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

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 ConocoPhillips Company	Contact **Lindsay Dumas**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 258-1643
Facility Name: San Juan 28-7 184	Facility Type: Gas

Surface Owner BLM	Mineral Owner SF-078640	API No. 30-039-20771

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	**09**	**27N**	**07W**	**1525'**	**FSL**	**1720'**	**FWL**	**Rio Arriba**

Latitude 36.585121 Longitude -107.58262

NATURE OF RELEASE

Type of Release Hydrocarbon	Volume of Release 85.6 bbls	Volume Recovered 34.7 bbls
Source of Release Overflow of pit	Date and Hour of Occurrence **unknown**	Date and Hour of Discovery **8/7/2015 at 4 pm**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Cory Smith and Shari Ketcham**	
By Whom? Lindsay Dumas	Date and Hour 8/10/2015 @ 6:30AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

OIL CONS. DIV DIST. 3
AUG 03 2016

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
A vandal opened the drain valve releasing the contents into the pit causing the pit to overflow 85.6 bbls of hydrocarbons into the cribbing.

Describe Area Affected and Cleanup Action Taken.*

Excavation was 28' x 29' x 3-6' Deep. 135 c/yds of soil was transported to IEI Land Farm. Analytical results were below the regulatory standards – 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: 8/4/2016	Expiration Date:
E-mail Address: **Lisa.Hunter**@cop.com	Conditions of Approval: NCS1524540865	Attached ☐
Date: 07/29/2017 Phone: (505) 258-1607		

* Attach Additional Sheets If Necessary

43

July 20, 2016

Lisa Hunter
ConocoPhillips
San Juan Business Unit
(505) 326-9786

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

RE: Release Assessment and Final Excavation Report
San Juan 28-7 #184
Rio Arriba County, New Mexico

Dear Ms. Hunter:

On August 14, 2015, and March 23, and May 25, 2016, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (COPC) San Juan 28-7 #184, located in Rio Arriba County, New Mexico. The total release consisted of approximately 85 barrels (bbls) of condensate associated with vandalism of the below grade tank (BGT). The initial release assessment was completed by AES on August 14, 2015, and March 23, 2106, and the final excavation was completed by COPC contractors while AES' was at the location on May 25, 2016.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-7 #184
Location – NE¼ SW¼, Section 9, T27N, R7W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude – N36.58505 and W107.58291, respectively
Release Location Latitude/Longitude – N36.58501 and W107.58261, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, August 2015

604 W. Piñon St.
Farmington, NM 87401
505-564-2281

1911 Main, Ste 200
Durango, CO 81301
970-403-3084

www.animasenvironmental.com

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 0 based on the following factors:

- **Depth to Groundwater:** A Pit Remediation and Closure Report form dated September 2001 reported the depth to groundwater as greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** A stock pond is 1,940 feet southwest of the location. (0 points)

1.3 Assessment

AES was initially contacted by Lindsay Dumas of COPC on August 10, 2015, and on August 14, 2015, Emilee Skyles, Corwin Lameman and Delilah Dougi of AES completed the release assessment field work. The assessment included collection and field sampling of 18 soil samples from 8 borings in and around the release area. Soil borings were terminated between 2 and 4.5 feet. Based on field sampling results and discussion with COPC, AES recommended returning to the site for additional sample collection. Sample locations are shown on Figure 3.

On March 23, 2016, Sam Glasses and John Sandoval of AES returned to the location for a second assessment that included collection and field sampling of five soil samples from three borings in and around the release area. Soil borings were terminated between 2 and 4 feet on sandstone. Based on field and analytical results, AES recommended excavation of the release area. Sample locations are shown on Figure 3, and an initial assessment cross section is included as Figure 4.

On May 25, 2016, AES returned to the location to collect confirmation soil samples of the excavation. 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 28 feet by 29 feet by 3 to 6 feet in depth. Sample locations and final excavation extents are presented on Figure 5.

2.0 Soil Sampling

A total of 23 soil samples from 11 borings (SB-1 through SB-11) and 5 composite samples (SC-1 through SC-5) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Three samples (SB-3, SB-6 and SB-11) collected during the initial assessment and five composite samples (SC-1 through SC-5) collected during the excavation clearance were submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for 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

Field TPH samples were analyzed 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's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.*

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 a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B.
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

2.3 Field and Laboratory Analytical Results

On August 14, 2015, and March 23, 2016, release assessment field screening results for VOCs via OVM showed concentrations ranging from 0.4 ppm in SB-10 up to 9,890 ppm in SB-2. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-9 and SB-10 up to 13,600 mg/kg in SB-1.

On May 25, 2016, final excavation field screening results for VOCs via OVM ranged from 391 ppm in SC-4 up to 1,738 ppm in SC-2. Field TPH concentrations ranged from 120 mg/kg in SC-4 up to 1,590 mg/kg in SC-3. Results are included below in Table 1 and on Figures 3 and 5. The AES Field Sampling Reports are attached.

Table 1. Soil Field VOCs and TPH Results
San Juan 28-7 #184 Initial Release Assessment and Final Excavation
August 2015, March and May 2016

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
*NMOCD Action Level**			*100*	*5,000*
SB-1	8/14/15	0.5	**3,601**	**8,930**
		2	**1,980**	**13,600**
		3.5	**3,535**	**5,020**
		4.5	NA	NA
SB-2	8/14/15	0.5	**4,502**	NA
		2	**9,890**	**7,850**
SB-3	8/14/15	2	56.6	49.9
		3	**2,165**	**5,150**
SB-4	8/14/15	2	5.8	NA
		3	14.6	60.9
SB-5	8/14/15	2	12.9	NA
		3.25	9.1	48.5
SB-6	8/14/15	2	**806**	NA
		3.5	**3,858**	4,070
SB-7	8/14/15	0.5	21.1	NA
		2	**935**	NA
		3.5	**1,726**	286
SB-8	8/14/15	3	12.4	NA
SB-9	3/23/16	2	0.5	<20.0
		4	96.8	109
SB-10	3/23/16	2	0.4	<20.0
		4	0.9	<20.0
SB-11	3/23/16	3.5	**2,411**	374

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
*NMOCD Action Level**			*100*	*5,000*
SC-1	5/25/16	0 to 3	**459**	189
SC-2	5/25/16	0 to 3	**1,738**	1,210
SC-3	5/25/16	0 to 3	**1,334**	1,590
SC-4	5/25/16	0 to 3	**391**	120
SC-5	5/25/16	3 to 6	**919**	860

NA - not analyzed

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

Laboratory analyses for SB-3, SB-6, and SB-11 were used to confirm field sampling results of the initial release assessment. Benzene concentrations were reported below laboratory detection limits in each sample. Total BTEX concentrations were reported as 1.4 mg/kg (SB-3), 3.3 mg/kg (SB-6), and 4.9 mg/kg (SB-11). TPH concentrations as GRO/DRO were reported in SB-3 (993 mg/kg), SB-6 (1,240 mg/kg), and SB-11 (234 mg/kg).

Laboratory analyses for samples SC-1 through S-5 were used to confirm field sampling results from the final excavation. Benzene concentrations in all samples were reported below laboratory detection limits. Total BTEX concentrations ranged from 0.86 mg/kg in SC-4 up to 8.9 mg/kg in SC-2. TPH concentrations as GRO/DRO varied from 69 mg/kg in SC-4 up to 480 mg/kg in SC-5. Results are presented below in Table 2 and on Figure 5. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
San Juan 28-7 #184 Initial Release Assessment and Final Excavation
August 2015, March and May 2016

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
*NMOCD Action Level**			*10*	*50*	*5,000*	
SB-3	8/14/15	3.0	<0.12	1.4	63	930
SB-6	8/14/15	3.5	<0.23	3.3	300	940
SB-11	3/23/16	3.5	<0.047	4.8	74	160
SC-1	5/25/16	0 to 3	<0.034	2.8	51	72
SC-2	5/25/16	0 to 3	<0.17	8.9	160	310
SC-3	5/25/16	0 to 3	<0.082	3.4	65	320

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
SC-4	5/25/16	0 to 3	<0.033	0.86	20	49
SC-5	5/25/16	3 to 6	<0.075	4.4	110	370

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

On August 14, 2015, and March 23, 2016, AES conducted an initial assessment of petroleum contaminated soils associated with the release of approximately 85 bbls of condensate and produced water due to vandalism of the BGT at the San Juan 28-7 #184. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 0.

Initial assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 5,000 mg/kg TPH were reported in SB-1, SB-2, SB-3, SB-6, SB-7, and SB-11. The highest VOC concentration was reported in SB-2 with 9,890 ppm, and the highest TPH concentration was reported in SB-1 with 13,600 mg/kg.

Laboratory analyses for SB-3, SB-6, and SB-11 were used to confirm field sampling results. Benzene and total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively, in each sample. Similarly, TPH concentrations as GRO/DRO were below the NMOCD action level of 5,000 mg/kg in SB-3 (993 mg/kg), SB-6 (1,240 mg/kg), and SB-11 (234 mg/kg). Based on the results of the release assessments, AES recommended excavation and removal of the impacted soils.

On May 25, 2016, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations exceeded the NMOCD action level of 100 ppm for the final walls and base of the excavation, ranging from 391 ppm (SC-4) up to 1,738 ppm (SC-2). However, field TPH concentrations were below the applicable NMOCD action level of 5,000 mg/kg in all samples. Similarly, laboratory analytical results reported benzene, total BTEX, and TPH concentrations as GRO/DRO below the applicable NMOCD action levels in all samples.

Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-7 #184, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,

David Reese
Environmental Scientist

Emilee Skyles
Geologist/Project Lead

Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, August 2015
- Figure 3. Initial Assessment Sample Locations and Results, August 2015 and March 2016
- Figure 4. Release Assessment Cross Section, August 2015 and March 2016
- Figure 5. Final Excavation Sample Locations and Results, May 2016
- AES Field Sampling Report 081415
- AES Field Sampling Report 032316
- AES Field Sampling Report 052516
- Hall Laboratory Analytical Report 1508947
- Hall Laboratory Analytical Report 1603C07
- Hall Laboratory Analytical Report 1605B87

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 aes server client projects dropbox\2016 Client Projects\ConocoPhillips\SJ 28-7 #184\COPC San Juan 28-7 #184 Release and Final Excavation Report 072016 DR ems EM.docx

DRAWN BY: S. Glasses	**DATE DRAWN:** September 9, 2015	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** June 10, 2016	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: E. Skyles	**DATE CHECKED:** June 10, 2016	ConocoPhillips SAN JUAN 28-7 #184 NE¼ SW¼, SECTION 9, T27N, R7W RIO ARRIBA COUNTY, NEW MEXICO N36.58505, W107.58291
APPROVED BY: E. McNally	**DATE APPROVED:** June 10, 2016	

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animasenvironmental.com

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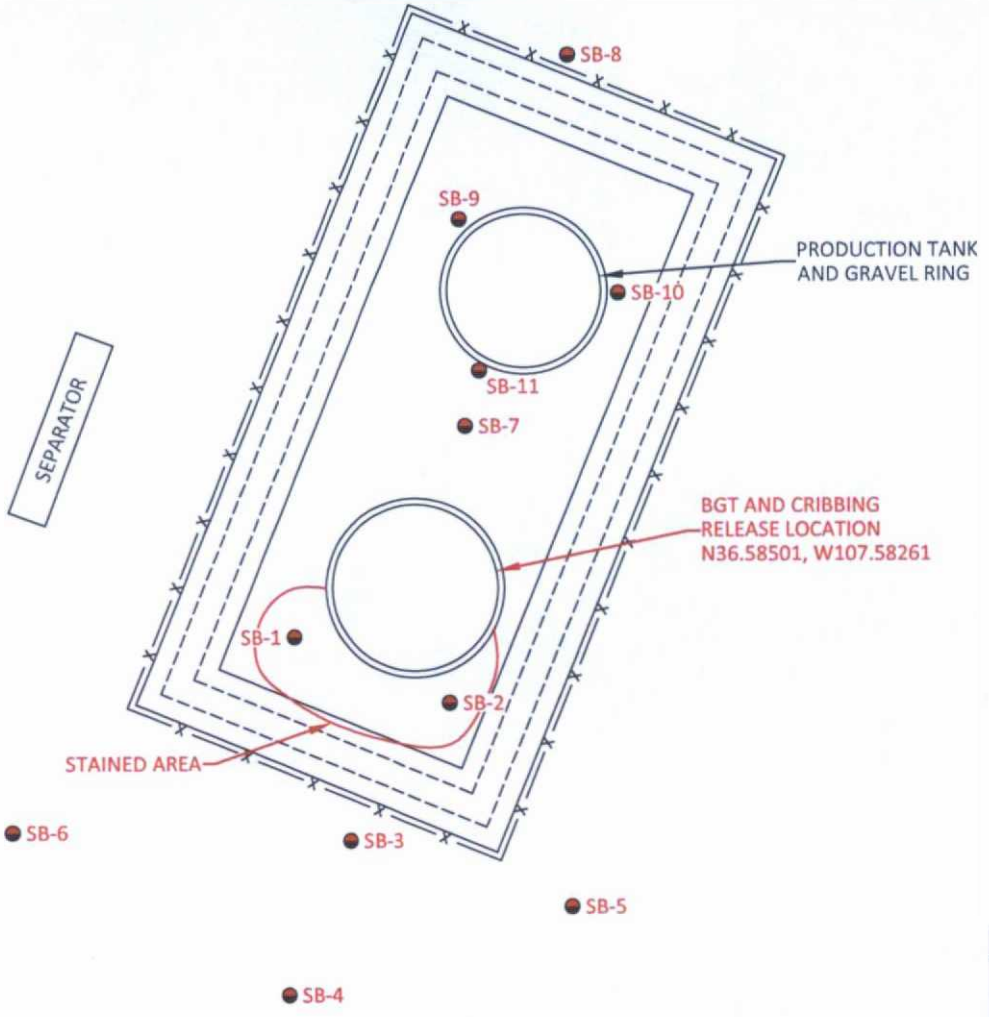
animasenvironmental.com

DRAWN BY: S. Glasses	**DATE DRAWN:** September 9, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** June 10, 2016
CHECKED BY: E. Skyles	**DATE CHECKED:** June 10, 2016
APPROVED BY: E. McNally	**DATE APPROVED:** June 10, 2016

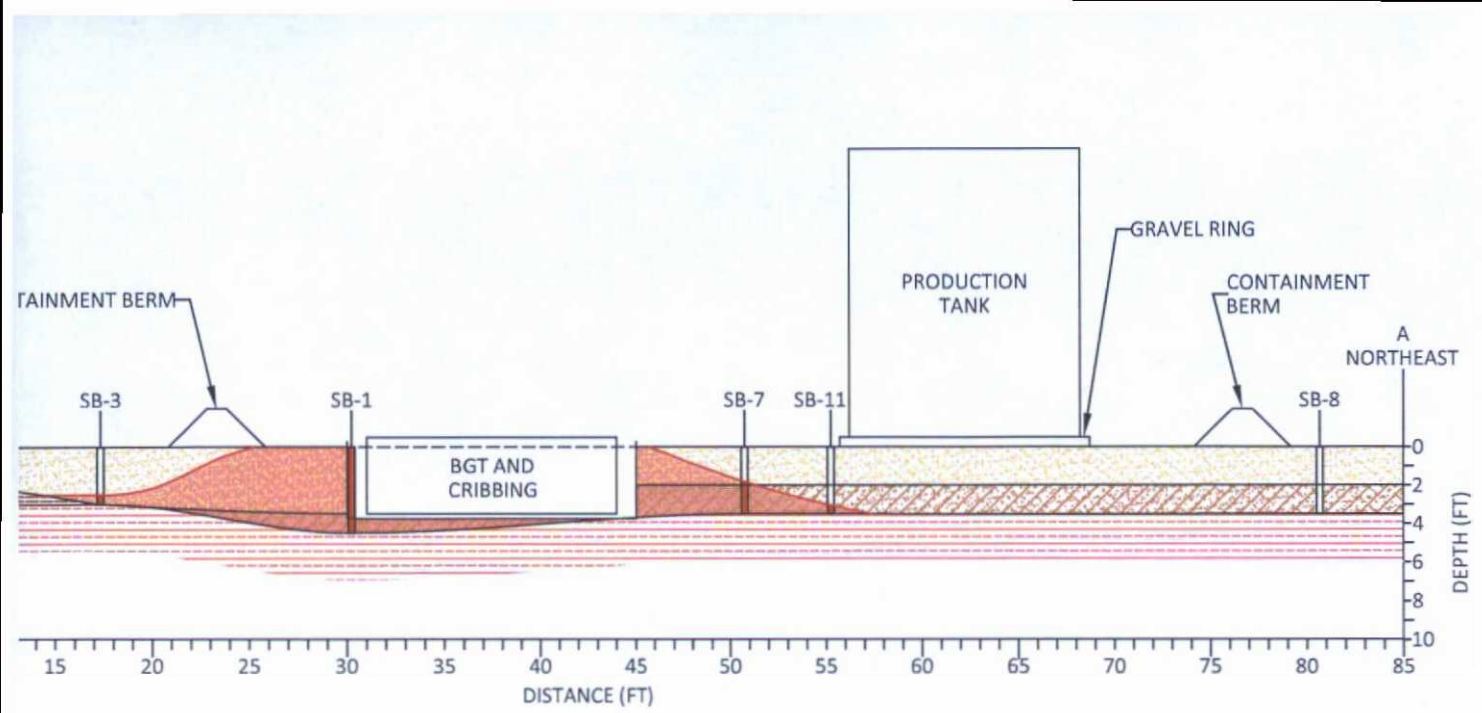
FIGURE 2

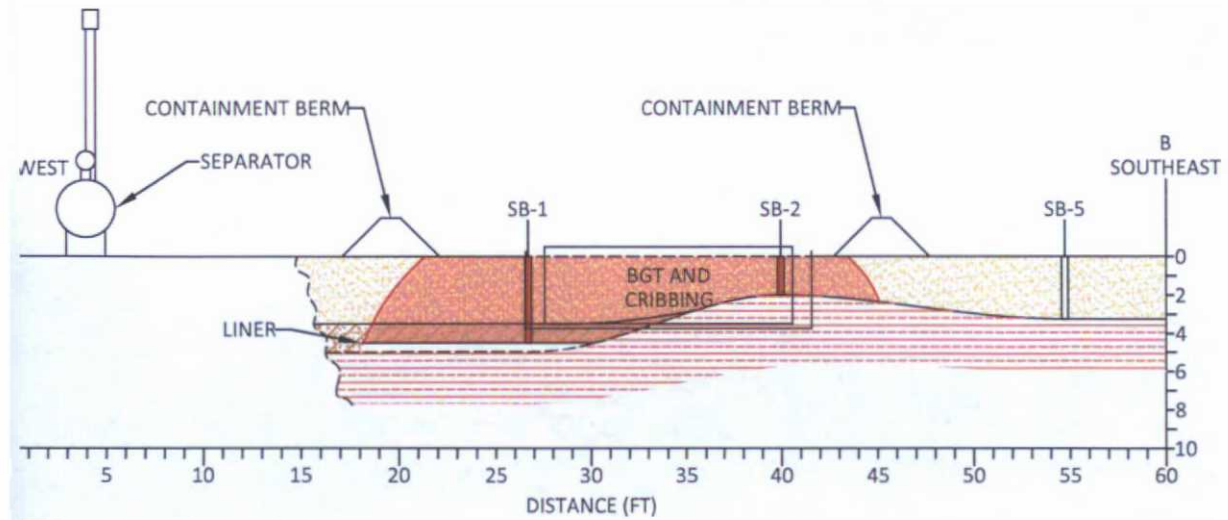
AERIAL SITE MAP
AUGUST 2015
ConocoPhillips
SAN JUAN 28-7 #184
NE¼ SW¼, SECTION 9, T27N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.58505, W107.58291



		(ft)	(ppm)	(mg/kg)
NMOCD ACTION LEVEL			*100*	*5,000*
SB-1	8/14/15	0.5	**3,601**	**8,930**
		2.0	**1,980**	**13,600**
		3.5	**3,535**	**5,020**
		4.5	**4,110**	NA
SB-2	8/14/15	0.5	**4,502**	NA
		2.0	**9,890**	**7,850**
SB-3	8/14/15	2.0	56.6	49.9
		3.0	**2,165**	**5,150**
SB-4	8/14/15	2.0	5.8	NA
		3.0	14.6	60.9
SB-5	8/14/15	2.0	12.9	NA
		3.25	9.1	48.5
SB-6	8/14/15	2.0	**806**	NA
		3.5	**3,858**	4,070
SB-7	8/14/15	0.5	21.1	NA
		2.0	**935**	NA
		3.5	**1,726**	286
SB-8	8/14/15	3.0	12.4	NA
SB-9	3/23/16	2.0	0.5	<20.0
		4.0	96.8	109
SB-10	3/23/16	2.0	0.4	<20.0
		4.0	0.9	<20.0
SB-11	3/23/16	3.5	**2,411**	374
NA - NOT ANALYZED				

Laboratory Analytical Results						
Sample ID	*Date*	*Depth (ft)*	*Benzene (mg/kg)*	*Total BTEX (mg/kg)*	*TPH - GRO (mg/kg)*	*TPH - DRO (mg/kg)*
NMOCD ACTION LEVEL			**10**	**50**	*5,000*	
SB-3	8/14/15	3.0	<0.12	1.4	63	930
SB-6	8/14/15	3.5	<0.23	3.3	300	940
SB-11	3/23/16	3.5	<0.047	4.8	74	160
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.						


SAND
CLAYEY SAND
SHALE
SANDSTONE
APPROXIMATE EXTENT OF IMPACTED SOIL (IN-PLACE 181 Y BASED ON OVM AND/OR TPH
TAINMENT BERM
PRODUCTION TANK
GRAVEL RING
CONTAINMENT BERM
A
NORTHEAST
SB-3
SB-1
SB-7
SB-11
SB-8
BGT AND CRIBBING
DEPTH (FT)
0
2
4
6
8
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
DISTANCE (FT)


CONTAINMENT BERM
CONTAINMENT BERM
WEST
SEPARATOR
B
SOUTHEAST
SB-1
SB-2
SB-5
BGT AND CRIBBING
LINER
0
2
4
6
8
10
5
10
15
20
25
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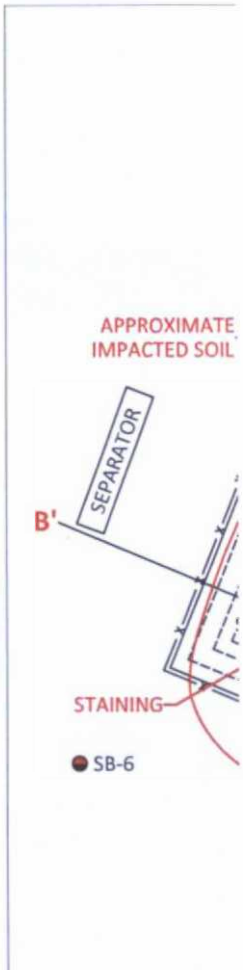
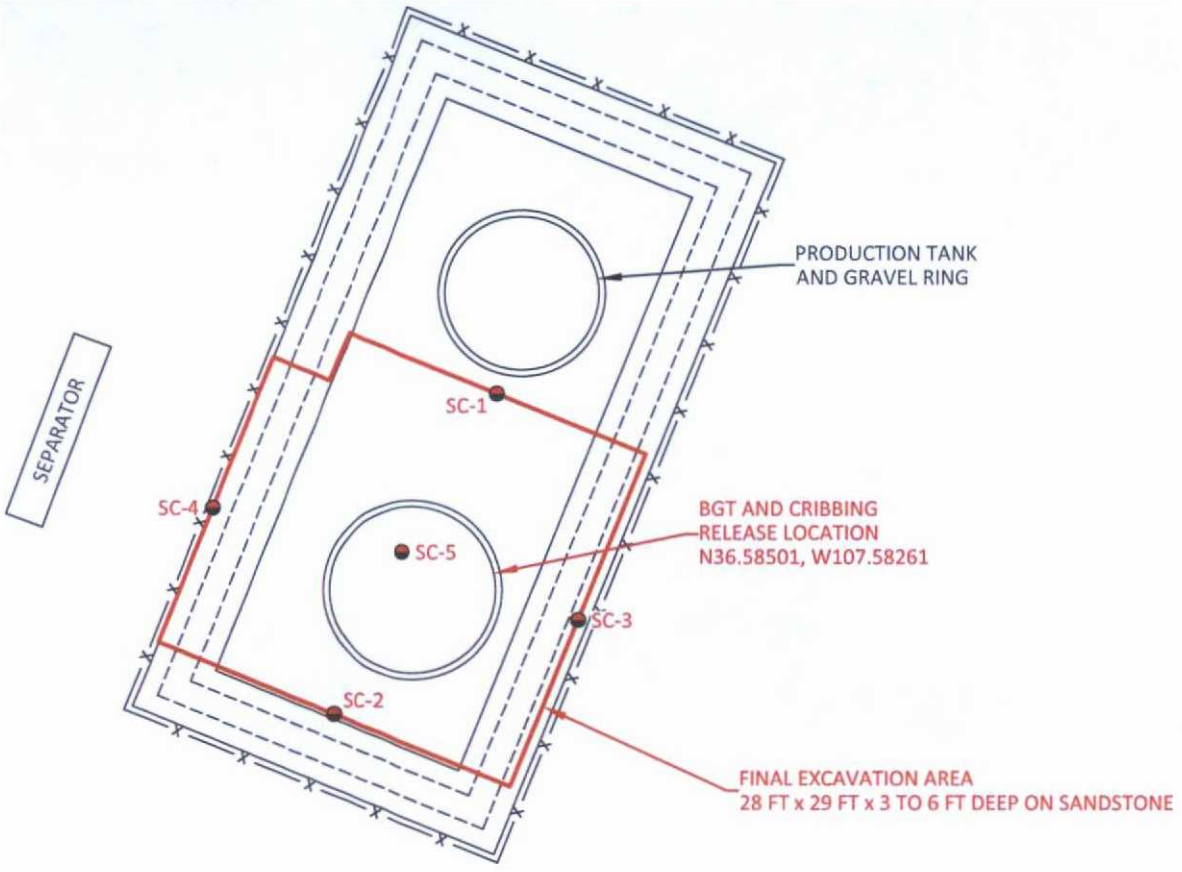
60
DISTANCE (FT)


APPROXIMATE IMPACTED SOIL
SEPARATOR
B'
STAINING
SB-6



Field Sampling Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	5,000
SC-1	5/25/16	0 to 3	**459**	189
SC-2	5/25/16	0 to 3	**1,738**	1,210
SC-3	5/25/16	0 to 3	**1,334**	1,590
SC-4	5/25/16	0 to 3	**391**	120
SC-5	5/25/16	3 to 6	**919**	860

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	5,000	
SC-1	5/25/16	0 to 3	<0.034	2.8	51	72
SC-2	5/25/16	0 to 3	<0.17	8.9	160	310
SC-3	5/25/16	0 to 3	<0.082	3.4	65	320
SC-4	5/25/16	0 to 3	<0.033	0.86	20	49
SC-5	5/25/16	3 to 6	<0.075	4.4	110	370
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.						

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-7 #184

Date: 8/14/2015

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 @ 0.5'	8/14/2015	9:30	3,601	8,926	10:50	200	10	EMS
SB-1 @ 2'	8/14/2015	9:33	1,980	13,562	11:14	200	10	EMS
SB-1 @ 3'	8/14/2015	9:39	NA	*Not Analyzed for TPH*				
SB-1 @ 3.5'	8/14/2015	9:40	3,535	5,023	11:41	200	10	EMS
SB-1 @ 4.5'	8/14/2015	11:35	NA	*Not Analyzed for TPH*				
SB-2 @ 0.5'	8/14/2015	9:50	4,502	*Not Analyzed for TPH*				
SB-2 @ 2'	8/14/2015	9:53	9,890	7,851	13:03	200	10	EMS
SB-3 @ 2'	8/14/2015	10:04	56.6	49.9	13:44	20.0	1	EMS
SB-3 @ 3'	8/14/2015	10:11	2,165	5,147	13:30	200	10	EMS
SB-4 @ 2'	8/14/2015	10:23	5.8	*Not Analyzed for TPH*				
SB-4 @ 3'	8/14/2015	10:29	14.6	60.9	13:38	20.0	1	EMS
SB-5 @ 2'	8/14/2015	10:39	12.9	*Not Analyzed for TPH*				
SB-5 @ 3.25'	8/14/2015	10:44	9.1	48.5	13:41	20.0	1	EMS
SB-6 @ 2'	8/14/2015	10:56	806	*Not Analyzed for TPH*				

Report Finalized: 8/14/15

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 @ 3.5'	8/14/2015	11:05	3,858	4,071	13:35	200	10	EMS
SB-7 @ 0.5'	8/14/2015	11:20	21.1	*Not Analyzed for TPH*				
SB-7 @ 2'	8/14/2015	11:27	935	*Not Analyzed for TPH*				
SB-7 @ 3.5'	8/14/2015	11:32	1,726	286	13:13	20.0	1	EMS
SB-8 @ 3'	8/14/2015	11:44	12.4	*Not Analyzed for TPH*				

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: Erik Sy L

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-7 #184

Date: 3/23/2016

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-9 @ 2'	3/23/2016	11:51	0.5	6.3	13:17	20.0	1	SG
SB-9 @ 4'	3/23/2016	11:58	96.8	18.6	13:25	20.0	1	SG
SB-10 @ 2'	3/23/2016	12:08	0.4	109	13:31	20.0	1	SG
SB-10 @ 4'	3/23/2016	12:23	0.9	18.6	13:39	20.0	1	SG
SB-11 @ 3.5'	3/23/2016	12:58	2,411	374	13:48	20.0	1	SG

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:

Report Finalized: 3/23/16

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-7 #184

Date: 5/25/2016

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	5/25/2016	11:35	North Wall	459	189	12:40	20.0	1	EMS
SC-2	5/25/2016	11:44	South Wall	1,738	1,210	12:43	20.0	1	EMS
SC-3	5/25/2016	11:41	East Wall	1,334	1,590	12:46	20.0	1	EMS
SC-4	5/25/2016	13:14	West Wall	391	120	13:34	20.0	1	EMS
SC-5	5/25/2016	11:47	Base	919	860	12:48	20.0	1	EMS

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Erik Sy L

Report Finalized: 5/25/16

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

August 26, 2015

Emilee Skyles

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

RE: COPC SJ 28-7 #184 OrderNo.: 1508947

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/19/2015 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 **1508947**
Date Reported: **8/26/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 #184
Lab ID: 1508947-001 **Matrix:** SOIL

Client Sample ID: SB-3 @ 3'
Collection Date: 8/14/2015 10:00:00 AM
Received Date: 8/19/2015 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	930	9.8		mg/Kg	1	8/24/2015 8:00:14 PM	20909
Surr: DNOP	127	57.9-140		%REC	1	8/24/2015 8:00:14 PM	20909
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	63	24		mg/Kg	5	8/24/2015 9:45:14 AM	20899
Surr: BFB	148	75.4-113	S	%REC	5	8/24/2015 9:45:14 AM	20899
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12	D	mg/Kg	5	8/24/2015 9:45:14 AM	20899
Toluene	ND	0.24	D	mg/Kg	5	8/24/2015 9:45:14 AM	20899
Ethylbenzene	ND	0.24	D	mg/Kg	5	8/24/2015 9:45:14 AM	20899
Xylenes, Total	1.4	0.48	D	mg/Kg	5	8/24/2015 9:45:14 AM	20899
Surr: 4-Bromofluorobenzene	111	80-120	D	%REC	5	8/24/2015 9:45:14 AM	20899

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 #184
Lab ID: 1508947-002 **Matrix:** SOIL

Client Sample ID: SB-6 @ 3.5'
Collection Date: 8/14/2015 11:05:00 AM
Received Date: 8/19/2015 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	940	100		mg/Kg	10	8/25/2015 11:43:52 PM	20909
Surr: DNOP	0	57.9-140	S	%REC	10	8/25/2015 11:43:52 PM	20909
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	300	46		mg/Kg	10	8/24/2015 10:10:03 AM	20899
Surr: BFB	241	75.4-113	S	%REC	10	8/24/2015 10:10:03 AM	20899
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.23	D	mg/Kg	10	8/24/2015 10:10:03 AM	20899
Toluene	ND	0.46	D	mg/Kg	10	8/24/2015 10:10:03 AM	20899
Ethylbenzene	ND	0.46	D	mg/Kg	10	8/24/2015 10:10:03 AM	20899
Xylenes, Total	3.3	0.92	D	mg/Kg	10	8/24/2015 10:10:03 AM	20899
Surr: 4-Bromofluorobenzene	112	80-120	D	%REC	10	8/24/2015 10:10:03 AM	20899

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1508947**

26-Aug-15

Client: Animas Environmental

Project: COPC SJ 28-7 #184

Sample ID	MB-20909	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	20909		RunNo:	28400				
Prep Date:	8/21/2015	Analysis Date:	8/24/2015		SeqNo:	859302	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.6		10.00		95.9	57.9	140			

Sample ID	LCS-20909	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	20909		RunNo:	28400				
Prep Date:	8/21/2015	Analysis Date:	8/24/2015		SeqNo:	859303	Units:	mg/Kg		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	57.4	139			
Surr: DNOP	4.7		5.000		94.7	57.9	140			

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1508947**

26-Aug-15

Client: Animas Environmental
Project: COPC SJ 28-7 #184

Sample ID	MB-20899	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	20899		RunNo:	28388				
Prep Date:	8/20/2015	Analysis Date:	8/21/2015		SeqNo:	857409	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	800		1000		80.1	75.4	113			

Sample ID	LCS-20899	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	20899		RunNo:	28388				
Prep Date:	8/20/2015	Analysis Date:	8/21/2015		SeqNo:	857410	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	79.6	122			
Surr: BFB	950		1000		94.7	75.4	113			

Sample ID	5ML RB	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	R28415		RunNo:	28415				
Prep Date:		Analysis Date:	8/24/2015		SeqNo:	858403	Units:	%REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		87.2	75.4	113			

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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- 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
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1508947**

26-Aug-15

Client: Animas Environmental

Project: COPC SJ 28-7 #184

Sample ID **MB-20899**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **20899**	RunNo: **28388**
Prep Date: **8/20/2015**	Analysis Date: **8/21/2015**	SeqNo: **857443** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	80	120			

Sample ID **LCS-20899**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **20899**	RunNo: **28388**
Prep Date: **8/20/2015**	Analysis Date: **8/21/2015**	SeqNo: **857444** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.050	1.000	0	97.1	76.6	128			
Toluene	0.98	0.050	1.000	0	98.2	75	124			
Ethylbenzene	1.0	0.050	1.000	0	100	79.5	126			
Xylenes, Total	3.0	0.10	3.000	0	98.8	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **a28415**	RunNo: **28415**
Prep Date:	Analysis Date: **8/24/2015**	SeqNo: **858545** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.4	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		

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: **1508947** RcptNo: **1**

Received by/date: AG 08/19/15

Logged By: **Ashley Gallegos** **8/19/2015 7:45:00 AM** AG

Completed By: **Ashley Gallegos** **8/19/2015 6:15:07 PM** AG

Reviewed By: 08/20/15

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?	Client		

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 ☑	# of preserved bottles checked for pH: (<2 or >12 unless noted)
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 ☐	Adjusted?
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 ☐	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	1.0	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#: eskyles@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 SJ 28-7 #184

Project #:

Project Manager: E. Skyles

Sampler: E. Skyles
On Ice: ☑ Yes ☐ No
Sample Temperature: 1.0

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. 1508947	BTEX - 8021B	TPH - EPA 8015B (GRO/DRO/MRO)	Chlorides - 300.0	Air Bubbles (Y or N)
8/14/15	1000	Soil	SB-3 @ 3'	1-4oz.	cool	-001	X	X		
8/14/15	1105	Soil	SB-6 @ 3.5'	1-4oz.	cool	-001	X	X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/18/15	1145			8/18/15	1145
8/18/15	1930			08/19/15	0745

Remarks: Bill To Conoco Phillips
WO#: 20960074
Area: 23
Area Supervisor: Greg Dunn
User/Approver: BENALE
Ordered by: Lindsay Dumas

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

March 30, 2016

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

RE: COPC SJ 28-7 #184 OrderNo.: 1603C07

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/24/2016 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 **1603C07**
Date Reported: **3/30/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 #184
Lab ID: 1603C07-001 **Matrix:** SOIL

Client Sample ID: SB-11 @ 3.5'
Collection Date: 3/23/2016 12:58:00 PM
Received Date: 3/24/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	160	9.3		mg/Kg	1	3/29/2016 8:59:34 PM	24450
Surr: DNOP	102	70-130		%Rec	1	3/29/2016 8:59:34 PM	24450
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	74	9.4		mg/Kg	2	3/25/2016 8:33:37 PM	24428
Surr: BFB	242	66.2-112	S	%Rec	2	3/25/2016 8:33:37 PM	24428
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	2	3/25/2016 8:33:37 PM	24428
Toluene	0.45	0.094		mg/Kg	2	3/25/2016 8:33:37 PM	24428
Ethylbenzene	0.35	0.094		mg/Kg	2	3/25/2016 8:33:37 PM	24428
Xylenes, Total	4.0	0.19		mg/Kg	2	3/25/2016 8:33:37 PM	24428
Surr: 4-Bromofluorobenzene	125	80-120	S	%Rec	2	3/25/2016 8:33:37 PM	24428

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#: **1603C07**

30-Mar-16

Client: Animas Environmental

Project: COPC SJ 28-7 #184

Sample ID	1603C07-001AMS	SampType:	MS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	SB-11 @ 3.5'	Batch ID:	24450		RunNo:	33126				
Prep Date:	3/25/2016	Analysis Date:	3/29/2016		SeqNo:	1017901	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	170	9.6	48.17	164.2	17.4	31.2	162			S
Surr: DNOP	4.5		4.817		92.8	70	130			

Sample ID	1603C07-001AMSD	SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	SB-11 @ 3.5'	Batch ID:	24450		RunNo:	33126				
Prep Date:	3/25/2016	Analysis Date:	3/29/2016		SeqNo:	1017902	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	180	9.6	48.17	164.2	34.9	31.2	162	4.76	31.7	
Surr: DNOP	4.4		4.817		91.6	70	130	0	0	

Sample ID	LCS-24450	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	24450		RunNo:	33126				
Prep Date:	3/25/2016	Analysis Date:	3/29/2016		SeqNo:	1017915	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.1	65.8	136			
Surr: DNOP	5.0		5.000		99.9	70	130			

Sample ID	MB-24450	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	24450		RunNo:	33126				
Prep Date:	3/25/2016	Analysis Date:	3/29/2016		SeqNo:	1017916	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.6		10.00		96.4	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#: **1603C07**

30-Mar-16

Client: Animas Environmental

Project: COPC SJ 28-7 #184

Sample ID **MB-24428**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **24428**	RunNo: **33067**
Prep Date: **3/24/2016**	Analysis Date: **3/25/2016**	SeqNo: **1015282** 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	1100		1000		105	66.2	112			

Sample ID **LCS-24428**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **24428**	RunNo: **33067**
Prep Date: **3/24/2016**	Analysis Date: **3/25/2016**	SeqNo: **1015283** 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	94.2	80	120			
Surr: BFB	1100		1000		114	66.2	112			S

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#: **1603C07**

30-Mar-16

Client: Animas Environmental

Project: COPC SJ 28-7 #184

Sample ID **MB-24428**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **24428**	RunNo: **33067**
Prep Date: **3/24/2016**	Analysis Date: **3/25/2016**	SeqNo: **1015303** 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	1.1		1.000		110	80	120			

Sample ID **LCS-24428**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **24428**	RunNo: **33067**
Prep Date: **3/24/2016**	Analysis Date: **3/25/2016**	SeqNo: **1015304** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.6	75.3	123			
Toluene	0.95	0.050	1.000	0	94.6	80	124			
Ethylbenzene	0.99	0.050	1.000	0	99.0	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	99.4	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	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: 1603C07 | RcptNo: 1

Received by/date: 03/24/16

Logged By: Lindsay Mangin 3/24/2016 7:30:00 AM

Completed By: Lindsay Mangin 3/24/2016 9:50:48 AM

Reviewed By: 03/24/16

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 ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
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 ☐	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	1.2	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#: eskyles@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 SJ 28-7 #184

Project #:

Project Manager:
E. Skyles

Sampler: S. Glasses/J. Sandoval

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.2+1.0=3.2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1603607	Analysis Request: BTEX - 8021B	TPH - EPA 8015B (GRO/DRO)	Chlorides - 300.0	Air Bubbles (Y or N)
3/23/16	12:58	SOIL	SB-11 @ 3.5'	1 - 4 oz jar	cool	-001	X	X		

Date	Time	Relinquished by:	Received by:	Date	Time
3/23/16	1602			3/23/16	1602
3/24/16	1843			03/24/16	0830

Remarks: Bill to Conoco Phillips
WO#: 20960074
Area: 7
Area Supervisor: Ervin Wyckoff
User/Approver:
Ordered by Lisa Hunter

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

May 27, 2016

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

RE: COPC SJ 28-7 184 OrderNo.: 1605B87

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/26/2016 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 **1605B87**
Date Reported: **5/27/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 184
Lab ID: 1605B87-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 5/25/2016 11:35:00 AM
Received Date: 5/26/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	72	10		mg/Kg	1	5/26/2016 10:37:15 AM	25515
Surr: DNOP	84.9	70-130		%Rec	1	5/26/2016 10:37:15 AM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	51	6.8		mg/Kg	2	5/26/2016 11:51:51 AM	25505
Surr: BFB	254	80-120	S	%Rec	2	5/26/2016 11:51:51 AM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.034		mg/Kg	2	5/26/2016 11:51:51 AM	25505
Toluene	0.24	0.068		mg/Kg	2	5/26/2016 11:51:51 AM	25505
Ethylbenzene	0.17	0.068		mg/Kg	2	5/26/2016 11:51:51 AM	25505
Xylenes, Total	2.4	0.14		mg/Kg	2	5/26/2016 11:51:51 AM	25505
Surr: 4-Bromofluorobenzene	127	80-120	S	%Rec	2	5/26/2016 11:51:51 AM	25505

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 184
Lab ID: 1605B87-002 **Matrix:** SOIL

Client Sample ID: SC-2
Collection Date: 5/25/2016 11:44:00 AM
Received Date: 5/26/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	310	9.8		mg/Kg	1	5/26/2016 11:04:47 AM	25515
Surr: DNOP	93.2	70-130		%Rec	1	5/26/2016 11:04:47 AM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	160	34		mg/Kg	10	5/26/2016 12:15:22 PM	25505
Surr: BFB	233	80-120	S	%Rec	10	5/26/2016 12:15:22 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.17		mg/Kg	10	5/26/2016 12:15:22 PM	25505
Toluene	1.3	0.34		mg/Kg	10	5/26/2016 12:15:22 PM	25505
Ethylbenzene	0.46	0.34		mg/Kg	10	5/26/2016 12:15:22 PM	25505
Xylenes, Total	7.1	0.67		mg/Kg	10	5/26/2016 12:15:22 PM	25505
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	10	5/26/2016 12:15:22 PM	25505

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 184
Lab ID: 1605B87-003 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 5/25/2016 11:41:00 AM
Received Date: 5/26/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	320	9.9		mg/Kg	1	5/26/2016 11:32:22 AM	25515
Surr: DNOP	91.3	70-130		%Rec	1	5/26/2016 11:32:22 AM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	65	16		mg/Kg	5	5/26/2016 12:38:53 PM	25505
Surr: BFB	183	80-120	S	%Rec	5	5/26/2016 12:38:53 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.082		mg/Kg	5	5/26/2016 12:38:53 PM	25505
Toluene	0.57	0.16		mg/Kg	5	5/26/2016 12:38:53 PM	25505
Ethylbenzene	0.18	0.16		mg/Kg	5	5/26/2016 12:38:53 PM	25505
Xylenes, Total	2.6	0.33		mg/Kg	5	5/26/2016 12:38:53 PM	25505
Surr: 4-Bromofluorobenzene	123	80-120	S	%Rec	5	5/26/2016 12:38:53 PM	25505

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 184
Lab ID: 1605B87-004 **Matrix:** SOIL

Client Sample ID: SC-4
Collection Date: 5/25/2016 1:14:00 PM
Received Date: 5/26/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	49	9.5		mg/Kg	1	5/26/2016 11:59:57 AM	25515
Surr: DNOP	84.4	70-130		%Rec	1	5/26/2016 11:59:57 AM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	20	6.6		mg/Kg	2	5/26/2016 1:02:20 PM	25505
Surr: BFB	168	80-120	S	%Rec	2	5/26/2016 1:02:20 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.033		mg/Kg	2	5/26/2016 1:02:20 PM	25505
Toluene	0.14	0.066		mg/Kg	2	5/26/2016 1:02:20 PM	25505
Ethylbenzene	ND	0.066		mg/Kg	2	5/26/2016 1:02:20 PM	25505
Xylenes, Total	0.72	0.13		mg/Kg	2	5/26/2016 1:02:20 PM	25505
Surr: 4-Bromofluorobenzene	121	80-120	S	%Rec	2	5/26/2016 1:02:20 PM	25505

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COPC SJ 28-7 184
Lab ID: 1605B87-005 **Matrix:** SOIL

Client Sample ID: SC-5
Collection Date: 5/25/2016 11:47:00 AM
Received Date: 5/26/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	370	9.7		mg/Kg	1	5/26/2016 12:27:50 PM	25515
Surr: DNOP	95.1	70-130		%Rec	1	5/26/2016 12:27:50 PM	25515
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	110	15		mg/Kg	4	5/26/2016 1:25:47 PM	25505
Surr: BFB	232	80-120	S	%Rec	4	5/26/2016 1:25:47 PM	25505
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.075		mg/Kg	4	5/26/2016 1:25:47 PM	25505
Toluene	0.74	0.15		mg/Kg	4	5/26/2016 1:25:47 PM	25505
Ethylbenzene	0.24	0.15		mg/Kg	4	5/26/2016 1:25:47 PM	25505
Xylenes, Total	3.4	0.30		mg/Kg	4	5/26/2016 1:25:47 PM	25505
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	4	5/26/2016 1:25:47 PM	25505

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#: **1605B87**

27-May-16

Client: Animas Environmental

Project: COPC SJ 28-7 184

Sample ID	LCS-25515	SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS	Batch ID:	25515		RunNo:	34493				
Prep Date:	5/26/2016	Analysis Date:	5/26/2016		SeqNo:	1063925	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.0	62.6	124			
Surr: DNOP	4.8		5.000		95.5	70	130			

Sample ID	MB-25515	SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS	Batch ID:	25515		RunNo:	34493				
Prep Date:	5/26/2016	Analysis Date:	5/26/2016		SeqNo:	1063926	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.9		10.00		98.7	70	130			

Sample ID	1605B87-001AMS	SampType:	MS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	SC-1	Batch ID:	25515		RunNo:	34489				
Prep Date:	5/26/2016	Analysis Date:	5/26/2016		SeqNo:	1064106	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	9.6	47.98	72.44	78.0	33.9	141			
Surr: DNOP	4.5		4.798		93.1	70	130			

Sample ID	1605B87-001AMSD	SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	SC-1	Batch ID:	25515		RunNo:	34489				
Prep Date:	5/26/2016	Analysis Date:	5/26/2016		SeqNo:	1064107	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	9.5	47.62	72.44	66.0	33.9	141	5.60	20	
Surr: DNOP	4.5		4.762		94.8	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
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#: **1605B87**

27-May-16

Client: Animas Environmental

Project: COPC SJ 28-7 184

Sample ID **MB-25505**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064463** 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	1100		1000		107	80	120			

Sample ID **LCS-25505**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **25505**	RunNo: **34502**
Prep Date: **5/25/2016**	Analysis Date: **5/26/2016**	SeqNo: **1064464** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.4	80	120			
Surr: BFB	1200		1000		120	80	120			S

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#: **1605B87**

27-May-16

Client: Animas Environmental

Project: COPC SJ 28-7 184

Sample ID	MB-25505	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	25505	RunNo:	34502					
Prep Date:	5/25/2016	Analysis Date:	5/26/2016	SeqNo:	1064483	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	1.1		1.000		110	80	120			

Sample ID	LCS-25505	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	25505	RunNo:	34502					
Prep Date:	5/25/2016	Analysis Date:	5/26/2016	SeqNo:	1064484	Units:	mg/Kg			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	75.3	123			
Toluene	0.98	0.050	1.000	0	98.2	80	124			
Ethylbenzene	0.97	0.050	1.000	0	96.8	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	96.3	83.9	122			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	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: 1605B87 RcptNo: 1

Received by/date: AT 05/26/16

Logged By: Anne Thorne 5/26/2016 8:00:00 AM Anne Thorne

Completed By: Anne Thorne 5/26/2016 Anne Thorne

Reviewed By: JC 5.26.16

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	1.5	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

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

Phone #: 505-564-2281

Email or Fax#: eskyles@animasenvironmental.com

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

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard X Rush Same Day (by 3 pm)

Project Name:
COPC SJ 28-7 #184

Project #:

Project Manager:
E.Skyles

Sampler: E.Skyles

On Ice: X Yes ☐ No

Sample Temperature: 1.5

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.	BTEX - 8021B	TPH - EPA 8015B (GRO/DRO)	Chlorides - 300.0	Air Bubbles (Y or N)
5/25/16	11:35	Soil	SC-1	MeOH 1 - 4 oz.	MeOH cool	201	X	X		
5/25/16	11:44	Soil	SC-2	MeOH 1 - 4 oz.	MeOH cool	202	X	X		
5/25/16	11:41	Soil	SC-3	MeOH 1 - 4 oz.	MeOH cool	203	X	X		
5/25/16	13:14	Soil	SC-4	MeOH 1 - 4 oz.	MeOH cool	204	X	X		
5/25/16	11:47	Soil	SC-5	MeOH 1 - 4 oz.	MeOH cool	205	X	X		

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/25/16	1610		Matt Walt	5/25/16	1610
5/25/16	2030	Christine Walker		05/26/16	0800

Remarks: Bill to Conoco Phillips
WO#: 20960074
Area: 7
Area Supervisor: Ervin Wyckoff
User/Approver:
Ordered by Lisa Hunter

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.