OIL CONS. DIV DIST. 3

FEB 18 2016

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 **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 326-9786**
Facility Name: **Phillips 2E**	Facility Type: **Gas Well**

Surface Owner **Federal**	Mineral Owner **Federal**	API No. **3004524407**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**22**	**28N**	**11W**	**1120**	**South**	**1800**	**West**	**San Juan**

Latitude 36.64348 Longitude -107.99396

NATURE OF RELEASE

Type of Release **Hydrocarbon**	Volume of Release **Unknown**	Volume Recovered **None**
Source of Release **Below Grade Tank (BGT) Closure**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **08-18-2015**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **N/A**	
By Whom? **N/A**	Date and Hour **N/A**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

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

Describe Cause of Problem and Remedial Action Taken.*
Below-Grade Tank Closure activities with samples taken resulting in constituents exceeded standards outlined by 19.15.17.13 NMAC.

Describe Area Affected and Cleanup Action Taken.*
NMOCD action levels for releases are specified in NMOCD's Guidelines for Leaks, Spills and Releases and the release was assigned a ranking score of 40. Samples were collected and analytical results are below applicable NMOCD action levels. No further work will be performed. The final 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: 02/18/2016 Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval: — Attached ☐
Date: **February 11, 2016** Phone: **(505) 326-9786**	

* Attach Additional Sheets If Necessary

NUF1604150350

22

January 19, 2016

Lisa Hunter
ConocoPhillips
San Juan Business Unit
(505) 258-1607

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

RE: Below Grade Tank Closure Report
Phillips 2E
San Juan County, New Mexico

Dear Ms. Hunter:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (COPC) Phillips 2E, located in San Juan County, New Mexico. Tank removal was completed by COPC contractors while AES was on site.

1.0 Site Information

1.1 Location

Site Name – Phillips 2E
Legal Description – SE¼ SW¼, Section 22, T28N, R11W, San Juan County, New Mexico
Well Latitude/Longitude – N36.64381 and W107.99417, respectively
BGT Latitude/Longitude – N36.64348 and W107.99396, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, August 2015

1.2 NMOCD Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), the location was given a ranking score of 40 based on the following factors:

- **Depth to Groundwater:** A BGT permit application (C-144) form site-specific hydrogeology report dated August 2015 estimated the depth to groundwater to be 6 feet below ground surface (bgs). However, note that during site work in 2015 and 2016, groundwater was not encountered during an excavation that was terminated on sandstone at 6 feet bgs. (20 points)
- **Wellhead Protection Area:** The tank location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An unnamed wash which ultimately discharges to Kutz Wash is located approximately 95 feet east of the location. (20 points)

1.3 BGT Closure Assessment

AES was initially contacted by Lindsay Dumas of COPC on August 18, 2015, and on August 21, 2015, Corwin Lameman and Sam Glasses of AES mobilized to the location. AES personnel collected one 5-point soil sample composited from four perimeter samples and one center sample of the BGT footprint from below the BGT liner. After release assessment activities, AES returned to the location on October 1, 2015, to collect one 5-point soil sample composited from the sandstone base below the BGT.

2.0 Soil Sampling

On August 18, 2015, AES personnel conducted field sampling and collected one 5-point composite (BGT SC-1) from below the BGT. Soil was collected from approximately 0.5 feet below the former BGT. Soil sample BGT SC-1 was field screened for volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chloride, and was also submitted for confirmation laboratory analysis.

On October 1, 2015, AES personnel collected an additional 5-point composite sample (BGT SC-2) from the base of the BGT pit. Soil sample BGT SC-2 was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

A portion of BGT SC-1 was utilized for field screening of VOC vapors with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Soil sample BGT SC-1 was also analyzed in the field for TPH per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

2.1.3 Chlorides

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

2.2 Laboratory Analyses

The composite soil samples BGT SC-1 and BGT SC-2 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. The samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample BGT SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH per USEPA Method 418.1; and
- Chloride per USEPA Method 300.0.

Soil sample BGT SC-2 was laboratory analyzed for:

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

2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM were measured at 7.3 ppm in BGT SC-1. Field TPH concentrations were reported at 705 mg/kg. The field chloride concentration was

40 mg/kg. Field sampling results are summarized in Table 1 and presented on Figure 2. The AES Field Sampling Report is attached.

Table 1. Soil Field VOCs, TPH, and Chloride Results
Phillips 2E BGT Closure, August and October 2015

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13E)			--	*100/100**	*250/NE**
BGT SC-1	8/21/15	0.5	7.3	**705**	40
BGT SC-2	10/1/15	0.5	NA	NA	NA

NA – Not Analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

Laboratory analytical results reported benzene and total BTEX concentrations in BGT SC-1 as less than 0.0046 mg/kg and 0.23 mg/kg, respectively. TPH concentrations were reported at 520 mg/kg. The laboratory chloride concentration was reported below the laboratory detection limit of 30 mg/kg. TPH concentrations as GRO/DRO in BGT SC-2 were reported at 17 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results
Phillips 2E BGT Closure, August and October 2015

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Total TPH (mg/kg)	Chlorides (mg/kg)
	NMOCD Action Level (NMAC 19.15.17.13E)		*0.2/10**	*50*	*100*		*100*	*250/NE**
BGT SC-1	8/21/15	0.5	<0.046	<0.23	NA	NA	**520**	<30
BGT SC-2	10/1/15	0.5	NA	NA	<4.7	17	NA	NA

*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)
NA – Not Analyzed

3.0 Conclusions and Recommendations

3.1 BGT Closure

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations in BGT SC-1 exceeded the NMOCD action level of 100 mg/kg, with a concentration reported at 705 mg/kg. Laboratory analytical results for TPH were reported above the NMOCD action level with 520 mg/kg. However, benzene and total BTEX concentrations were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations were below the NMOCD action level of 250 mg/kg. Based on field sampling and laboratory analytical results on August 21, 2015, a release is confirmed at the Phillips 2E.

3.2 Release Confirmation

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 40. Benzene and total BTEX concentrations in BGT SC-1 were below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively while total TPH concentrations were reported above the NMOCD action level of 100 mg/kg. On October 1, 2015, soil sample BGT SC-2 was collected from sandstone below the previous BGT liner. Sample BGT SC-2 reported laboratory analytical results for TPH below the NMOCD action level with 17 mg/kg. Soil laboratory analyses showed that benzene, total BTEX, and chloride concentrations for BGT SC-1 and TPH as GRO/DRO for BGT SC-2 were below the NMOCD action levels. Release notification should follow the protocols outlined in NMAC 19.15.29 and 30. No further work is recommended for the Phillips 2E release.

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

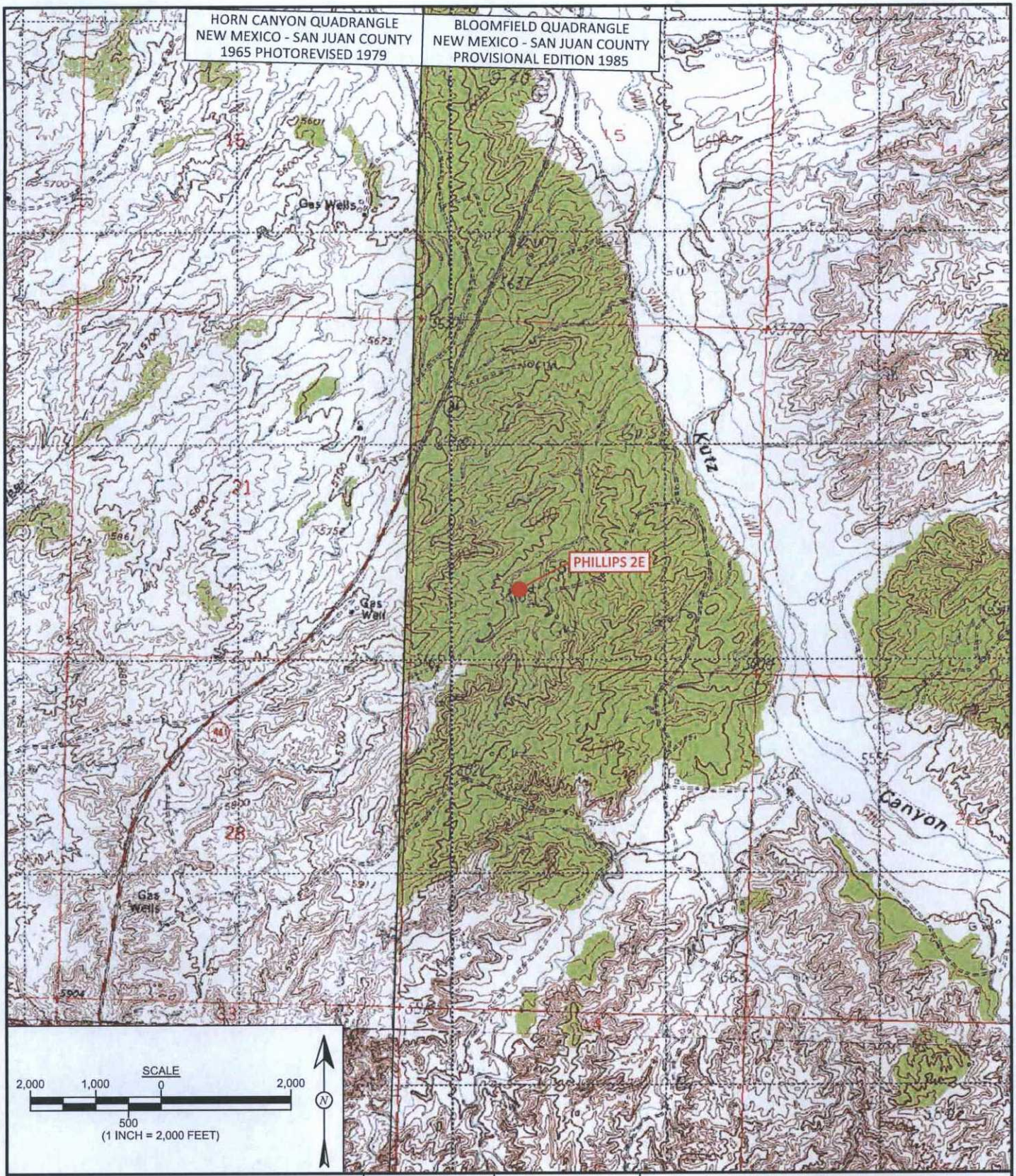
Emilee Skyles
Geologist/Project Lead

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, August 2015
AES Field Sampling Report 082115
Hall Analytical Report 1508B82
Hall Analytical Report 1510098

R:\Animas 2000\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2016 Projects\ConocoPhillips\Phillips 2E\COPC Phillips 2E BGT Closure Report 011916.docx



animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY: S. Glasses	**DATE DRAWN:** September 2, 2015
REVISIONS BY: D. Dougi	**DATE REVISED:** September 9, 2015
CHECKED BY: E. Skyles	**DATE CHECKED:** September 9, 2015
APPROVED BY: E. McNally	**DATE APPROVED:** September 9, 2015

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
PHILLIPS 2E
SE¼ SW¼, SECTION 22, T28N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.64381, W107.99417

Field Sampling Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			--	100	250
BGT SC-1	8/21/15	0.5	7.3	4,533	40
BGT SC-2	10/1/15	0.5	NA	NA	NA

SC-1 AND SC-2 ARE 5-POINT COMPOSITE SAMPLES. NA - NOT ANALYZED

Laboratory Analytical Results

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	Total TPH (mg/kg)	Chlorides (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			0.2	50	100	250	100	
BGT SC-1	8/21/15	0.5	<0.046	<0.23	520	<30	NA	NA
BGT SC-2	10/1/15	0.5	NA	NA	NA	NA	<4.7	17

BGT SC-1 WAS ANALYZED PER USEPA METHOD 8021B, 418.1, AND 300.0. BGT SC-2 WAS ANALYZED PER USEPA METHOD 8015. NA - NOT ANALYZED

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY: D. Dougi	DATE DRAWN: September 9, 2015
REVISIONS BY: S. Glasses	DATE REVISED: January 22, 2016
CHECKED BY: E. Skyles	DATE CHECKED: January 22, 2016
APPROVED BY: E. McNally	DATE APPROVED: January 22, 2016

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
AUGUST AND OCTOBER 2015
ConocoPhillips
PHILLIPS 2E
SE¼ SW¼, SECTION 22, T28N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.64381, W107.99417

AES Field Sampling Report

Animas Environmental Services, LLC

Client: ConocoPhillips

Project Location: Phillips 2E

Date: 8/21/2015

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
BGT-SC-1	8/21/2015	13:15	Composite	7.6	40	705	13:50	20.0	1	EMS

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

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate
Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Emily Sky

Report Finalized: 8/21/15

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

August 31, 2015

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

RE: CoP Phillips 2E OrderNo.: 1508B82

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/22/2015 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 **1508B82**
Date Reported: **8/31/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Phillips 2E
Lab ID: 1508B82-001 **Matrix:** SOIL

Client Sample ID: BGT SC-1
Collection Date: 8/21/2015 1:15:00 PM
Received Date: 8/22/2015 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **TOM**	
Petroleum Hydrocarbons, TR	520	20		mg/Kg	1	8/28/2015	20982
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	8/27/2015 1:27:10 PM	21013
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.046		mg/Kg	1	8/26/2015 1:28:18 PM	20969
Toluene	ND	0.046		mg/Kg	1	8/26/2015 1:28:18 PM	20969
Ethylbenzene	ND	0.046		mg/Kg	1	8/26/2015 1:28:18 PM	20969
Xylenes, Total	ND	0.092		mg/Kg	1	8/26/2015 1:28:18 PM	20969
Surr: 4-Bromofluorobenzene	96.8	80-120		%REC	1	8/26/2015 1:28:18 PM	20969

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#: **1508B82**

31-Aug-15

Client: Animas Environmental
Project: CoP Phillips 2E

Sample ID	**MB-20982**	SampType:	**MBLK**		TestCode:	**EPA Method 418.1: TPH**				
Client ID:	**PBS**	Batch ID:	**20982**		RunNo:	**28520**				
Prep Date:	**8/26/2015**	Analysis Date:	**8/28/2015**		SeqNo:	**862783**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	**LCS-20982**	SampType:	**LCS**		TestCode:	**EPA Method 418.1: TPH**				
Client ID:	**LCSS**	Batch ID:	**20982**		RunNo:	**28520**				
Prep Date:	**8/26/2015**	Analysis Date:	**8/28/2015**		SeqNo:	**862784**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	104	83.6	116			

Sample ID	**LCSD-20982**	SampType:	**LCSD**		TestCode:	**EPA Method 418.1: TPH**				
Client ID:	**LCSS02**	Batch ID:	**20982**		RunNo:	**28520**				
Prep Date:	**8/26/2015**	Analysis Date:	**8/28/2015**		SeqNo:	**862785**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	107	83.6	116	2.42	20	

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#: **1508B82**

31-Aug-15

Client: Animas Environmental
Project: CoP Phillips 2E

Sample ID **MB-20969**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **20969**	RunNo: **28483**
Prep Date: **8/25/2015**	Analysis Date: **8/26/2015**	SeqNo: **861082** 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		94.5	80	120			

Sample ID **LCS-20969**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **20969**	RunNo: **28483**
Prep Date: **8/25/2015**	Analysis Date: **8/26/2015**	SeqNo: **861083** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.050	1.000	0	93.1	76.6	128			
Toluene	0.95	0.050	1.000	0	95.1	75	124			
Ethylbenzene	1.0	0.050	1.000	0	99.6	79.5	126			
Xylenes, Total	2.9	0.10	3.000	0	96.1	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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

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: 1508B82 RcptNo: 1

Received by/date: G.A. 08/22/15
Logged By: Ashley Gallegos 8/22/2015 8:30:00 AM
Completed By: Ashley Gallegos 8/24/2015 5:47:07 PM
Reviewed By: CS 08/25/15

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 ☐
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	1.9	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 E. Pinon 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 Phillips 2E

Project #:

Project Manager: E. Skyles

Sampler: CL/SG

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

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. 1508882	BTEX + MTBE + 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)	Chloride 300.0				Air Bubbles (Y or N)
8-21-15	1315	Soil	BGT SC-1	4oz jar	Cool	-001	X			X								X				

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/21/15	1755		Christi Waeke	8/21/15	1755
8/21/15	1824	Christi Waeke		08/22/15	0830

Remarks: Bill to ConocoPhillips
WO: 20970860 ordered by: Lindsay Dunna
Supervisor: Shawn Fincher
User ID: KGARCIA
Area:

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

October 09, 2015

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

RE: CoPC Phillips 2E

OrderNo.: 1510098

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 10/3/2015 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 **1510098**
Date Reported: **10/9/2015**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoPC Phillips 2E
Lab ID: 1510098-001 **Matrix:** SOIL

Client Sample ID: BGT SC-2
Collection Date: 10/1/2015 10:51:00 AM
Received Date: 10/3/2015 9:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **KJH**	
Diesel Range Organics (DRO)	17	9.7		mg/Kg	1	10/8/2015 1:47:43 AM	21643
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/8/2015 1:47:43 AM	21643
Surr: DNOP	101	57.9-140		%REC	1	10/8/2015 1:47:43 AM	21643
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/6/2015 2:34:16 PM	21666
Surr: BFB	87.0	75.4-113		%REC	1	10/6/2015 2:34:16 PM	21666

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#: **1510098**

09-Oct-15

Client: Animas Environmental
Project: CoPC Phillips 2E

Sample ID **MB-21652**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **21652**			RunNo: **29273**					
Prep Date: **10/5/2015**	Analysis Date: **10/5/2015**			SeqNo: **890900**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.9		10.00		78.7	57.9	140			

Sample ID **LCS-21652**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **21652**			RunNo: **29273**					
Prep Date: **10/5/2015**	Analysis Date: **10/5/2015**			SeqNo: **890901**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.7	57.9	140			

Sample ID **MB-21643**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **21643**			RunNo: **29273**					
Prep Date: **10/2/2015**	Analysis Date: **10/7/2015**			SeqNo: **894135**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	57.9	140			

Sample ID **LCS-21643**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **21643**			RunNo: **29273**					
Prep Date: **10/2/2015**	Analysis Date: **10/7/2015**			SeqNo: **894136**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.9	57.4	139			
Surr: DNOP	4.8		5.000		95.7	57.9	140			

Sample ID **MB-21737**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **21737**			RunNo: **29273**					
Prep Date: **10/8/2015**	Analysis Date: **10/8/2015**			SeqNo: **894229**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		98.6	57.9	140			

Sample ID **LCS-21737**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **21737**			RunNo: **29273**					
Prep Date: **10/8/2015**	Analysis Date: **10/8/2015**			SeqNo: **894230**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		103	57.9	140			

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#: **1510098**

09-Oct-15

Client: Animas Environmental

Project: CoPC Phillips 2E

Sample ID **MB-21666**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **21666**	RunNo: **29332**
Prep Date: **10/5/2015**	Analysis Date: **10/6/2015**	SeqNo: **892323** 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	870		1000		86.6	75.4	113			

Sample ID **LCS-21666**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **21666**	RunNo: **29332**
Prep Date: **10/5/2015**	Analysis Date: **10/6/2015**	SeqNo: **892324** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	79.6	122			
Surr: BFB	940		1000		94.1	75.4	113			

Sample ID **1510098-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BGT SC-2**	Batch ID: **21666**	RunNo: **29332**
Prep Date: **10/5/2015**	Analysis Date: **10/6/2015**	SeqNo: **892326** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.7	23.72	0	118	62.5	151			
Surr: BFB	920		948.8		97.2	75.4	113			

Sample ID **1510098-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BGT SC-2**	Batch ID: **21666**	RunNo: **29332**
Prep Date: **10/5/2015**	Analysis Date: **10/6/2015**	SeqNo: **892327** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.7	23.70	0	112	62.5	151	5.86	22.1	
Surr: BFB	920		947.9		96.8	75.4	113	0	0	

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

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Albuquerque, NM 87109
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Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1510098 RcptNo: 1

Received by/date: 10/03/15

Logged By: Lindsay Mangin 10/3/2015 9:25:00 AM

Completed By: Lindsay Mangin 10/5/2015 7:29:41 AM

Reviewed By: 10/05/15

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	2.6	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

Mailing Address: 604 W. Pinon St.

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: COPC Phillips 2E

Project #:

Project Manager: E. Skyles

Sampler: E. Skyles

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.6

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. 1510098	BTEX + MTBE + 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)
10/1/15	10:51	Soil	BGT SC-2	1-4oz.	cool	-001			X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/2/15	1317		Christ Walt	10/2/15	1317
10/2/15	2020	Christ Walt		10/03/15	0925

Remarks: Bill to Conoco Phillips
Area: 22
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.