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

OIL CONS. DIV DIST. 3

JUL 08 2016 Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Submit 1 Copy to appropriate District Office to accordance with 19.15.29 NMAC.

Oil Conservation Division 1220 South St. Francis Dr.

State of New Mexico

Santa Fe, NM 87505

Release Notific	ation and Corrective Action						
and the second	OPERATOR Initial Report Final Report						
Name of Company ConocoPhillips Company	Contact Lisa Hunter						
Address 3401 East 30th St, Farmington, NM	Telephone No. (505) 258-1607						
Facility Name: San Juan 28-7 145F	Facility Type: Gas						
Surface Owner BLM Mineral O	wner SF-078972 API No. 30-039-27078						
LOCA	TION OF RELEASE						
Unit LetterSectionTownshipRangeFeet from theF1027N07W1835'	North/South Line Feet from the 1810' East/West Line FWL County Rio Arriba						
Latitude: <u>3</u>	<u>59067</u> Longitude: - <u>107.56441</u>						
Type of Release Hydrocarbons and produced water	Volume of Release 38 bbls Volume Recovered 0 bbls HC/ 23 bbls PW						
Source of Release Production tank drain line	Date and Hour of Occurrence Date and Hour of Discovery unknown 8/6/2015						
Was Immediate Notice Given?	quired If YES, To Whom? Cory Smith and Shari Ketcham						
By Whom? Lindsay Dumas	Date and Hour 8/6/2015 @ 12:30 pm						
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse. N/A						
If a Watercourse was Impacted, Describe Fully.*							
A vandal opened the drain valve and moved the drain line from du produced water into cribbing. Describe Area Affected and Cleanup Action Taken.*	nping into the pit to dumping into the cribbing; releasing 61 total bbls of condensate and						
Excavation was 26' x 35' x 2-6' Deep. 100 c/yds of soil y regulatory standards – no further action required. The	as transported to IEI Land Farm. Analytical results were below the soil sampling report is attached for review.						
I hereby certify that the information given above is true and comp regulations all operators are required to report and/or file certain r public health or the environment. The acceptance of a C-141 repo should their operations have failed to adequately investigate and r or the environment. In addition, NMOCD acceptance of a C-141 federal, state, or local laws and/or regulations.	te to the best of my knowledge and understand that pursuant to NMOCD rules and lease notifications and perform corrective actions for releases which may endanger t by the NMOCD marked as "Final Report" does not relieve the operator of liability mediate contamination that pose a threat to ground water, surface water, human health eport does not relieve the operator of responsibility for compliance with any other						
Signature: John HIF	OIL CONSERVATION DIVISION Approved by Environmental Specialist:						
Printed Name: Lisa Hunter	Lapsia cont						
Title: Field Environmental Specialist	Approval Date: 1010016 Expiration Date:						
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval: Attached						
Date: 07/01/2016 Phone: (505) 258-1607	NCSIS2454108						

Animas Environmental Services, LLC



May 26, 2016

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

Via electronic mail to: <u>SJBUE-Team@ConocoPhillips.com</u>

RE: Release Assessment and Final Excavation Report San Juan 28-7 #145F Rio Arriba County, New Mexico

Dear Ms. Hunter:

On August 25, 2015, and April 13 and 14, 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 #145F, located in Rio Arriba County, New Mexico. The release consisted of approximately 38 barrels (bbls) of condensate and 23 bbls of produced water associated with vandalism of the below grade tank (BGT). The initial release assessment was completed by AES on August 25, 2015, and the final excavation was completed by COPC contractors prior to AES' arrival at the location on April 14, 2016.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-7 #145F Location – SE¼ NW¼, Section 10, T27N, R7W, Rio Arriba County, New Mexico Well Head Latitude/Longitude – N36.59091 and W107.56440, respectively Release Location Latitude/Longitude – N36.59067 and W107.56441, 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: Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is interpreted to be 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: Adolfo Canyon is located 1,100 feet south of the location. (0 points)

1.3 Assessment

AES was initially contacted by Lindsay Dumas of COPC on August 17, 2015, and on August 25, 2015, Emilee Skyles and Sam Glasses of AES completed the release assessment field work. The assessment included collection and field sampling of 14 soil samples from 8 borings in and around the release area. Soil borings were terminated between 0.5 and 2 feet. Based on field sampling results, AES recommended excavation of the release area. Sample locations and results, in addition to the associated geologic cross sections, are shown on Figure 3 and Figure 4, respectively.

On April 13 and 14, 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 26 feet by 35 feet by 2 to 6 feet in depth. Sample locations and final excavation extents are presented on Figure 5.

2.0 Soil Sampling

A total of 14 soil samples from eight borings (SB-1 through SB-8) and five 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). All 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, laboratorysupplied 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; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

2.3 Field and Laboratory Analytical Results

On August 25, 2015, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.3 ppm in SB-8 up to 3,338 ppm in SB-3. Field TPH concentrations ranged from 32.7 mg/kg in SB-2 and SB-5 up to 9,280 mg/kg in SB-3.

On April 13 and 14, 2016, final excavation field screening results for VOCs via OVM ranged from 61.7 ppm in SC-1 up to 3,575 ppm in SC-5. Field TPH concentrations ranged from 39.4 mg/kg in SC-2 up to 4,850 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)
NMOCL	Action Level*		100	5,000
CD 1	0/05/45	0.5	2.2	NA
2B-1	8/25/15 -	2	88.1	48.0
60.2	0/25/15	0.5	5.8	NA
5B-2	8/25/15 -	1.5	18.7	32.7
C	0/25/15	0.5	3,338	1,950
SB-3	8/25/15 -	2	1,762	9,280
CD 4	0/25/15	0.5	47.9	NA
SB-4	8/25/15 -	2	2,145	6,413
CD F	9/25/15	0.5	15.8	NA
20-2	8/25/15 -	1.5	17.7	32.7
SB-6	8/25/15	0.5	3.7	41.1
SB-7	8/25/15	0.5	2.5	53.5
50.0	0/25/15	0.5	0.3	NA
SD-0	0/20/15 -	1.5	0.5	43.8
SC-1	4/14/16	0 to 4	61.7	47.0
SC-2	4/14/16	0 to 6	83.8	39.4
SC-3	4/13/16	0 to 6	3,537	2,910
SC-4	4/14/16	0 to 2	296	156
SC-5	4/14/16	2 to 6	3,575	4,850

Table 1. Soil Field VOCs and TPH Results San Juan 28-7 #145F Initial Release Assessment and Final Excavation

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 SC-1 through SC-5 were used to confirm field sampling results from the final excavation. Benzene concentrations in all samples were reported below laboratory detection limits, which ranged from 0.019 mg/kg to 0.89 mg/kg. Total BTEX concentrations ranged from 0.27 mg/kg up to 68.1 mg/kg. TPH concentrations as GRO/DRO were reported below laboratory detection limits in SC-1 and SC-2, and ranged up to 1,970 mg/kg. Results are presented in Table 2 and on Figure 5. The laboratory analytical report is attached.

		Sample		Total		
Sample ID	Date Sampled	Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOC	D Action Leve	el*	10	50	5,0	000
SC-1	4/14/16	0 to 4	<0.019	0.48	<3.9	<9.8
SC-2	4/14/16	0 to 6	<0.018	0.27	<3.6	<9.5
SC-3	4/13/16	0 to 6	<0.37	34.7	460	820
SC-4	4/14/16	0 to 2	<0.019	0.28	5.8	45
SC-5	4/14/16	2 to 6	<0.89	68.1	870	1,100

 Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH

 San Juan 28-7 #145F Initial Release Assessment and Final Excavation

*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 25, 2015, AES conducted an initial assessment of petroleum contaminated soils associated with vandalism of the BGT at the San Juan 28-7 #145F. 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-3 and SB-4. The highest VOC and TPH concentrations were reported in SB-3 with 3,338 ppm and 9,280 mg/kg, respectively. Based on these results, excavation of the impacted area was recommended.

On April 13 and 14, 2016, final clearance of the excavation area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for two of the final walls, SC-1 (north wall) and SC-2 (south wall), while the remaining walls and base of the excavation remained above action levels, with 296 ppm for SC-4 (west wall) up to 3,575 ppm for SC-5 (base). Field TPH concentrations were below the applicable NMOCD action level of 5,000 mg/kg for all of the final walls and base of the excavation. Laboratory analytical results reported benzene and total BTEX concentrations below NMOCD action levels with the exception of SC-5, which reported total BTEX at 68.1 mg/kg. TPH concentrations as GRO/DRO were reported below the applicable NMOCD action levels with the exception of SC-5, which reported total BTEX at 68.1 mg/kg.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the San Juan 28-7 #145F, benzene, total BTEX, and TPH

concentrations were below the applicable NMOCD action levels for all of the final sidewalls. However, the base of the excavation (SC-5) exceeded the applicable NMOCD action level for total BTEX at 68 mg/kg. On April 22, 2016, COPC received approval to backfill the excavation from Cory Smith of the NMOCD and on April 25, 2016, received approval from Katherina Diemer of the BLM. 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,

Shih Sy L

Emilee Skyles Geologist/Project Lead

Elizabeth o Merdly

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, August 2015 Figure 3. Release Assessment Sample Locations and Results, August 2015 Figure 4. Initial Assessment Cross-Section Figure 5. Final Excavation Sample Locations and Results, April 2016 AES Field Sampling Report 082515 AES Field Sampling Report 041316 AES Field Sampling Report 041416 Hall Laboratory Analytical Report 1604644

C:\Users\eskyles\Dropbox (Animas Environmental)\2016 Client Projects\ConocoPhillips\SJ 28-7 #145F\COPC SJ 28-7 #145F Release and Final Excavation Report 052616.docx











AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-7 #145F

Date: 8/25/2015

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'	8/25/2015	12:10	2.2					
SB-1 @ 2'	8/25/2015	12:15	88.1	48.0	12:50	20.0	1	EMS
SB-2 @ 0.5'	8/25/2015	12:30	5.8		Not A	Analyzed for Th	PH	
SB-2 @ 1.5'	8/25/2015	12:38	18.7	32.7	13:17	20.0	1	EMS
SB-3 @ 0.5'	8/25/2015	12:45	3,338	1,950	13:21	20.0	1	EMS
SB-3 @ 2'	8/25/2015	12:48	1,762	9,280	13:27	200	10	EMS
SB-4 @ 0.5'	8/25/2015	12:50	47.9		Not A	Analyzed for Th	РН	
SB-4 @ 2'	8/25/2015	12:56	2,145	6,413	14:10	200	10	EMS
SB-5 @ 0.5'	8/25/2015	13:08	15.8		Not A	Analyzed for Th	РН	
SB-5 @ 1.5'	8/25/2015	13:10	7.7	32.7	14:07	20.0	1	EMS
SB-6 @ 0.5'	8/25/2015	12:14	3.7	41.1	14:05	20.0	1	EMS
SB-7 @ 0.5'	8/25/2015	13:18	2.5	53.5	14:03	20.0	1	EMS
SB-8 @ 0.5'	8/25/2015	13:40	0.3		Not A	Analyzed for Th	РН	

					Field TPH			TPH
Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Analysis Time	TPH PQL (mg/kg)	DF	Analysts Initials
SB-8 @ 1.5'	8/25/2015	13:45	0.5	43.8	14:12	20.0	1	EMS

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

*Field TPH concentrations recorded may be below PQL.

Analyst: Sinh ShL

Total Petroleum Hydrocarbons - USEPA 418.1

AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: San Juan 28-7 #145F

Date: 4/13/2016

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-3	4/13/2016	12:34	East Wall	3,537	2,914	13:33	200	10	CL

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

*TPH concentrations recorded may be below PQL.

Contin Analyst:

Total Petroleum Hydrocarbons - USEPA 418.1

AES Field Sampling Report





Client: ConocoPhillips

Project Location: San Juan 28-7 #145F

Date: 4/14/2016

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	4/14/2016	12:50	North Wall	61.7	47.0	13:32	20.0	1	EMS
SC-2	4/14/2016	12:45	South Wall	83.8	39.4	13:35	20.0	1	EMS
SC-4	4/14/2016	12:54	West Wall	296	156	13:37	20.0	1	EMS
SC-5	4/14/2016	12:59	Base	3,575	4,850	13:44	200	10	EMS

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

*TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Sinh Sy L Analyst:



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

April 20, 2016

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

RE: COPC SJ 28-7 #145F

OrderNo.: 1604644

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/15/2016 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 19, 2016.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1604644

Date Reported: 4/20/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Project: COPC SJ 28-7 #145F

1604644-001

Lab ID:

Client Sample ID: SC-1 Collection Date: 4/14/2016 12:50:00 PM

Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS	5			Analyst	: KJH
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/15/2016 1:53:33 PM	24822
Surr: DNOP	78.2	70-130	%Rec	1	4/15/2016 1:53:33 PM	24822
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	4/15/2016 9:01:31 PM	24804
Surr: BFB	101	80-120	%Rec	1	4/15/2016 9:01:31 PM	24804
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.019	mg/Kg	1	4/15/2016 9:01:31 PM	24804
Toluene	0.075	0.039	mg/Kg	1	4/15/2016 9:01:31 PM	24804
Ethylbenzene	ND	0.039	mg/Kg	1	4/15/2016 9:01:31 PM	24804
Xylenes, Total	0.40	0.077	mg/Kg	1	4/15/2016 9:01:31 PM	24804
Surr: 4-Bromofluorobenzene	97.7	80-120	%Rec	1	4/15/2016 9:01:31 PM	24804

Matrix: MEOH (SOIL)

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method I	Blank	
	D	Sample Diluted Due to Matrix	E	Value above quantitation range		
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Daga 1 of 9	
	ND Not Detected at the Reporting Limit		Р	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	t as specified	

Analytical Report Lab Order 1604644 Date Reported: 4/20/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Animas Environmental
 Client Sample ID: SC-2

 Project:
 COPC SJ 28-7 #145F
 Collection Date: 4/14/2016 12:45:00 PM

 Lab ID:
 1604644-002
 Matrix: MEOH (SOIL)
 Received Date: 4/15/2016 7:20:00 AM

 Applyance
 POL
 Quel Units
 DF
 Date Applyzed

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS	6			Analyst:	KJH
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/15/2016 2:36:35 PM	24822
Surr: DNOP	78.7	70-130	%Rec	1	4/15/2016 2:36:35 PM	24822
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	4/15/2016 9:24:58 PM	24804
Surr: BFB	100	80-120	%Rec	1	4/15/2016 9:24:58 PM	24804
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.018	mg/Kg	1	4/15/2016 9:24:58 PM	24804
Toluene	ND	0.036	mg/Kg	1	4/15/2016 9:24:58 PM	24804
Ethylbenzene	ND	0.036	mg/Kg	1	4/15/2016 9:24:58 PM	24804
Xylenes, Total	0.27	0.072	mg/Kg	1	4/15/2016 9:24:58 PM	24804
Surr: 4-Bromofluorobenzene	95.8	80-120	%Rec	1	4/15/2016 9:24:58 PM	24804

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method	Blank	
	D	Sample Diluted Due to Matrix	E	Value above quantitation range		
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Page 2 of 8	
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	1 age 2 01 0	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S % Recovery outside of range due to dilution or matrix			Sample container temperature is out of limit as specified		

Analytical Report Lab Order 1604644

Date Reported: 4/20/2016

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SC-3 CLIENT: Animas Environmental Project: COPC SJ 28-7 #145F Lab ID: 1604644-003 Matrix: MEOH (SOIL)

Collection Date: 4/13/2016 12:34:00 PM

Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS			1		Analyst:	KJH
Diesel Range Organics (DRO)	820	9.2		mg/Kg	1	4/15/2016 3:19:41 PM	24822
Surr: DNOP	83.5	70-130		%Rec	1	4/15/2016 3:19:41 PM	24822
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	460	73		mg/Kg	20	4/18/2016 11:52:36 AM	24836
Surr: BFB	190	80-120	S	%Rec	20	4/18/2016 11:52:36 AM	24836
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.37		mg/Kg	20	4/18/2016 11:52:36 AM	24836
Toluene	5.6	0.73		mg/Kg	20	4/18/2016 11:52:36 AM	24836
Ethylbenzene	2.1	0.73		mg/Kg	20	4/18/2016 11:52:36 AM	24836
Xylenes, Total	27	1.5		mg/Kg	20	4/18/2016 11:52:36 AM	24836
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	20	4/18/2016 11:52:36 AM	24836

Qualifiers:		Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method I	Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Dage 2 of
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	Fage 5 01
	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	t as specified

Analytical Report Lab Order 1604644

Date Reported: 4/20/2016

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SC-4 CLIENT: Animas Environmental Collection Date: 4/14/2016 12:54:00 PM Project: COPC SJ 28-7 #145F Lab ID: 1604644-004 Matrix: MEOH (SOIL) Received Date: 4/15/2016 7:20:00 AM

Analyses	Result	PQL Q	ual Uni	ts	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	5				Analyst:	KJH
Diesel Range Organics (DRO)	45	9.5	mg/	/Kg	1	4/15/2016 4:02:50 PM	24822
Surr: DNOP	75.6	70-130	%R	ec	1	4/15/2016 4:02:50 PM	24822
EPA METHOD 8015D: GASOLINE RANG	GE					Analyst:	NSB
Gasoline Range Organics (GRO)	5.8	3.8	mg/	/Kg	1	4/15/2016 10:11:56 PM	24804
Surr: BFB	127	80-120	S %R	ec	1	4/15/2016 10:11:56 PM	24804
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.019	mg/	/Kg	1	4/15/2016 10:11:56 PM	24804
Toluene	ND	0.038	mg	/Kg	1	4/15/2016 10:11:56 PM	24804
Ethylbenzene	ND	0.038	mg	/Kg	1	4/15/2016 10:11:56 PM	24804
Xylenes, Total	0.28	0.075	mg/	/Kg	1	4/15/2016 10:11:56 PM	24804
Surr: 4-Bromofluorobenzene	99.2	80-120	%R	ec	1	4/15/2016 10:11:56 PM	24804

Qualifiers:		Value exceeds Maximum Contaminant Level	В	Analyte detected in the associated Method	Blank
Quanta a	D	Sample Diluted Due to Matrix	E	Value above quantitation range	DIGITIS
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Dage 1 of
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	rage 4 01 d
	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	t as specified

Analytical Report

Lab Order 1604644

Date Reported: 4/20/2016

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Animas Environmental
 Client Sample ID: SC-5

 Project: COPC SJ 28-7 #145F
 Collection Date: 4/14/2016 12:59:00 PM

 Lab ID: 1604644-005
 Matrix: MEOH (SOIL)
 Received Date: 4/15/2016 7:20:00 AM

 Analyses
 Result
 POL Qual Units
 DF Date Analyzed
 Batch

Anaryses	Result	TQL	Quai	Units	DI	Date Analyzeu	Daten
EPA METHOD 8015M/D: DIESEL RAM	GE ORGANICS		6			Analyst:	KJH
Diesel Range Organics (DRO)	1100	99		mg/Kg	10	4/18/2016 9:27:00 AM	24822
Surr: DNOP	0	70-130	S	%Rec	10	4/18/2016 9:27:00 AM	24822
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst:	NSB
Gasoline Range Organics (GRO)	870	180		mg/Kg	50	4/15/2016 10:35:24 PM	24804
Surr: BFB	166	80-120	S	%Rec	50	4/15/2016 10:35:24 PM	24804
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.89		mg/Kg	50	4/15/2016 10:35:24 PM	24804
Toluene	8.8	1.8		mg/Kg	50	4/15/2016 10:35:24 PM	24804
Ethylbenzene	2.3	1.8		mg/Kg	50	4/15/2016 10:35:24 PM	24804
Xylenes, Total	57	3.6		mg/Kg	50	4/15/2016 10:35:24 PM	24804
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	50	4/15/2016 10:35:24 PM	24804

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method	Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Dage 5 of 9
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	1 age 5 01 6
	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	it as specified

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1604644

Page 6 of 8

20-Apr-16

Client: Project:	Animas COPC S	Environme SJ 28-7 #14	ntal 5F								
Sample ID LC Client ID: LC	S-24822 SS	Samp1 Batcl	Type: LC	:S 822	Tes F	tCode: E RunNo: 3	PA Method	8015M/D: Di	esel Rang	e Organics	
Prep Date: 4/	/15/2016	Analysis D	Date: 4/	15/2016	5	SeqNo: 1	032484	Units: mg/H	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ	nics (DRO)	38	10	50.00	0	75.9	65.8	136	1.1.1	1.11.1	100
Surr: DNOP		3.8		5.000		75.5	70	130		1. 60	
Sample ID ME	3-24822	SampT	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	Sec. 7
Client ID: PB	S	Batcl	h ID: 24	822	F	RunNo: 3	3556				
Prep Date: 4/	/15/2016	Analysis D	Date: 4/	15/2016	5	SeqNo: 1	032485	Units: mg/H	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organ	nics (DRO)	ND	10			100	14 A A				
Surr: DNOP		8.1		10.00		81.4	70	130			

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
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1604644

Page 7 of 8

20-Apr-16

Client: Animas Project: COPC	s Environmental SJ 28-7 #145F		
Sample ID MB-24804	SampType: MBLK	TestCode: EPA Method 8015	D: Gasoline Range
Client ID: PBS	Batch ID: 24804	RunNo: 33568	
Prep Date: 4/14/2016	Analysis Date: 4/15/2016	SeqNo: 1033188 Units	s: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit High	hLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	ND 5.0		
Surr: BFB	950 1000	95.0 80	120
Sample ID LCS-24804	SampType: LCS	TestCode: EPA Method 8015	D: Gasoline Range
Client ID: LCSS	Batch ID: 24804	RunNo: 33568	
Prep Date: 4/14/2016	Analysis Date: 4/15/2016	SeqNo: 1033189 Units	s: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	hLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	25 5.0 25.00	0 102 80	120
Surr: BFB	1000 1000	100 80	120
Sample ID MB-24836	SampType: MBLK	TestCode: EPA Method 8015	D: Gasoline Range
Client ID: PBS	Batch ID: 24836	RunNo: 33600	
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1033974 Units	s: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	hLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	ND 5.0		
Surr: BFB	930 1000	93.4 80	120
Sample ID LCS-24836	SampType: LCS	TestCode: EPA Method 8015	D: Gasoline Range
Client ID: LCSS	Batch ID: 24836	RunNo: 33600	
Prep Date: 4/15/2016	Analysis Date: 4/18/2016	SeqNo: 1033975 Units	s: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	hLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	22 5.0 25.00	0 87.8 80	120
Surr: BFB	1000 1000	100 80	120

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
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: 1604644

20-Apr-16

Client: Anima	s Environme	ntal								
Project: COPC	SJ 28-7 #14	5F				_				
Sample ID MB-24804	SampType: MBLK			Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batcl	h ID: 24	804	F	RunNo: 3	3568				
Prep Date: 4/14/2016	Analysis D	Date: 4	15/2016	S	SeqNo: 1	033222	Units: mg/h	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025							· ·	1 F
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000	ed to be	95.9	80	120			-
Sample ID LCS-24804	Samp	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles	1.4	3.78
Client ID: LCSS	Batc	h ID: 24	804	F	RunNo: 3	3568				
Prep Date: 4/14/2016	Analysis [Date: 4	15/2016	5	SeqNo: 1	033223	Units: mg/h	٢g		
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			(in per-
Toluene	0.89	0.050	1.000	0	88.6	80	124			
Ethylbenzene	0.87	0.050	1.000	0	87.4	82.8	121			
Xylenes, Total	2.6	0.10	3.000	0	88.0	83.9	122			
Surr: 4-Bromofluorobenzene	0.99	2	1.000		99.4	80	120	1	100	1. 20
Sample ID MB-24836	Samp	Гуре: МІ	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		A Good a
Client ID: PBS	Batc	h ID: 24	836	F	RunNo: 3	3600				
Prep Date: 4/15/2016	Analysis [Date: 4	18/2016	5	SeqNo: 1	034018	Units: mg/h	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								1.16
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.96		1.000		96.3	80	120	1.00		
Sample ID LCS-24836	Samp	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		1.5
Client ID: LCSS	Batc	h ID: 24	836	F	RunNo: 3	3600				
Prep Date: 4/15/2016	Analysis [Date: 4	/18/2016	5	SeqNo: 1	034019	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.5	75.3	123			San Alanta
Toluene	0.87	0.050	1.000	0	87.1	80	124			
Ethylbenzene	0.87	0.050	1.000	0	87.4	82.8	121			
Xylenes, Total	2.6	0.10	3.000	0	87.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- % Recovery outside of range due to dilution or matrix S
- В Analyte detected in the associated Method Blank
- Value above quantitation range Е
- Analyte detected below quantitation limits J

Page 8 of 8

Sample pH Not In Range RL Reporting Detection Limit

Ρ

W Sample container temperature is out of limit as specified

HALL IIall Environmental ENVIRONMENTAL ANALYSIS LABORATORY IVEL: 505-345-391 Website: www.	al Analysis Labo 4901 Hawk buquerque, NM 75 F.AX: 505-342 hallenvironment	ratory ins NL 87109 S-4107 al.com	ple Log-In C	heck List
Client Name: Animas Environmental Work Order Number	er: 1604644		RcptNo:	1
110 sthely				
Received by/date: 05 041101120		1.1.111		
Logged By: Lindsay Mangin 4/15/2016 7:20:00 Al	N	Juniy Hogo		
Completed By: Lindsay Mangin 4/15/2016 7:45:29 Al	N	And Hogo		
Reviewed By: 04/15/16				
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			
LogIn				
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 L.	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 []	
		N. [1		
10.VOA vials have zero headspace?	Yes L	No L.J	No VOA Viais	
11, were any sample containers received broken?	Yes (3)		# of preserved bottles checked	
12.Does paperwork match bottle labels?	Yes 🐖	No L.J	tor pH:	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 [7]		
15.Were all holding times able to be met?	Yes 🕷	No [.]	Checked by:	
(If no, notify customer for authorization.)				
Special Handling (If applicable)				
Special Handling (II applicable)	X., [7]	No. [7]	العبا مند	
10, was client notified of all discrepancies with this order?	Tes	NOTI	NA RC	
Person Notified: Date:				
By Whom: Via:	eMail [Phone [] Fax	[_] In Person	
Client Instructions:				
I / . Additional remarks:				
18. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact Seal No	Seal Date	Signed By		
I 2.5 Good Yes				

Page | of |

Chain-of-Custody Record ent: Animas Environmental Services ailing Address: 604 W. Pinon St. Farmington, NM 8740/ none #: 605 -564 - 22.8/ hail or Fax#: 6544 / 5 Canimasen vironmental.com VQC Package: Standard Level 4 (Full Validation) :creditation	Turn-Around Time: Image: Image: Project Name: COPC SJ $27-5$ #145F 4901 H Project #: $m_5 - 64/20/16$ Project Manager: E. Skyles E. Skyles Image: Sampler: E. Skyles	HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com tawkins NE - Albuquerque, NM 87109 05-345-3975 Fax 505-345-4107 Analysis Request
NELAP \Box Other EDD (Type) \Box Date Time Matrix Sample Request ID $H-Ib$ (250 Soil SC-1 $H-Ib$ 1245 Soil SC-2 $H-Ib$ 1234 Soil SC-3 $H-Ib$ 1254 Soil SC-4 $H-Ib$ 1259 Soil SC-5	Sampler: 6.JEyles/C. Cameman On Ice: Preservative Sample Temperature: 2.5 Container Type and # Preservative Type HEAL No. HEAL NO.	TPH (Method 418.1) EDB (Method 504.1) EDB (Method 504.1) PAH's (8310 or 827(RCRA 8 Metals Anions (F,CI,NO ₃ ,N(8260B (VOA) 8260B (VOA) 8270 (Semi-VOA) 8270 (Semi-VOA) Air Bubbles (Y or N)
Ite: Time: Relinquished by: H/L ISU Relinqu	Received by: Received by: Chustue Ucelle 1/1/1, 1804 Received by: Date Time Date Time Remarks: USER: SUPERUSOR AREA : Intracted to other accredited laboratories. This serves as notice of this possibility. Any su	Bill to Comoco Phillips WOTF OKOCRED by : Listfunter.