District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

OIL CONS. DIV DIST. 3

JUN 28 2017

Form C-141
Revised August 8, 2011
Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 258-1607**
Facility Name: **Atlantic 13**	Facility Type: **Gas well**

Surface Owner **BLM**	Mineral Owner **Fed**	API No.**3004523283**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	**23**	**31**	**10**	**1020**	**South**	**1680**	**East**	**San Juan**

Latitude 36.87960 Longitude -107.84868

NATURE OF RELEASE

Type of Release **Hydrocarbon**	Volume of Release **Unknown**	Volume Recovered **None**
Source of Release **BGT (Historic)**	Date and Hour of Occurrence **N/A**	Date and Hour of Discovery **11/20/2016**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **N/A**	
By Whom? **N/A**	Date and Hour **N/A**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Historic contamination was encountered after soil sample was taken on 12-21-2016

Describe Area Affected and Cleanup Action Taken.*
Delineation of the BGT area on 02-10-17 indicates a 23' x 27' x 12' area that will be excavated to at or below action levels.

Historical hydrocarbon impacted soil was found during the BGT closure for the subject well. The excavation was 23' x 29' x 15' in depth and 300 yds of soil was transported to IEI land farm. Analytical results were below the regulatory standards on the walls, and on 06/16/2017, NMOCD approved (via email) alternative remediation of spraying Potassium Permanganate on the base and backfill with clean soil – no further action required. The soil sampling report is attached for review.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: Lisa Hunter	
Title: **Field Environmental Specialist**	Approval Date: 7/25/2017 Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval: Attached ☐
Date: June 22, 2017 Phone: 505-258-1607	—

* Attach Additional Sheets If Necessary

NVF1705938555

48

Fields, Vanessa, EMNRD

From: Smith, Cory, EMNRD
Sent: Friday, June 16, 2017 12:14 PM
To: Hunter, Lisa; Fields, Vanessa, EMNRD
Cc: whitney thomas (l1thomas@blm.gov); Spearman, Bobby E
Subject: RE: Request to backfill Atlantic 13

Lisa,

OCD has reviewed COPC request for alternative closure standards and has approved COPC request.

Please include this approval in your final C-141

OCD approval does not relieve COPC of any requirements imposed by other regulatory agencies.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Hunter, Lisa [mailto:Lisa.Hunter@conocophillips.com]
Sent: Friday, June 16, 2017 10:11 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: whitney thomas (l1thomas@blm.gov) <l1thomas@blm.gov>; Spearman, Bobby E <Robert.E.Spearman@conocophillips.com>
Subject: FW: Request to backfill Atlantic 13

Atlantic 13
API: 3004523283

<< File: Prelims COPC ATLANTIC 13.pdf >>

Cory –

Attached is the initial lab report from November 2016 from the initial BGT Resample Project.

Additionally, AES confirmed that even with a Trac hoe the sandstone base was extremely hard, and could not excavate any further.

Please let me know if you need anything else.

Thanks,

Lisa Hunter
Field Environmental Specialist
ConocoPhillips Company
505.258.1607
Lisa.Hunter@cop.com

"Archaeology permits us to see small moments in time to witness events in everyday lives not recorded by history."

From: Hunter, Lisa
Sent: Friday, June 16, 2017 9:38 AM
To: Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us) <Vanessa.Fields@state.nm.us>; cory.smith@state.nm.us
Cc: whitney thomas (l1thomas@blm.gov) <l1thomas@blm.gov>; Spearman, Bobby E <Robert.E.Spearman@conocophillips.com>
Subject: Request to backfill Atlantic 13

<< File: Hall Laboratory Report 1611629.pdf >>

Sample ID	Sample Location	Date	OVM (ppm)	Field TPH (mg/kg)
		NMOCD Action Level	***100***	***100***
SC-1	North Wall	6/14/17	4.7	60.8
SC-2	South Wall	6/14/17	0.0	40.3
SC-3	East Wall	6/14/17	0.0	91.0
SC-4	West Wall	6/14/17	0.0	48.5
SC-5	Base	6/14/17	**485**	**4,480**

Attached are the field results for the Atlantic 13 (table) and preliminary lab results for base sample. Site rank is 10, however, at the request of NMOCD, strictest closure requirements specified in NMAC 19.15.17.13E Table 1 were to be utilized. All samples were soil composite samples. Wall soil collection points were from 2 feet below ground surface and 2 feet above the base. Excavation dimension was 23 ft by 29 ft by 15 ft deep and was terminated on extremely hard sandstone and is excavated to maximum depth practicable.

Due to nearly Non-Detect BTEX levels (.38) and Base TPH of 2090ppm, COPC believes the residual contaminates do not pose a present or foreseeable threat or an environmental risk to water, humans or animals, and excavation is to the maximum depth practicable, therefore, COPC requests at this time to backfill the excavation with clean soil.

Please let me know if you have any questions.

Thanks,

Lisa Hunter
Field Environmental Specialist

ConocoPhillips Company
Lisa.Hunter@cop.com
Cell: 505.258.1607

"Archaeology permits us to see small moments in time to witness events in everyday lives not recorded by history."

June 19, 2017

Lisa Hunter and Robert Spearman
ConocoPhillips
San Juan Business Unit
(505) 326-9786 / (505) 320-3045

Via electronic mail to:
SJBUE-Team@ConocoPhillips.com

RE: Below Grade Tank Closure, Release Assessment and Final Excavation Report
Atlantic 13
San Juan County, New Mexico

Dear Ms. Hunter and Mr. Spearman:

On November 10 and December 21, 2016, and February 10 and June 14, 2017, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, a release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (COP) Atlantic 13 located in San Juan County, New Mexico. An initial release assessment was completed on February 10, 2017, and the final excavation was completed by COP contractors while AES was on location on June 14, 2017.

1.0 Site Information

1.1 Location

Site Name – Atlantic 13
Legal Description – SW¼ SE¼, Section 23, T31N, R10W, San Juan County, New Mexico
Well Latitude/Longitude – N36.87965 and W107.84867, respectively
BGT Latitude/Longitude – N36.87960 and W107.84868, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, 2016 and 2017

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer (NMOSE) databases were reviewed, and a site-specific hydrogeology report dated December 2008 reported the depth to groundwater at 229 feet below ground surface (bgs). However, at the request of the NMOCD, the most stringent sample result criteria were applied to this BGT. Note these criteria normally apply to sites with a depth to groundwater of 0 to 50 feet.

1.3 Assessment

AES was initially contacted by Robert Spearman of COP on November 2, 2016, and on November 10, 2016, Corwin Lameman and Sam Glasses of AES traveled to the location. Soil sampling consisted of collection of one soil sample (BGT S-1) from below the former BGT footprint. Soil sample results for BGT S-1 were above the action levels, and a release was confirmed.

On December 21, 2016, and February 10, 2017, AES personnel returned to the location to complete the release assessment field work. The assessment included collection and field sampling of 20 samples from 10 soil borings (SB-1 through SB-10). Based on field sampling results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On June 14, 2017, AES returned to the location to collect confirmation soil samples of the excavation extents. The field sampling activities included collection of five confirmation soil samples (SC-1 through SC-5) from the walls and base of the excavation. The area of the final excavation measured approximately 23 feet by 29 feet by 15 feet in depth. Note that the depth of the excavation was limited due to a confining sandstone unit around 15 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for volatile organic compound (VOC) vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Soil samples were also analyzed in the field for total petroleum hydrocarbons (TPH) per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES' *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

2.1.3 Chlorides

Soil sample BGT S-1 was field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto sample chain of custody records. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Soil sample BGT S-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH per USEPA Method 418.1;
- TPH as gasoline range, diesel range, and motor oil range organics (GRO/DRO/MRO) per USEPA Method 8015; and
- Chlorides per USEPA Method 300.0.

Soil samples SC-1 through SC-5 were laboratory analyzed for:

- BTEX per USEPA Method 8021B; and
- TPH as gasoline range, diesel range, and motor oil range organics (GRO/DRO/MRO) per USEPA Method 8015.

2.3 Field and Laboratory Analytical Results

Field sampling results and laboratory analytical results are summarized in Tables 1 and 2, respectively, and on Figures 3 and 4. The AES Field Sampling Reports and laboratory analytical reports are attached.

Table 1. Soil Field VOCs and TPH Results
Atlantic 13 Release Assessment and Final Excavation
December 2016 through June 2017

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (418.1) (mg/kg)
		NMOCD Action Level	*--**	*100**
SB-1	12/21/16	8	0.1	<20.0
		12	0.1	59.3
SB-2	12/21/16	4.25	21.8	<20.0
		8	790	**719**
		11.75	978	**999**
SB-3	12/21/16	8	0.0	<20.0
		12	0.5	**647**
SB-4	12/21/16	8	0.2	**2,000**
		12	0.0	<20.0
SB-5	12/21/16	5	127	**21,400**
		8	1,262	NA
		11	1,702	**21,000**
SB-6	12/21/16	5	0.5	43.9
		8	0.0	43.9
		12	0.0	<20.0
SB-7	2/10/17	8	0.1	28.9
		12	0.0	45.7
SB-8	2/10/17	8	0.1	28.5
SB-9	2/10/17	8.5	0.0	34.2
SB-10	2/10/17	12	0.0	31.3
SC-1	6/14/17	0 to 15	4.7	60.8
SC-2	6/14/17	0 to 15	0.0	40.3
SC-3	6/14/17	0 to 15	0.0	91.0
SC-4	6/14/17	0 to 15	0.0	48.5
SC-5	6/14/17	15	485	**4,480**

NA – not analyzed

*Action level determined by *NMAC 19.15.17.13 Table 1*

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides
Atlantic 13 BGT Closure and Final Excavation
November 2016 and June 2017

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH 418.1	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-MRO (mg/kg)	Chlorides (mg/kg)
	NMOCD Action Level		*10**	*50**	*100**		*100**		*600**
BGT S-1	11/10/16	8	<0.025	<0.221	**1,700**	**<4.9**	**<99**	**760**	<30
SC-1	6/14/17	0 to 15	<0.017	<0.153	NA	<3.4	<9.6	<48	NA
SC-2	6/14/17	0 to 15	<0.017	<0.149	NA	<3.3	<9.6	<48	NA
SC-3	6/14/17	0 to 15	<0.016	<0.143	NA	<3.2	<9.5	<47	NA
SC-4	6/14/17	0 to 15	<0.018	<0.158	NA	<3.5	<9.7	<48	NA
SC-5	6/14/17	15	<0.093	0.38	NA	**<19**	**84**	**1,900**	NA

NA – not analyzed
*Action level determined by *NMAC 19.15.17.13 Table 1*

3.0 Conclusions and Recommendations

3.1 BGT Closure

On November 10, 2016, AES conducted BGT closure sampling at the location. NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13 Table 1, and for this location the most stringent action levels were utilized per NMOCD. BGT closure sampling laboratory analytical results were below the NMOCD action levels of 10 mg/kg for benzene and 50 mg/kg for total BTEX. In contrast, results exceeded the NMOCD action level of 100 mg/kg for TPH, with BGT S-1 reporting laboratory concentrations of 1,700 mg/kg TPH (418.1) and 760 mg/kg TPH (as GRO/DRO/MRO). Chloride concentrations in BGT S-1 were reported below the NMOCD action level of 600 mg/kg, with less than 30 mg/kg. Based on lab concentrations, a release was confirmed at the former BGT at the Atlantic 13 location.

3.2 Release Assessment and Excavation Clearance

On December 21, 2016, and February 10, 2017, AES completed a release assessment at the location. Release assessment field sampling results above the NMOCD action level of 100 mg/kg TPH were reported in SB-2 through SB-5. The highest field TPH

concentration was reported in SB-5, with a concentration of 21,400 mg/kg TPH. Excavation of the release area was recommended.

On June 14, 2017, final clearance of the excavation area was completed. Field sampling results of the excavation extents showed field TPH concentrations exceeded the applicable NMOCD action level of 100 mg/kg in SC-5 (base), with a concentration of 4,480 mg/kg TPH. Additionally, laboratory analytical results also reported TPH concentrations (as GRO/DRO/MRO) in SC-5 (base) as also above NMOCD action levels, with 1,984 mg/kg TPH. Note that the MRO concentration in SC-5 made up a significant portion of the total TPH concentration, and MRO is generally considered to be significantly less mobile in the subsurface than GRO and DRO. Combined GRO/DRO concentrations for SC-5 slightly exceeded 100 mg/kg (<19 mg/kg GRO, 84 mg/kg DRO). Laboratory analytical results reported benzene and total BTEX concentrations in all samples as below NMOCD action levels.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Atlantic 13, benzene and total BTEX were below the applicable NMOCD action levels for the final base and sidewalls. TPH concentrations for the excavation side walls were also below NMOCD action levels. However, TPH exceeded the NMOCD action level for the base (SC-5) which was terminated on sandstone. However, NMOCD granted approval to spray the excavation with a potassium permanganate solution and backfill the excavation, and no further work is recommended.

If you have any questions about this report or site conditions, please do not hesitate to contact Elizabeth McNally at (505) 564-2281.

Sincerely,

David J. Reese
Environmental Scientist

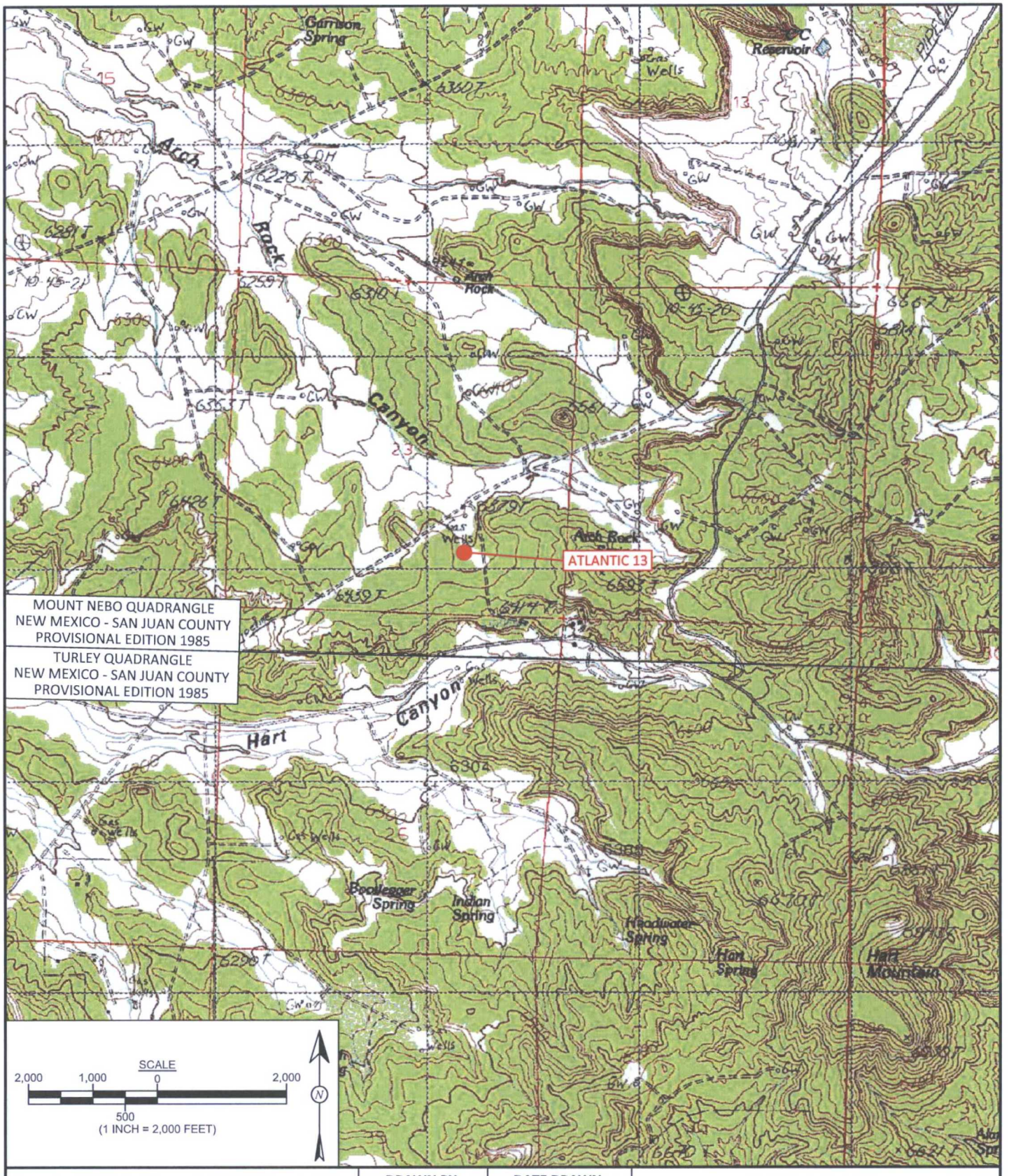
Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, 2016 and 2017
Figure 3. BGT Closure and Release Assessment Sample Locations and Results, November 2016 Through February 2017
Figure 4. Final Excavation Sample Locations and Results, June 2017
AES Field Sampling Report 122116 021017
AES Field Sampling Report 061417
Hall Laboratory Analytical Report 1611629
Hall Laboratory Analytical Report 1706836
Hall Laboratory Analytical Report 1706838

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 aes server client projects dropbox\2017 Client Projects\ConocoPhillips\Atlantic 13\Atlantic 13 BGT Closure, Release, and Excavation Report 061917.docx

Figures



DRAWN BY: C. Lameman	**DATE DRAWN:** June 15, 2017
REVISIONS BY: C. Lameman	**DATE REVISED:** June 15, 2017
CHECKED BY: E. McNally	**DATE CHECKED:** June 15, 2017
APPROVED BY: E. McNally	**DATE APPROVED:** June 15, 2017

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
ATLANTIC 13
SW¼ SE¼, SECTION 23, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87965, W107.84867

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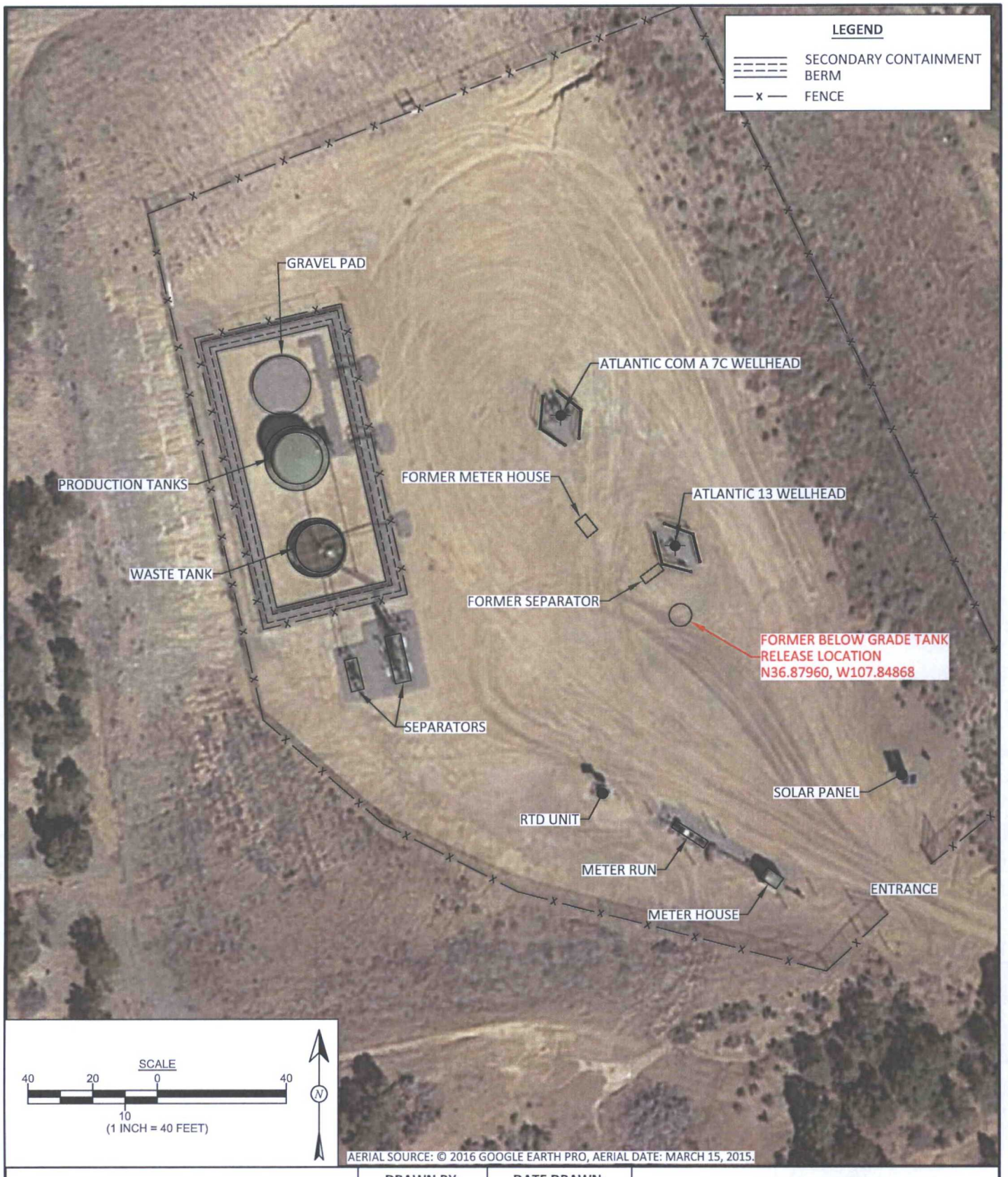

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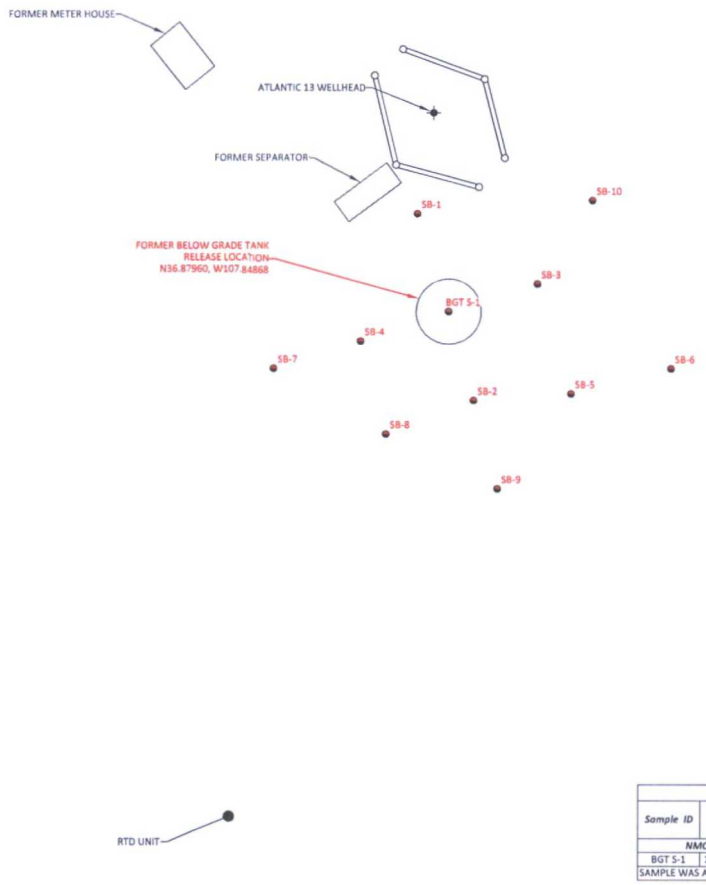
REVISIONS BY: C. Lameman	**DATE REVISED:** June 15, 2017
CHECKED BY: E. McNally	**DATE CHECKED:** June 15, 2017
APPROVED BY: E. McNally	**DATE APPROVED:** June 15, 2017

FIGURE 2

AERIAL SITE MAP 2016 AND 2017
ConocoPhillips
ATLANTIC 13
SW¼ SE¼, SECTION 23, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87965, W107.84867



Field Sampling Results				
Sample ID	Date	Depth (ft)	PID-OVM (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			--	100
SB-1	12/21/16	8	0.1	<20.0
		12	0.1	59.3
SB-2	12/21/16	4.25	21.8	<20.0
		8	790	719
		11.75	978	999
SB-3	12/21/16	8	0.0	<20.0
		12	0.5	647
SB-4	12/21/16	8	0.2	2,000
		12	0.0	<20.0
SB-5	12/21/16	5	127	21,400
		8	1,262	NA
		11	1,702	21,000
SB-6	12/21/16	5	0.5	43.9
		8	0.0	43.9
		12	0.0	<20.0
SB-7	2/10/17	8	0.1	28.9
		12	0.0	45.7
SB-8	2/10/17	8	0.1	28.5
SB-9	2/10/17	8.5	0.0	34.2
SB-10	2/10/17	12	0.0	31.3
NA - NOT ANALYZED				

Laboratory Analytical Results									
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH 418.1 (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			10	50	100		100		600
BGT S-1	11/10/16	8	<0.025	<0.221	1,700	<4.9	<99	760	<30
SAMPLE WAS ANALYZED PER USEPA METHOD 8021B, 418.1, 8015D AND 300.0									

FIGURE 3

BGT CLOSURE AND RELEASE ASSESSMENT SAMPLE LOCATIONS AND RESULTS NOVEMBER 2016 THROUGH FEBRUARY 2017

ConocoPhillips
ATLANTIC 13
SW¼ SE¼, SECTION 23, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87965, W107.84867

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DRAWN BY: C. Lameman	DATE DRAWN: February 10, 2017
REVISIONS BY: C. Lameman	DATE REVISED: June 15, 2017
CHECKED BY: E. McNally	DATE CHECKED: June 15, 2017
APPROVED BY: E. McNally	DATE APPROVED: June 15, 2017

LEGEND

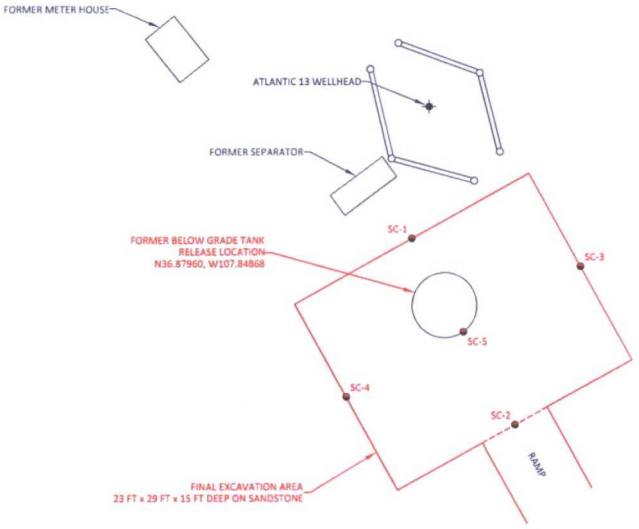
- SOIL BORING LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

N

SCALE
10 5 0 10
(1 INCH = 10 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
JUNE 2017
ConocoPhillips
ATLANTIC 13
SW¼ SE¼, SECTION 23, T31N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.87965, W107.84867



NOTES

1. NMOCD APPROVED APPLICATION OF POTASSIUM PERMANGANATE SOLUTION AND BACKFILL OF EXCAVATION.

Field Sampling Results

Sample ID	Date	Depth (ft)	PID-OVM (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			--	100
SC-1	6/14/17	0 to 15	4.7	60.8
SC-2	6/14/17	0 to 15	0.0	40.3
SC-3	6/14/17	0 to 15	0.0	91.0
SC-4	6/14/17	0 to 15	0.0	48.5
SC-5	6/14/17	15	485	**4,480**
ALL SAMPLES WERE SOIL COMPOSITE SAMPLES.				

Laboratory Analytical Results

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)
NMOCD ACTION LEVEL			10	50	100		
SC-1	6/14/17	0 to 15	<0.017	<0.153	<3.4	<9.6	<48
SC-2	6/14/17	0 to 15	<0.017	<0.149	<3.3	<9.6	<48
SC-3	6/14/17	0 to 15	<0.016	<0.143	<3.2	<9.5	<47
SC-4	6/14/17	0 to 15	<0.018	<0.158	<3.5	<9.7	<48
SC-5	6/14/17	15	<0.093	0.38	**<19**	**84**	**1,900**
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015.							

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DRAWN BY: C. Lameman	**DATE DRAWN:** June 15, 2017
REVISIONS BY: C. Lameman	**DATE REVISED:** June 15, 2017
CHECKED BY: E. McNally	**DATE CHECKED:** June 15, 2017
APPROVED BY: E. McNally	**DATE APPROVED:** June 15, 2017

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

N

SCALE
10 5 0 10
(1 INCH = 10 FEET)

Sampling Reports

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: Atlantic 13

Date: 12/21/2016 and 2/10/2017

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 8'	12/21/2016	10:57	0.1	<20.0	11:26	20.0	1	CL
SB-1 @ 12'	12/21/2016	11:13	0.1	59.3	11:30	20.0	1	CL
SB-2 @ 4.25'	12/21/2016	12:26	21.8	<20.0	12:56	20.0	1	CL
SB-2 @ 8'	12/21/2016	12:34	790	719	13:01	20.0	1	CL
SB-2 @ 11.75	12/21/2016	12:45	978	999	13:09	20.0	1	CL
SB-3 @ 8'	12/21/2016	10:05	0.0	<20.0	11:04	20.0	1	CL
SB-3 @ 12'	12/21/2016	10:21	0.5	647	11:07	20.0	1	CL
SB-4 @ 8'	12/21/2016	11:35	0.2	2,000	12:08	200	10	CL
SB-4 @ 12'	12/21/2016	11:53	0.0	<20.0	12:12	20.0	1	CL
SB-5 @ 5'	12/21/2016	13:15	127	21,400	13:53	200	10	CL
SB-5 @ 8'	12/21/2016	13:22	1,262	*Not Analyzed for TPH*				
SB-5 @ 11'	12/21/2016	13:30	1,702	21,000	14:05	200	10	CL
SB-6 @ 5'	12/21/2016	14:00	0.5	43.9	14:27	20.0	1	CL

Report Finalized: 2/10/17

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-6 @ 8'	12/21/2016	14:16	0.0	43.9	14:30	20.0	1	CL
SB-6 @ 12'	12/21/2016	14:29	0.0	<20.0	14:45	20.0	1	CL
SB-7 @ 8'	2/10/2017	9:55	0.1	28.9	10:24	20.0	1	CL
SB-7 @ 12'	2/10/2017	10:00	0.0	45.7	10:26	20.0	1	CL
SB-8 @ 8'	2/10/2017	10:13	0.1	28.5	10:39	20.0	1	CL
SB-9 @ 8.5'	2/10/2017	10:27	0.0	34.2	10:43	20.0	1	CL
SB-10 @ 12'	2/10/2017	11:00	0.0	31.3	11:16	20.0	1	CL

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: 

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: Atlantic 13

Date: 6/14/2017

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	6/14/2017	9:15	North Wall	4.7	60.8	11:09	20.0	1	CL
SC-2	6/14/2017	9:30	South Wall	0.0	40.3	11:12	20.0	1	CL
SC-3	6/14/2017	9:45	East Wall	0.0	91.0	11:12	20.0	1	CL
SC-4	6/14/2017	10:00	West Wall	0.0	48.5	11:26	20.0	1	CL
SC-5	6/14/2017	10:12	Base	485	4,480	11:36	200	10	CL

DF Dilution Factor
NA Not Analyzed
PQL Practical Quantitation Limit
**TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Report Finalized: 6/14/17

Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

November 17, 2016

Emilee Skyles
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: COPC Atlantic 13 OrderNo.: 1611629

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/11/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1611629**
Date Reported: **11/17/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC Atlantic 13
Lab ID: 1611629-001 **Matrix:** SOIL

Client Sample ID: BGT S-1
Collection Date: 11/10/2016 11:22:00 AM
Received Date: 11/11/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	1700	200		mg/Kg	10	11/16/2016 12:00:00 PM	28668
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	11/16/2016 11:53:37 AM	28702
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	99	D	mg/Kg	10	11/15/2016 9:01:00 PM	28641
Motor Oil Range Organics (MRO)	760	490	D	mg/Kg	10	11/15/2016 9:01:00 PM	28641
Surr: DNOP	0	70-130	SD	%Rec	10	11/15/2016 9:01:00 PM	28641
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/15/2016 12:10:42 PM	28620
Surr: BFB	88.2	68.3-144		%Rec	1	11/15/2016 12:10:42 PM	28620
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	11/15/2016 12:10:42 PM	28620
Toluene	ND	0.049		mg/Kg	1	11/15/2016 12:10:42 PM	28620
Ethylbenzene	ND	0.049		mg/Kg	1	11/15/2016 12:10:42 PM	28620
Xylenes, Total	ND	0.098		mg/Kg	1	11/15/2016 12:10:42 PM	28620
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	11/15/2016 12:10:42 PM	28620

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611629**

17-Nov-16

Client: Animas Environmental

Project: COPC Atlantic 13

Sample ID	**MB-28702**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**28702**		RunNo:	**38771**				
Prep Date:	**11/16/2016**	Analysis Date:	**11/16/2016**		SeqNo:	**1211314**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-28702**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**28702**		RunNo:	**38771**				
Prep Date:	**11/16/2016**	Analysis Date:	**11/16/2016**		SeqNo:	**1211315**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611629**

17-Nov-16

Client: Animas Environmental

Project: COPC Atlantic 13

Sample ID **MB-28668**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **28668**	RunNo: **38752**
Prep Date: **11/15/2016**	Analysis Date: **11/16/2016**	SeqNo: **1210600** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-28668**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **28668**	RunNo: **38752**
Prep Date: **11/15/2016**	Analysis Date: **11/16/2016**	SeqNo: **1210601** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	113	80.7	121			

Sample ID **LCSD-28668**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **28668**	RunNo: **38752**
Prep Date: **11/15/2016**	Analysis Date: **11/16/2016**	SeqNo: **1210602** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	111	80.7	121	1.18	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611629**

17-Nov-16

Client: Animas Environmental
Project: COPC Atlantic 13

Sample ID **MB-28641**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **28641**	RunNo: **38704**
Prep Date: **11/14/2016**	Analysis Date: **11/15/2016**	SeqNo: **1209527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.8		10.00		78.4	70	130			

Sample ID **LCS-28641**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **28641**	RunNo: **38704**
Prep Date: **11/14/2016**	Analysis Date: **11/15/2016**	SeqNo: **1209529** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.4	62.6	124			
Surr: DNOP	4.1		5.000		81.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611629**

17-Nov-16

Client: Animas Environmental
Project: COPC Atlantic 13

Sample ID **MB-28620**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **28620**	RunNo: **38684**
Prep Date: **11/11/2016**	Analysis Date: **11/14/2016**	SeqNo: **1208386** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		86.3	68.3	144			

Sample ID **LCS-28620**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **28620**	RunNo: **38684**
Prep Date: **11/11/2016**	Analysis Date: **11/14/2016**	SeqNo: **1208395** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.5	74.6	123			
Surr: BFB	930		1000		93.3	68.3	144			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1611629**

17-Nov-16

Client: Animas Environmental

Project: COPC Atlantic 13

Sample ID **MB-28620**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **28620**	RunNo: **38684**
Prep Date: **11/11/2016**	Analysis Date: **11/14/2016**	SeqNo: **1208454** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			

Sample ID **LCS-28620**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **28620**	RunNo: **38684**
Prep Date: **11/11/2016**	Analysis Date: **11/14/2016**	SeqNo: **1208455** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.7	75.2	115			
Toluene	1.0	0.050	1.000	0	100	80.7	112			
Ethylbenzene	1.0	0.050	1.000	0	102	78.9	117			
Xylenes, Total	3.1	0.10	3.000	0	102	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1611629 | RcptNo: 1

Received by/date: AS 11/11/16

Logged By: Lindsay Mangin 11/11/2016 8:00:00 AM

Completed By: Lindsay Mangin 11/11/2016 10:08:24 AM

Reviewed By: 11/11/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 604 W Pinon St.
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#: clameman@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
X Standard ☐ Rush_____

Project Name:
COPC ATLANTIC 13

Project #:

Project Manager:
C. Lameman/E. Skyles

Sampler: CL/SG
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1611629	BTEX - 8021B	TPH - EPA 418.1	TPH - 8015	Chlorides - 300.0	Air Bubbles (Y or N)
11/10/16	11:22	SOIL	BGT S-1	1 - 4 oz.	cool	-001	X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/10/16	1950			11/10/16	1950
Date:	Time:	Relinquished by:	Received by:	Date	Time
11/10/16	2050			11/11/16	0800

Remarks: Bill to Conoco Phillips
WO # 21773149
Supervisor: Chris Neuenschwander
USERID: BRADLRY
Area: 3
Ordered by: Bobby Spearman

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 19, 2017

Corwin Lameman
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: COPC ATLANTIC 13 OrderNo.: 1706836

Dear Corwin Lameman:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/15/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1706836**
Date Reported: **6/19/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC ATLANTIC 13
Lab ID: 1706836-001 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 6/14/2017 9:45:00 AM
Received Date: 6/15/2017

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/16/2017 9:46:57 AM	32326
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/16/2017 9:46:57 AM	32326
Surr: DNOP	95.0	70-130		%Rec	1	6/16/2017 9:46:57 AM	32326
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	6/16/2017 9:53:41 AM	32311
Surr: BFB	98.2	54-150		%Rec	1	6/16/2017 9:53:41 AM	32311
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	6/16/2017 9:53:41 AM	32311
Toluene	ND	0.032		mg/Kg	1	6/16/2017 9:53:41 AM	32311
Ethylbenzene	ND	0.032		mg/Kg	1	6/16/2017 9:53:41 AM	32311
Xylenes, Total	ND	0.063		mg/Kg	1	6/16/2017 9:53:41 AM	32311
Surr: 4-Bromofluorobenzene	125	66.6-132		%Rec	1	6/16/2017 9:53:41 AM	32311

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC ATLANTIC 13
Lab ID: 1706836-002 **Matrix:** SOIL

Client Sample ID: SC-5
Collection Date: 6/14/2017 10:12:00 AM
Received Date: 6/15/2017

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	84	37		mg/Kg	4	6/15/2017 3:29:33 PM	32302
Motor Oil Range Organics (MRO)	1900	180		mg/Kg	4	6/15/2017 3:29:33 PM	32302
Surr: DNOP	89.8	70-130		%Rec	4	6/15/2017 3:29:33 PM	32302
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	6/15/2017 11:15:36 AM	32286
Surr: BFB	115	54-150		%Rec	5	6/15/2017 11:15:36 AM	32286
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.093		mg/Kg	5	6/15/2017 11:15:36 AM	32286
Toluene	ND	0.19		mg/Kg	5	6/15/2017 11:15:36 AM	32286
Ethylbenzene	ND	0.19		mg/Kg	5	6/15/2017 11:15:36 AM	32286
Xylenes, Total	0.38	0.37		mg/Kg	5	6/15/2017 11:15:36 AM	32286
Surr: 4-Bromofluorobenzene	120	66.6-132		%Rec	5	6/15/2017 11:15:36 AM	32286

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706836**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **LCS-32302**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **32302**	RunNo: **43528**
Prep Date: **6/15/2017**	Analysis Date: **6/15/2017**	SeqNo: **1371104** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.7	73.2	114			
Surr: DNOP	4.7		5.000		94.7	70	130			

Sample ID **MB-32302**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **32302**	RunNo: **43528**
Prep Date: **6/15/2017**	Analysis Date: **6/15/2017**	SeqNo: **1371105** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		95.4	70	130			

Sample ID **LCS-32292**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **32292**	RunNo: **43528**
Prep Date: **6/14/2017**	Analysis Date: **6/15/2017**	SeqNo: **1372096** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.4	70	130			

Sample ID **MB-32292**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **32292**	RunNo: **43528**
Prep Date: **6/14/2017**	Analysis Date: **6/15/2017**	SeqNo: **1372097** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		87.4	70	130			

Sample ID **LCS-32326**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **32326**	RunNo: **43559**
Prep Date: **6/16/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372144** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.1	73.2	114			
Surr: DNOP	4.7		5.000		93.8	70	130			

Sample ID **MB-32326**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **32326**	RunNo: **43559**
Prep Date: **6/16/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372145** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706836**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **MB-32326**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **32326**	RunNo: **43559**
Prep Date: **6/16/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372145** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		99.7	70	130			

Sample ID **1706836-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SC-3**	Batch ID: **32326**	RunNo: **43560**
Prep Date: **6/16/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372527** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.9	49.36	0	105	55.8	122			
Surr: DNOP	3.7		4.936		75.5	70	130			

Sample ID **1706836-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SC-3**	Batch ID: **32326**	RunNo: **43560**
Prep Date: **6/16/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372528** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.3	46.47	0	107	55.8	122	3.94	20	
Surr: DNOP	3.5		4.647		75.1	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706836**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **MB-32286**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **32286**	RunNo: **43526**
Prep Date: **6/14/2017**	Analysis Date: **6/15/2017**	SeqNo: **1371437** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.5	54	150			

Sample ID **LCS-32286**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **32286**	RunNo: **43526**
Prep Date: **6/14/2017**	Analysis Date: **6/15/2017**	SeqNo: **1371438** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.7	76.4	125			
Surr: BFB	1100		1000		107	54	150			

Sample ID **MB-32311**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373048** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.9	54	150			

Sample ID **LCS-32311**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373049** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	76.4	125			
Surr: BFB	1100		1000		108	54	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706836**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **MB-32286**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **32286**	RunNo: **43526**
Prep Date: **6/14/2017**	Analysis Date: **6/15/2017**	SeqNo: **1371467** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		122	66.6	132			

Sample ID **LCS-32286**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **32286**	RunNo: **43526**
Prep Date: **6/14/2017**	Analysis Date: **6/15/2017**	SeqNo: **1371469** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.1	0.050	1.000	0	109	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	111	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		126	66.6	132			

Sample ID **MB-32311**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373066** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		124	66.6	132			

Sample ID **LCS-32311**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		126	66.6	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1706836 RcptNo: 1

Received By: Anne Thorne 6/15/2017 9:00:00 AM Anne Thorne

Completed By: Anne Thorne 6/15/2017 9:37:38 AM Anne Thorne

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks: 06/15/17 Did not receive SC-3. CW Shipping SC-3 for 06/16/17 delivery / A 06/15/17

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 604 W Pinon St.
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#: clameman@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard X Rush ___SAME DAY___

Project Name:
COPC ATLANTIC 13

Project #:

Project Manager:
C. Lameman/E. McNally

Sampler: CL/SJ
On Ice: X Yes ☐ No
Sample Temperature: 2.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706536	BTEX - 8021B	TPH (GRO/DRO/MRO) - 8015.	Air Bubbles (Y or N)
6/14/17	9:45	SOIL	SC-3	1 - MeOH Kit 1 - 4 oz.	MeOH cool	201	X	X	
6/14/17	10:12	SOIL	SC-5	1 - MeOH Kit 1 - 4 oz.	MeOH cool	202	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/14/17	1603			6/14/17	1603
6/14/17	1910			06/15/17	0900

Remarks: Bill to Conoco Phillips
WO # 10401200
Supervisor: Chris Nuenschwander
USERID: BRADLRY
Area: 3
Ordered by: Lisa Hunter

SC-3 received on 6-16-17 SO

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 19, 2017

Corwin Lameman
Animas Environmental
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: COPC ATLANTIC 13 OrderNo.: 1706838

Dear Corwin Lameman:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/15/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1706838**
Date Reported: **6/19/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC ATLANTIC 13
Lab ID: 1706838-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 6/14/2017 9:15:00 AM
Received Date: 6/15/2017 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/16/2017 2:32:07 PM	32315
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/16/2017 2:32:07 PM	32315
Surr: DNOP	119	70-130		%Rec	1	6/16/2017 2:32:07 PM	32315
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	6/16/2017 2:18:26 PM	32311
Surr: BFB	96.8	54-150		%Rec	1	6/16/2017 2:18:26 PM	32311
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	6/16/2017 2:18:26 PM	32311
Toluene	ND	0.034		mg/Kg	1	6/16/2017 2:18:26 PM	32311
Ethylbenzene	ND	0.034		mg/Kg	1	6/16/2017 2:18:26 PM	32311
Xylenes, Total	ND	0.068		mg/Kg	1	6/16/2017 2:18:26 PM	32311
Surr: 4-Bromofluorobenzene	124	66.6-132		%Rec	1	6/16/2017 2:18:26 PM	32311

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC ATLANTIC 13
Lab ID: 1706838-002 **Matrix:** SOIL

Client Sample ID: SC-2
Collection Date: 6/14/2017 9:30:00 AM
Received Date: 6/15/2017 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/16/2017 3:39:03 PM	32315
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/16/2017 3:39:03 PM	32315
Surr: DNOP	105	70-130		%Rec	1	6/16/2017 3:39:03 PM	32315
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	6/16/2017 5:57:03 PM	32311
Surr: BFB	96.9	54-150		%Rec	1	6/16/2017 5:57:03 PM	32311
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	6/16/2017 5:57:03 PM	32311
Toluene	ND	0.033		mg/Kg	1	6/16/2017 5:57:03 PM	32311
Ethylbenzene	ND	0.033		mg/Kg	1	6/16/2017 5:57:03 PM	32311
Xylenes, Total	ND	0.066		mg/Kg	1	6/16/2017 5:57:03 PM	32311
Surr: 4-Bromofluorobenzene	119	66.6-132		%Rec	1	6/16/2017 5:57:03 PM	32311

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC ATLANTIC 13
Lab ID: 1706838-003 **Matrix:** SOIL

Client Sample ID: SC-4
Collection Date: 6/14/2017 10:00:00 AM
Received Date: 6/15/2017 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/16/2017 4:01:14 PM	32315
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/16/2017 4:01:14 PM	32315
Surr: DNOP	98.7	70-130		%Rec	1	6/16/2017 4:01:14 PM	32315
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/16/2017 6:21:28 PM	32311
Surr: BFB	98.2	54-150		%Rec	1	6/16/2017 6:21:28 PM	32311
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	6/16/2017 6:21:28 PM	32311
Toluene	ND	0.035		mg/Kg	1	6/16/2017 6:21:28 PM	32311
Ethylbenzene	ND	0.035		mg/Kg	1	6/16/2017 6:21:28 PM	32311
Xylenes, Total	ND	0.070		mg/Kg	1	6/16/2017 6:21:28 PM	32311
Surr: 4-Bromofluorobenzene	122	66.6-132		%Rec	1	6/16/2017 6:21:28 PM	32311

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
RL	Reporting Detection Limit
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
R	RPD outside accepted recovery limits
S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706838**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **MB-32315**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **32315**	RunNo: **43560**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372149** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.0	70	130			

Sample ID **LCS-32315**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **32315**	RunNo: **43560**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1372317** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.8	73.2	114			
Surr: DNOP	4.8		5.000		95.6	70	130			

Sample ID **1706838-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **32315**	RunNo: **43559**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373034** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.4	46.90	0	87.9	55.8	122			
Surr: DNOP	4.8		4.690		103	70	130			

Sample ID **1706838-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **SC-1**	Batch ID: **32315**	RunNo: **43559**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373035** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	49.80	0	91.4	55.8	122	9.89	20	
Surr: DNOP	5.2		4.980		105	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706838**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **MB-32311**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373048** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		96.9	54	150			

Sample ID **LCS-32311**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373049** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	76.4	125			
Surr: BFB	1100		1000		108	54	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1706838**

19-Jun-17

Client: Animas Environmental
Project: COPC ATLANTIC 13

Sample ID **MB-32311**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373066** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		124	66.6	132			

Sample ID **LCS-32311**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **32311**	RunNo: **43568**
Prep Date: **6/15/2017**	Analysis Date: **6/16/2017**	SeqNo: **1373067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		126	66.6	132			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	% Recovery outside of range due to dilution or matrix

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental | Work Order Number: 1706838 | RcptNo: 1

Received By: Anne Thorne 6/15/2017 9:00:00 AM

Completed By: Anne Thorne 6/15/2017 9:48:57 AM

Reviewed By: ENM 06/15/17

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
6. Sample(s) in proper container(s)?	Yes ☑	No ☐	
7. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
8. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
9. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
10. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
11. Were any sample containers received broken?	Yes ☐	No ☑	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
14. Is it clear what analyses were requested?	Yes ☑	No ☐	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 604 W Pinon St.
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#: clameman@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☐ Standard X Rush___3 DAY TAT___

Project Name:
COPC ATLANTIC 13

Project #:

Project Manager:
C. Lameman/E. McNally

Sampler: CL/SJ
On Ice: X Yes ☐ No
Sample Temperature: 2 3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1706838	BTEX - 8021B	TPH (GRO/DRO/MRO) - 8015.	Air Bubbles (Y or N)
6/14/17	9:15	SOIL	SC-1	1 - MeOH Kit 1 - 4 oz.	MeOH cool	-001	X	X	
6/14/17	9:30	SOIL	SC-2	1 - MeOH Kit 1 - 4 oz.	MeOH cool	-002	X	X	
6/14/17	10:00	SOIL	SC-4	1 - MeOH Kit 1 - 4 oz.	MeOH cool	-003	X	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/14/17	1603			6/14/17	1603
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/14/17	1910			06/15/17	0900

Remarks: Bill to Conoco Phillips
WO # 10401200
Supervisor: Chris Nuenschwander
USERID: BRADLRY
Area: 3
Ordered by: Lisa Hunter