3A

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11744
Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11744
Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

Metal	D52612-1A Original MS		Spikelot ICPAL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	110000	257000	125000	117.6	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	34100	161000	125000	101.5	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	796000	990000	125000	155.2(a)	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP11744: D52612-1A, D52612-2A, D52612-3A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D52612
 Account: CONECOK - Confluence Energy
 Project: Confluence

QC Batch ID: MP11744
 Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

Metal	D52612-1A 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: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11744
Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

Metal	D52612-1A Original	MSD	SpikeLot ICPAL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium	110000	257000	125000	117.6	0.0	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium	34100	159000	125000	99.9	1.3	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium	796000	1020000	125000	179.2(a)	3.0	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP11744: D52612-1A, D52612-2A, D52612-3A

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D52612
 Account: CONECOK - Confluence Energy
 Project: Confluence

QC Batch ID: MP11744
 Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

Metal	D52612-1A Original MSD	SpikeLot 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: D52612

Account: CONECOK - Confluence Energy

Project: Confluence

QC Batch ID: MP11744

Methods: SW846 6010C, USDA HANDBOOK 60

Matrix Type: AQUEOUS

Units: ug/l

Prep Date:

11/19/13

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	137000	125000	109.6	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	124000	125000	99.2	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	123000	125000	98.4	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP11744: D52612-1A, D52612-2A, D52612-3A

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

9.2.3

9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D52612

Account: CONECOK - Confluence Energy

Project: Confluence

QC Batch ID: MP11744

Methods: SW846 6010C, USDA HANDBOOK 60

Matrix Type: AQUEOUS

Units: ug/l

Prep Date:

11/19/13

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

QC Batch ID: MP11744
Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

Metal	D52612-1A Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	22000	22000	0.0	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	6820	6920	1.5	0-10
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	159000	164000	2.8	0-10
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP11744: D52612-1A, D52612-2A, D52612-3A

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

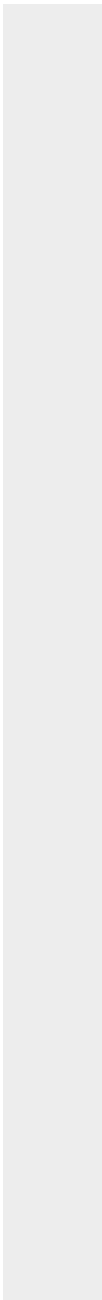
QC Batch ID: MP11744
Matrix Type: AQUEOUS

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

Prep Date: 11/19/13

	D52612-1A		QC
Metal	Original SDL 1:5	%DIF	Limits

(anr) Analyte not requested



General Chemistry

QC Data Summaries

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: D52612
Account: CONECOK - Confluence Energy
Project: Confluence

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP11435/GN22778			umhos/cm	9979	9960	99.8	90-110%
pH	GN22743			su	8.00	8.00	100.0	99.3-100.7%

Associated Samples:
Batch GN22743: D52612-1, D52612-2, D52612-3
Batch GP11435: D52612-1, D52612-2, D52612-3
(*) Outside of QC limits