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) 599-4089
Facility Name: **San Juan 28-7 129F**	Facility Type: **Gas**

Surface Owner: State	Mineral Owner: 016608	API No.**3003926966**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	**02**	**27N**	**07W**	**770'**	**FNL**	**545'**	**FEL**	**Rio Arriba**

Latitude 36.6080611 Longitude -107.53521

NATURE OF RELEASE

Type of Release **Hydrocarbon**	Volume of Release **190 bbl**	Volume Recovered **0**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **1/17/2015 11:00 AM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Cory Smith (OCD)**	
By Whom? Lindsay Dumas	Date and Hour 1/17/2015 2:30 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
On 1/8/15 at approximately 1300, CIC doing routine inspection on separator and tank, found the swedge on the back side of the tank leaking. CIC contacted area supervisor and MSO. 10' X 5' area of contaminated soil identified. MSO immediately headed to location to place plug and dike to stop the leak. The loss of condensate was being investigated as possible vandalism or theft and then on 1/17/15 through soil sampling it was discovered it was a spill. Investigation is ongoing.

Describe Area Affected and Cleanup Action Taken.*
Excavation was 50' x 45' x 14' Deep. 1124 c/yds of soil was transported to IEI Land Farm and 1124 c/yds of clean soil was transported from Aztec Machine Co., and placed in the excavation site. Analytical results were below the regulatory standards for all walls; the base exceeded NMOCD action levels. NMOCD gave approval to spray potassium permanganate, which was applied on 1/28/2015.

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: Lindsay Dumas	OIL CONSERVATION DIVISION
Printed Name: **Lindsay Dumas**	Approved by Environmental Specialist: Cory Smith
Title: **Field Environmental Specialist**	Approval Date: 8/11/15 Expiration Date:
E-mail Address: **Lindsay.Dumas**@conocophillips.com	Conditions of Approval: Attached ☐
Date: 1/26/2015 Phone: (505) 599-4089	

* Attach Additional Sheets If Necessary #nCS1507248091

May 4, 2015

Lindsay Dumas
ConocoPhillips
San Juan Business Unit
Office 214-07
5525 Hwy 64
Farmington, New Mexico 87401

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

RE: Release Assessment and Final Excavation Report
San Juan 28-7 #129F
Rio Arriba County, New Mexico

Dear Ms. Dumas:

On January 17, 21, and 26, 2015, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 28-7 #129F, located in Rio Arriba County, New Mexico. The release consisted of approximately 190 barrels (bbls) of produced water and condensate and was the result of a corrosion hole on the bottom of the condensate tank at the location. The initial assessment was completed by AES on January 17, 2015, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on January 26, 2015.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-7 #129F
Location – NE¼ NE¼, Section 2, T27N, R7W, Rio Arriba County, New Mexico
Wellhead Lat/Long – N36.60809 and W107.53582
Release Location Lat/Long – N36.60831 and W107.53574
Land Jurisdiction – State of New Mexico
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, January 2015

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

1911 Main, Ste 280
Durango, CO
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 50 based on the following factors:

- **Depth to Groundwater:** Based on elevation, topographic interpretation, and visual reconnaissance, depth to groundwater is interpreted to be less than 50 feet below ground surface (bgs). (20 points)
- **Wellhead Protection Area:** A livestock well is located 275 feet east-northeast of the location. (20 points)
- **Distance to Surface Water Body:** A wash and intermittent pond are located approximately 330 feet to north and 345 feet northeast of the location, respectively, and discharge to Carrizo Canyon Creek. (10 points)

1.3 Assessment

AES was initially contacted by Lindsay Dumas of CoP on January 9, 2015, and on January 16, 2015, AES personnel completed the release assessment field work. The assessment included collection and field sampling of three soil samples from one soil boring in the immediate vicinity of the release. The soil boring was terminated at 9.5 feet on sandstone. All soil samples were saturated with petroleum hydrocarbons. Based on field sampling results, AES recommended excavation of the release area. The sample location is shown on Figure 3.

On January 21, 2015, 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. On January 26, 2015, at the request of Cory Smith - NMOCD representative, AES personnel collected three additional confirmation soil samples (SC-5 through SC-7) from the base of the excavation and from a one foot interval directly above the sandstone. The area of the final excavation measured approximately 48 feet by 39 feet by 10 feet in depth. The depth of the excavation was limited due to a confining sandstone unit around 12 feet bgs. On January 28, 2015, potassium permanganate was applied to the base of the excavation. No additional sampling was conducted. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of three soil samples from one boring (SB-1) and eight composite samples (SC-1 through SC-7 and SC-5 duplicate) 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-7) collected during the excavation clearance were submitted for confirmation laboratory analysis, with the exception of sample SC-5 collected on January 21, 2015.

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; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

2.3 Field and Laboratory Analytical Results

On January 16, 2015, initial assessment field screening results for VOCs via OVM showed concentrations in SB-1 ranging from 2,676 ppm to 3,777 ppm. Because soils were visibly saturated, no TPH analyses were run.

On January 21 and 26, 2015, final excavation field screening results for VOCs via OVM ranged from 21.9 ppm in SC-1 up to 2,550 ppm in SC-5. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-1 through SC-4 up to greater than 2,500 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.

Table 1. Soil Field Sampling VOCs and TPH Results
San Juan 28-7 #129F Initial Release Assessment and Final Excavation, January 2015

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*TPH 418.1 (mg/kg)*
	*NMOCD Action Level**		*100*	*100*
SB-1	1/16/15	1	**2,676**	NA
		5	**3,674**	NA
		8	**3,777**	NA
SC-1	1/21/15	1 to 10	21.9	<20.0
SC-2	1/21/15	1 to 10	27.6	<20.0
SC-3	1/21/15	1 to 10	**104**	<20.0
SC-4	1/21/15	1 to 10	65.0	<20.0
SC-5	1/21/15	10	**2,550**	**>2,500**
SC-5	1/26/15	10	NA	NA
SC-6	1/26/15	1 to 12	**746**	27.2
SC-7	1/26/15	1 to 12	36.2	23.6

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-7 were used to confirm field sampling results from the final excavation limits. Benzene and total BTEX concentrations in all samples were reported below laboratory detection limits, except SC-5 with 11 mg/kg benzene and 979 mg/kg total BTEX. TPH concentrations as GRO/DRO in SC-1 through SC-7 were also reported below laboratory detection limits in all samples, except SC-5 (8,700 mg/kg). Results are presented in Table 2 and on Figure 4. The laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results – Benzene, Total BTEX, and TPH
San Juan 28-7 #129F Initial Release Assessment and Final Excavation
January 2015

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
*NMOCD Action Level**			*10*	*50*	*100*	
SC-1	1/21/15	1 to 10	<0.049	<0.246	<4.9	<10
SC-2	1/21/15	1 to 10	<0.049	<0.245	<4.9	<10
SC-3	1/21/15	1 to 10	<0.049	<0.246	<4.9	<10
SC-4	1/21/15	1 to 10	<0.048	<0.240	<4.8	<9.9
SC-5	1/26/15	10	**11**	**979**	**6,800**	**1,900**
SC-6	1/26/15	1 to 12	<0.049	<0.246	<4.9	<9.9
SC-7	1/26/15	1 to 12	<0.049	<0.245	<4.9	<10

*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 January 16, 2015, AES conducted an initial assessment of petroleum contaminated soils associated with a release of produced water and condensate at the San Juan 28-7 #129F. 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 50.

Initial assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 100 mg/kg TPH were reported in SB-1. The highest VOC concentration was reported at 3,777 ppm.

On January 26, 2015, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the final walls and base of the excavation, except for SC-3 (north wall) which had a VOC concentration of 104 ppm and SC-5 (base) which had a VOC concentration of 2,550 ppm. Field TPH concentrations were below the applicable NMOCD action level of 100 mg/kg for the final walls of the excavation, but above the action level for the final excavation base, which had a TPH concentration greater than 2,500 mg/kg. Laboratory analytical results reported benzene, total BTEX, and TPH (as GRO/DRO)

concentrations below NMOCD action levels for the final walls of the excavation, but above the action level for the final excavation base (8,700 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 #129F, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for final sidewalls of the excavation. However, the final base of the excavation exceeded applicable NMOCD action levels for benzene, total BTEX, and TPH. The NMOCD gave approval to spray potassium permanganate (Quantum Growth™), which was applied to the base of the excavation on January 28, 2015. Backfilling activities took place on February 10, 2015. 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,

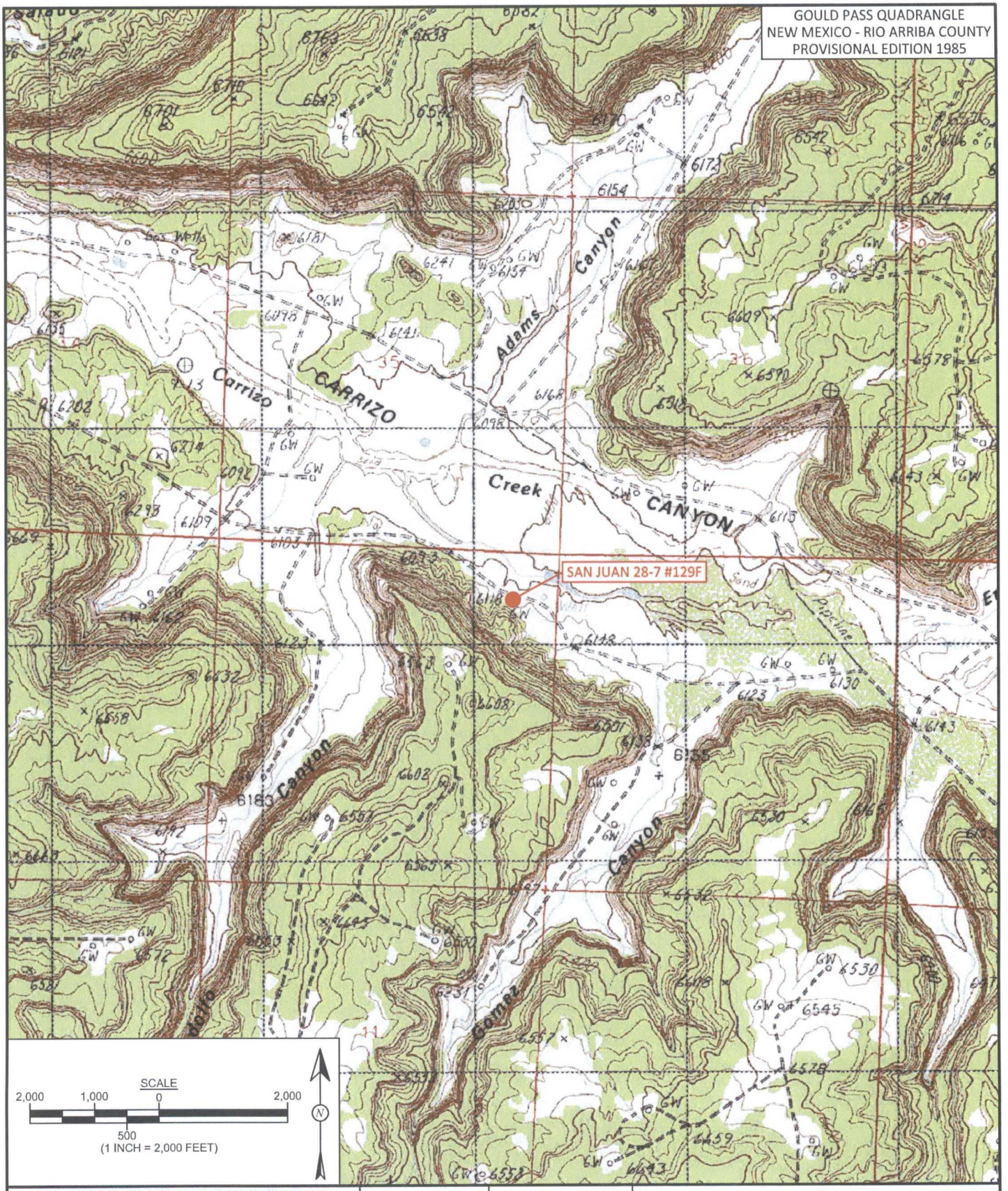
David J. Reese
Environmental Scientist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, January 2015
Figure 3. Initial Assessment Sample Locations and Results, January 2015
Figure 4. Final Excavation Sample Locations and Results, January 2015
AES Field Sampling Report 011615
AES Field Sampling Report 012115
AES Field Sampling Report 012615
Hall Laboratory Analytical Report 1501775
Hall Laboratory Analytical Report 1501902

R:\Animas 2000\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2015 Projects\ConocoPhillips\SJ 28-7 #129F\San Juan 28-7 #129F Release and Final Excavation Report 050415.docx



Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** February 5, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** April 29, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** April 29, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** April 29, 2015

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
SAN JUAN 28-7 #129F
NE¼ NE¼, SECTION 2, T27N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.60809, W107.53582

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** February 5, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** April 29, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** April 29, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** April 29, 2015

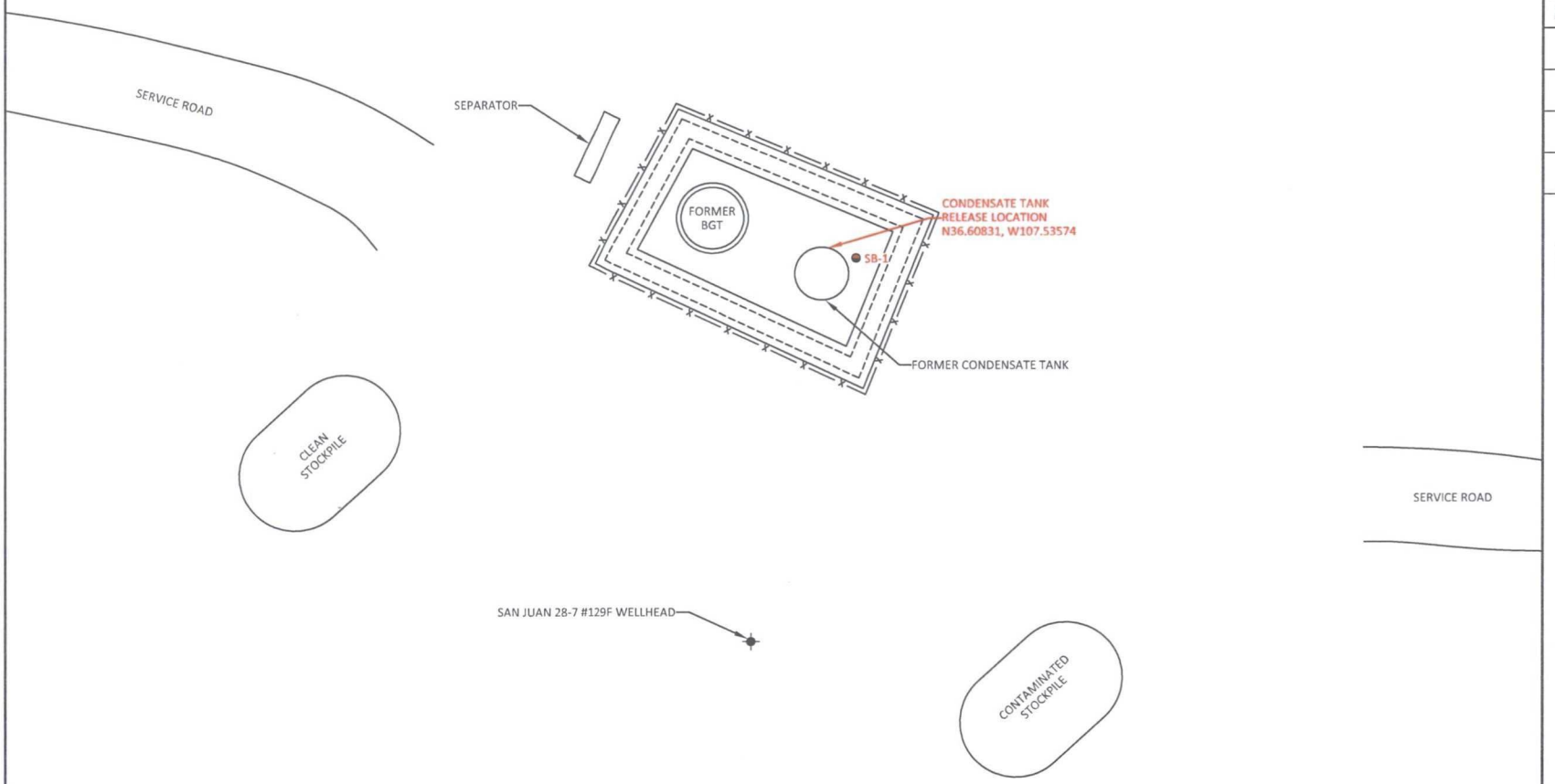
FIGURE 2

AERIAL SITE MAP
JANUARY 2015
ConocoPhillips
SAN JUAN 28-7 #129F
NE¼ NE¼, SECTION 2, T27N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.60809, W107.53582

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
JANUARY 2015
ConocoPhillips
SAN JUAN 28-7 #129F
NE¼ NE¼, SECTION 2, T27N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.60809, W107.53582

Field Sampling Results					
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			--	100	250
SB-1	1/16/15	1	2,676	NA	NA
		5	3,674	NA	NA
		8	3,777	NA	NA
NA - NOT ANALYZED					



Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
S. Glasses	February 5, 2015
REVISIONS BY:	**DATE REVISED:**
C. Lameman	April 29, 2015
CHECKED BY:	**DATE CHECKED:**
E. Skyles	April 29, 2015
APPROVED BY:	**DATE APPROVED:**
E. McNally	April 29, 2015

LEGEND

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

N

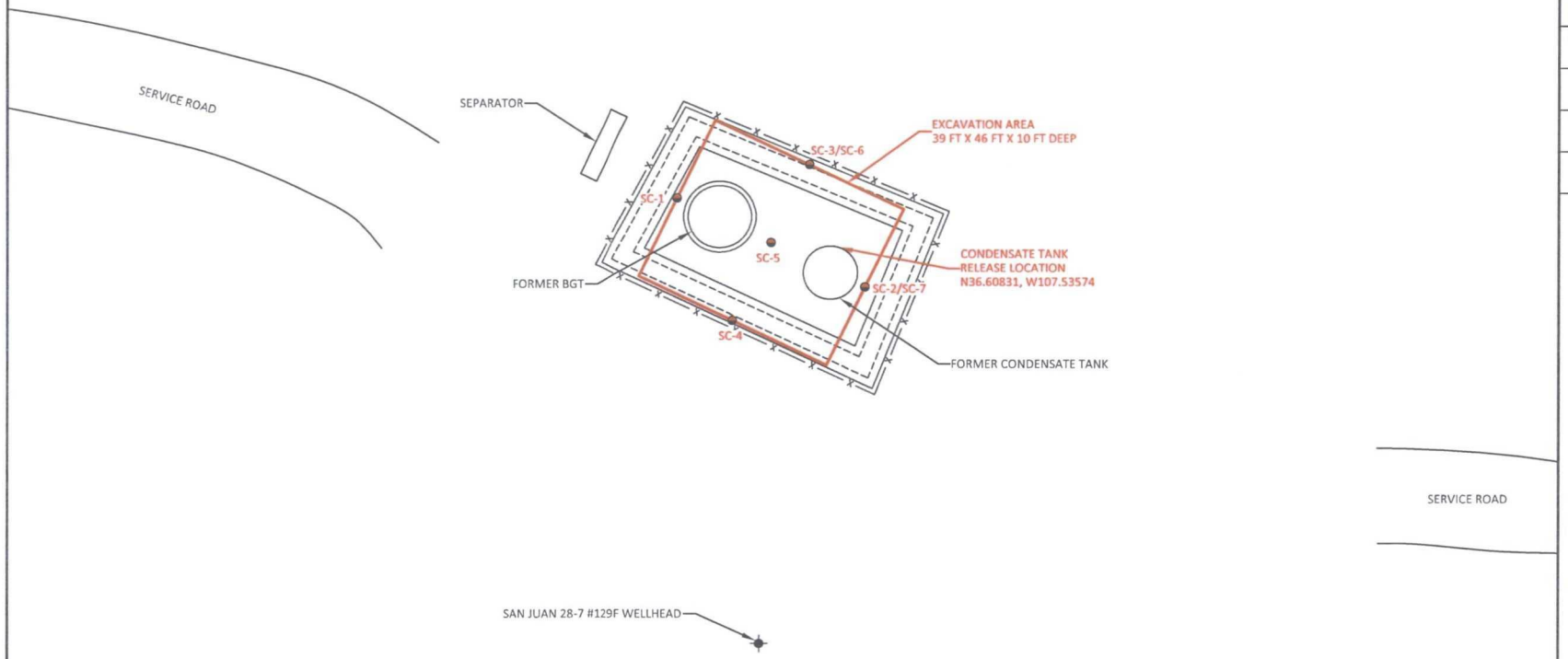
SCALE
25 15 0 25
5
(1 INCH = 25 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
JANUARY 2015
ConocoPhillips
SAN JUAN 28-7 #129F
NE¼ NE¼, SECTION 2, T27N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.60809, W107.53582

Field Sampling Results			
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL		100	100
SC-1	1/21/15	21.9	<20.0
SC-2	1/21/15	27.6	<20.0
SC-3	1/21/15	**104**	<20.0
SC-4	1/21/15	65.0	<20.0
SC-5	1/21/15	**2,550**	**>2,500**
SC-6	1/26/15	**746**	27.2
SC-7	1/26/15	36.2	23.6
ALL SAMPLES WERE COMPOSITE SAMPLES.			

Laboratory Analytical Results					
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL		10	50	100	
SC-1	1/21/15	<0.049	<0.246	<4.9	<10
SC-2	1/21/15	<0.049	<0.245	<4.9	<10
SC-3	1/21/15	<0.049	<0.246	<4.9	<10
SC-4	1/21/15	<0.048	<0.240	<4.8	<9.9
SC-5	1/26/15	**11**	**979**	**6,800**	**1,900**
SC-6	1/26/15	<0.049	<0.246	<4.9	<9.9
SC-7	1/26/15	<0.049	<0.245	<4.9	<10
SAMPLES WERE ANALYZED PER USEPA METHOD 8021B AND 8015D.					



Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** February 5, 2015
REVISIONS BY: C. Lameman	**DATE REVISED:** April 29, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** April 29, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** April 29, 2015

LEGEND

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

N

SCALE
25 15 0 25
5
(1 INCH = 25 FEET)

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-7 #129F

Date: 1/16/2015

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 @ 1'	1/16/2015	10:20	2,676	*Not Analyzed for TPH*				
SB-1 @ 5'	1/16/2015	10:25	3,674	*Not Analyzed for TPH*				
SB-1 @ 8'	1/16/2015	10:35	3,777	*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: Corwin Lameman

Report Finalized: 1/16/15

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-7 #129F

Date: 1/21/2015

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	1/21/2015	9:30	North Wall	21.9	13.6	10:39	20.0	1	SAH
SC-2	1/21/2015	9:40	South Wall	27.6	12.2	10:41	20.0	1	SAH
SC-3	1/21/2015	9:45	East Wall	104	10.9	10:43	20.0	1	SAH
SC-4	1/21/2015	9:50	West Wall	65.0	12.2	10:45	20.0	1	SAH
SC-5	1/21/2015	9:55	Base	2,550	>2,500	10:47	20.0	1	SAH

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Stephanie A. Hinds

Report Finalized: 1/21/15

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: San Juan 28-7 #129F

Date: 1/26/2015

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-6	1/26/2015	11:15	North Wall	746	23.6	11:38	20.0	1	CL
SC-7	1/26/2015	10:25	East Wall	36.2	27.2	11:21	20.0	1	CL

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Report Finalized: 1/26/15

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

January 26, 2015

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

RE: CoP SJ 28-7 #129F OrderNo.: 1501775

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 1/22/2015 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 **1501775**
Date Reported: **1/26/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501775-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 1/21/2015 9:30:00 AM
Received Date: 1/22/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **WL**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/23/2015 5:53:55 PM	17350
Surr: DNOP	82.8	63.5-128		%REC	1	1/23/2015 5:53:55 PM	17350
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2015 11:17:21 AM	17353
Surr: BFB	88.5	80-120		%REC	1	1/23/2015 11:17:21 AM	17353
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	1/23/2015 11:17:21 AM	17353
Toluene	ND	0.049		mg/Kg	1	1/23/2015 11:17:21 AM	17353
Ethylbenzene	ND	0.049		mg/Kg	1	1/23/2015 11:17:21 AM	17353
Xylenes, Total	ND	0.099		mg/Kg	1	1/23/2015 11:17:21 AM	17353
Surr: 4-Bromofluorobenzene	97.8	80-120		%REC	1	1/23/2015 11:17:21 AM	17353

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501775-002 **Matrix:** SOIL

Client Sample ID: SC-2
Collection Date: 1/21/2015 9:40:00 AM
Received Date: 1/22/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **WL**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/23/2015 6:15:21 PM	17350
Surr: DNOP	85.1	63.5-128		%REC	1	1/23/2015 6:15:21 PM	17350
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2015 12:43:34 PM	17353
Surr: BFB	90.4	80-120		%REC	1	1/23/2015 12:43:34 PM	17353
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	1/23/2015 12:43:34 PM	17353
Toluene	ND	0.049		mg/Kg	1	1/23/2015 12:43:34 PM	17353
Ethylbenzene	ND	0.049		mg/Kg	1	1/23/2015 12:43:34 PM	17353
Xylenes, Total	ND	0.098		mg/Kg	1	1/23/2015 12:43:34 PM	17353
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	1/23/2015 12:43:34 PM	17353

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501775-003 **Matrix:** SOIL

Client Sample ID: SC-3
Collection Date: 1/21/2015 9:45:00 AM
Received Date: 1/22/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **WL**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/23/2015 6:36:35 PM	17350
Surr: DNOP	81.3	63.5-128		%REC	1	1/23/2015 6:36:35 PM	17350
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2015 2:09:56 PM	17353
Surr: BFB	91.6	80-120		%REC	1	1/23/2015 2:09:56 PM	17353
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	1/23/2015 2:09:56 PM	17353
Toluene	ND	0.049		mg/Kg	1	1/23/2015 2:09:56 PM	17353
Ethylbenzene	ND	0.049		mg/Kg	1	1/23/2015 2:09:56 PM	17353
Xylenes, Total	ND	0.099		mg/Kg	1	1/23/2015 2:09:56 PM	17353
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	1/23/2015 2:09:56 PM	17353

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501775-004 **Matrix:** SOIL

Client Sample ID: SC-4
Collection Date: 1/21/2015 9:50:00 AM
Received Date: 1/22/2015 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **WL**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/23/2015 6:58:05 PM	17350
Surr: DNOP	90.6	63.5-128		%REC	1	1/23/2015 6:58:05 PM	17350
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/23/2015 2:38:39 PM	17353
Surr: BFB	89.3	80-120		%REC	1	1/23/2015 2:38:39 PM	17353
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.048		mg/Kg	1	1/23/2015 2:38:39 PM	17353
Toluene	ND	0.048		mg/Kg	1	1/23/2015 2:38:39 PM	17353
Ethylbenzene	ND	0.048		mg/Kg	1	1/23/2015 2:38:39 PM	17353
Xylenes, Total	ND	0.096		mg/Kg	1	1/23/2015 2:38:39 PM	17353
Surr: 4-Bromofluorobenzene	98.4	80-120		%REC	1	1/23/2015 2:38:39 PM	17353

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1501775**

26-Jan-15

Client: Animas Environmental
Project: CoP SJ 28-7 #129F

Sample ID **MB-17350**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **17350**	RunNo: **23845**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **703566** 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	7.5		10.00		75.0	63.5	128			

Sample ID **LCS-17350**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **17350**	RunNo: **23845**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **703573** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.8	67.8	130			
Surr: DNOP	4.7		5.000		94.7	63.5	128			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1501775**

26-Jan-15

Client: Animas Environmental
Project: CoP SJ 28-7 #129F

Sample ID **MB-17353**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704051** 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	890		1000		88.8	80	120			

Sample ID **LCS-17353**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704052** 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	107	65.8	139			
Surr: BFB	980		1000		98.5	80	120			

Sample ID **1501775-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704055** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.9	24.73	0	114	47.9	144			
Surr: BFB	990		989.1		99.6	80	120			

Sample ID **1501775-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-1**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704056** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.73	0	109	47.9	144	4.56	29.9	
Surr: BFB	980		989.1		99.0	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1501775**

26-Jan-15

Client: Animas Environmental
Project: CoP SJ 28-7 #129F

Sample ID **MB-17353**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704079** 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	0.99		1.000		99.2	80	120			

Sample ID **LCS-17353**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704080** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	106	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.1	0.050	1.000	0	106	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID **1501775-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-2**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704084** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9794	0	112	69.2	126			
Toluene	1.1	0.049	0.9794	0.01463	106	65.6	128			
Ethylbenzene	1.1	0.049	0.9794	0	112	65.5	138			
Xylenes, Total	3.3	0.098	2.938	0.03638	111	63	139			
Surr: 4-Bromofluorobenzene	1.1		0.9794		110	80	120			

Sample ID **1501775-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-2**	Batch ID: **17353**	RunNo: **23849**
Prep Date: **1/22/2015**	Analysis Date: **1/23/2015**	SeqNo: **704085** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9794	0	107	69.2	126	4.01	18.5	
Toluene	1.0	0.049	0.9794	0.01463	104	65.6	128	1.69	20.6	
Ethylbenzene	1.1	0.049	0.9794	0	111	65.5	138	0.927	20.1	
Xylenes, Total	3.2	0.098	2.938	0.03638	109	63	139	2.08	21.1	
Surr: 4-Bromofluorobenzene	1.0		0.9794		106	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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: 1501775 RcptNo: 1

Received by/date: 01/22/15

Logged By: Lindsay Mangin 1/22/2015 7:30:00 AM

Completed By: Lindsay Mangin 1/22/2015 8:35:15 AM

Reviewed By: JO 01/22/15

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?	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	2.4	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Animas Environmental Services	Turn-Around Time: ☒ Standard ☐ Rush
Mailing Address: 604 W. Pinon St. Farmington, NM 87401	Project Name: CoP SJ 28-7 #129F
Phone #: (505) 419-1660	Project #: CoP
email or Fax#: eskyles@animasenvironmental.com	Project Manager: E. Skyles
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)	Sampler: S. Hinds
Accreditation ☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 2.4

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1501775	BTEX + ~~MTBE + TMB's~~ 5/4 (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~ 5/4)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
1/21/15	09:30	Soil	SC-1	1-4oz	cool	-001	X		X									
1/21/15	09:40	Soil	SC-2	1-4oz	cool	-002	X		X									
1/21/15	09:45	Soil	SC-3	1-4oz	cool	-003	X		X									
1/21/15	09:50	Soil	SC-4	1-4oz	cool	-004	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/21/15	1720	Stephanie Alirdo	Christine Walters	1/21/15	1720
1/21/15	1756	Christine Walters		01/22/15	0730

Remarks: WO: 205 71513, Supervisor: Garry Nelson
Bill to CoP.
User: BENALE, Area: 23
Ordered by: Lindsay Dumas

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 02, 2015

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

RE: CoP SJ 28-7 #129F OrderNo.: 1501902

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/27/2015 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 **1501902**
Date Reported: **2/2/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501902-001 **Matrix:** SOIL

Client Sample ID: SC-5
Collection Date: 1/26/2015 11:15:00 AM
Received Date: 1/27/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	1900	99		mg/Kg	10	1/30/2015 12:51:54 PM	17416
Surr: DNOP	0	63.5-128	S	%REC	10	1/30/2015 12:51:54 PM	17416
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	6800	490		mg/Kg	100	1/28/2015 1:43:49 PM	17419
Surr: BFB	250	80-120	S	%REC	100	1/28/2015 1:43:49 PM	17419
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	11	4.9		mg/Kg	100	1/28/2015 1:43:49 PM	17419
Toluene	230	4.9		mg/Kg	100	1/28/2015 1:43:49 PM	17419
Ethylbenzene	48	4.9		mg/Kg	100	1/28/2015 1:43:49 PM	17419
Xylenes, Total	690	9.9		mg/Kg	100	1/28/2015 1:43:49 PM	17419
Surr: 4-Bromofluorobenzene	129	80-120	S	%REC	100	1/28/2015 1:43:49 PM	17419

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501902-002 **Matrix:** SOIL

Client Sample ID: SC-6
Collection Date: 1/26/2015 10:20:00 AM
Received Date: 1/27/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/29/2015 7:15:22 PM	17416
Surr: DNOP	81.7	63.5-128		%REC	1	1/29/2015 7:15:22 PM	17416
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2015 11:18:08 PM	17419
Surr: BFB	97.2	80-120		%REC	1	1/28/2015 11:18:08 PM	17419
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	1/28/2015 11:18:08 PM	17419
Toluene	ND	0.049		mg/Kg	1	1/28/2015 11:18:08 PM	17419
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2015 11:18:08 PM	17419
Xylenes, Total	ND	0.099		mg/Kg	1	1/28/2015 11:18:08 PM	17419
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	1/28/2015 11:18:08 PM	17419

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP SJ 28-7 #129F
Lab ID: 1501902-003 **Matrix:** SOIL

Client Sample ID: SC-7
Collection Date: 1/26/2015 10:25:00 AM
Received Date: 1/27/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/29/2015 7:36:52 PM	17416
Surr: DNOP	81.2	63.5-128		%REC	1	1/29/2015 7:36:52 PM	17416
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/28/2015 11:46:47 PM	17419
Surr: BFB	94.9	80-120		%REC	1	1/28/2015 11:46:47 PM	17419
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.049		mg/Kg	1	1/28/2015 11:46:47 PM	17419
Toluene	ND	0.049		mg/Kg	1	1/28/2015 11:46:47 PM	17419
Ethylbenzene	ND	0.049		mg/Kg	1	1/28/2015 11:46:47 PM	17419
Xylenes, Total	ND	0.098		mg/Kg	1	1/28/2015 11:46:47 PM	17419
Surr: 4-Bromofluorobenzene	107	80-120		%REC	1	1/28/2015 11:46:47 PM	17419

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
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
O	RSD is greater than RSDlimit	P	Sample pH greater than 2.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1501902**

02-Feb-15

Client: Animas Environmental

Project: CoP SJ 28-7 #129F

Sample ID **MB-17416**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **17416**	RunNo: **23963**
Prep Date: **1/27/2015**	Analysis Date: **1/29/2015**	SeqNo: **707558** 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	8.2		10.00		82.4	63.5	128			

Sample ID **LCS-17416**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **17416**	RunNo: **23963**
Prep Date: **1/27/2015**	Analysis Date: **1/29/2015**	SeqNo: **707560** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	10	50.00	0	74.8	67.8	130			
Surr: DNOP	4.8		5.000		96.9	63.5	128			

Sample ID **MB-17473**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **17473**	RunNo: **23997**
Prep Date: **1/30/2015**	Analysis Date: **1/30/2015**	SeqNo: **707649** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.0		10.00		79.9	63.5	128			

Sample ID **LCS-17473**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **17473**	RunNo: **23997**
Prep Date: **1/30/2015**	Analysis Date: **1/30/2015**	SeqNo: **707738** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.1	63.5	128			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1501902**

02-Feb-15

Client: Animas Environmental

Project: CoP SJ 28-7 #129F

Sample ID **MB-17419**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **17419**	RunNo: **23952**
Prep Date: **1/27/2015**	Analysis Date: **1/28/2015**	SeqNo: **706468** 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	920		1000		92.3	80	120			

Sample ID **LCS-17419**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **17419**	RunNo: **23952**
Prep Date: **1/27/2015**	Analysis Date: **1/28/2015**	SeqNo: **706469** 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	106	65.8	139			
Surr: BFB	1000		1000		101	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1501902**

02-Feb-15

Client: Animas Environmental

Project: CoP SJ 28-7 #129F

Sample ID **MB-17419**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **17419**	RunNo: **23952**
Prep Date: **1/27/2015**	Analysis Date: **1/28/2015**	SeqNo: **706493** 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	1.0		1.000		104	80	120			

Sample ID **LCS-17419**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **17419**	RunNo: **23952**
Prep Date: **1/27/2015**	Analysis Date: **1/28/2015**	SeqNo: **706494** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	114	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	112	80	120			
Xylenes, Total	3.4	0.10	3.000	0	112	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID **1501902-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-6**	Batch ID: **17419**	RunNo: **23952**
Prep Date: **1/27/2015**	Analysis Date: **1/28/2015**	SeqNo: **706509** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9891	0	115	69.2	126			
Toluene	1.1	0.049	0.9891	0.01393	109	65.6	128			
Ethylbenzene	1.1	0.049	0.9891	0.01133	113	65.5	138			
Xylenes, Total	3.4	0.099	2.967	0.08116	113	63	139			
Surr: 4-Bromofluorobenzene	1.1		0.9891		111	80	120			

Sample ID **1501902-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-6**	Batch ID: **17419**	RunNo: **23952**
Prep Date: **1/27/2015**	Analysis Date: **1/28/2015**	SeqNo: **706510** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9881	0	107	69.2	126	7.13	18.5	
Toluene	1.0	0.049	0.9881	0.01393	104	65.6	128	5.05	20.6	
Ethylbenzene	1.1	0.049	0.9881	0.01133	112	65.5	138	1.43	20.1	
Xylenes, Total	3.4	0.099	2.964	0.08116	112	63	139	0.808	21.1	
Surr: 4-Bromofluorobenzene	1.1		0.9881		115	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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: 1501902 RcptNo: 1

Received by/date: 01/27/15

Logged By: Lindsay Mangin 1/27/2015 7:00:00 AM

Completed By: Lindsay Mangin 1/27/2015 7:48:33 AM

Reviewed By: 01/27/15

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?	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

Mailing Address: 604 W. Piñon St. Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: eskyles@animasenvironmental.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: CoP SJ 29-7 #129F

Project #:

Project Manager: E. Skyles

Sampler: C. Lineman

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2

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. 1501902	BTEX + ~~MIBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / ~~MRO~~)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
1-26-15	1115	Soil	SC-5	1-4oz jar	Cool	-001	X		X													
1-26-15	1020	Soil	SC-6	1-4oz jar	Cool	-002	X		X													
1-26-15	1025	Soil	SC-7	1-4oz jar	Cool	-003	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/26/15	1715			1/26/15	1715
1/26/15	1747			01/27/15	0700

Remarks: Bill to ConocoPhillips
WO: 20571513
User: BENALE
Ordered by: Lindsay Dumas
Supervisor: Garry Nelson
Area: 73

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.