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 **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 326-9786**
Facility Name: **Albino Canyon 101**	Facility Type: **Gas Well**

Surface Owner **State**	Mineral Owner **State**	API No.**3004528566**

LOCATION OF RELEASE

RCVD SEP 17 '14

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	36	32N	08W	1445	South	1295	West	San Juan

OIL CONS. DIV.

DIST. 3

Latitude 36.93654 Longitude -107.63061

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **15.74 BBL**	Volume Recovered **0 BBL**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **06/23/14**
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	If YES, To Whom? **Jonathan Kelly, NMOCD**	
By Whom? **Lisa Hunter**	Date and Hour **06/24/14 @ 7:40 a.m.**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
Production Tank found leaking during a facility reset and compressor down size. Well was shut in, and tanks emptied. Delineation through Third-Party Environmental calculated spill to be approximately 15.74 BBLs.

Describe Area Affected and Cleanup Action Taken.*
ConocoPhillips will assess the soil to determine a path forward for clean-up if necessary. Third-Party Environmental to assess and delineate impacted area. Release assessment was completed by third-party environmental and Analytical results were below the NMOCD regulatory standards – no further action required. The soil sampling report is attached for review. No further remediation required.

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: 9/18/14	Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval:	Attached ☐
Date: **September 16, 2014** Phone: (505) **326-9786**		

* Attach Additional Sheets If Necessary

#NCS 1426139125

21

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

September 5, 2014

Lisa Hunter
ConocoPhillips
San Juan Business Unit
Office 214-04
5525 Hwy 64
Farmington, New Mexico 87401

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

RE: Release Assessment Report
Albino Canyon #101
San Juan County, New Mexico

Dear Ms. Hunter:

On June 24, 2014, Animas Environmental Services, LLC (AES) completed a release assessment at the ConocoPhillips (CoP) Albino Canyon #101, located in San Juan County, New Mexico. The release consisted of an unknown quantity of produced water and was the result of corrosion holes located at the bottom of the production tank discovered during a facility reset at the location.

1.0 Site Information

1.1 Location

Site Name – Albino Canyon #101
Location – NE¼ SW¼, Section 36, T32N, R8W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.93669 and W107.63140, respectively
Release Location Latitude/Longitude – N36.93643 and W107.63114, respectively
Land Jurisdiction – State of New Mexico
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, June 2014

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 10 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report form dated January 1994 for this location reported the depth to groundwater at greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** An ephemeral stream which flows through Blind Canyon and into Navajo Reservoir is located approximately 560 feet to the south. (10 points)

1.3 Assessment

AES was initially contacted by Lisa Hunter of CoP on June 24, 2014, and on the same day, Stephanie Lynn and Emilee Skyles of AES completed the release assessment field work. The assessment included collection and field sampling of six soil samples from two assessment trenches, and one composite sample collected in and around the release area. Assessment trenches were terminated at 6 feet below grade. Sample locations are presented on Figure 3.

2.0 Soil Sampling

A total of six soil samples from two assessment trenches (TH-1 and TH-2) and one composite sample (SC-1) were collected during the assessments. All soil samples from TH-1 and TH-2 were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). Soil sample SC-1 was field screened for VOCs and chlorides. Four samples (TH-1 at 0.5 ft, TH-1 at 4 ft, TH-2 at 0.5 ft and TH-2 at 4 ft) were also submitted for confirmation laboratory analysis.

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

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

2.1.3 Chlorides

Soil sample 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 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:

- Chloride per EPA Method 300.0

In addition, soil samples TH-1 at 0.5 ft and TH-2 at 0.5 ft 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 June 24, 2014, release assessment field screening results for VOCs via OVM showed concentrations ranging from 0.2 ppm in TH-2 up to 1.9 ppm in TH-1. Field TPH concentrations were reported at 54.0 mg/kg inTH-1 and 51.1 mg/kg in TH-2. Results are included below in Table 1 and on Figure 3. The AES Field Sampling Report is attached.

Table 1. Field Sampling VOCs and TPH Results
Albino Canyon #101 Release Assessment, June 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)	Field Chlorides (mg/kg)
*NMOCD Action Level**			*100*	*1,000*	*NE*
TH-1	6/24/14	0.5	1.9	54.0	NA
		4	0.4	NA	NA
		6	0.5	NA	NA
TH-2	6/24/14	0.5	1.2	51.1	NA
		4	0.5	NA	NA
		6	0.2	NA	NA

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)	Field Chlorides (mg/kg)
*NMOCD Action Level**			*100*	*1,000*	*NE*
SC-1	6/24/14	0.5	0.6	NA	80

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

Laboratory analyses for TH-1 and TH-2 were used to confirm field sampling results of the release assessment. Benzene concentrations were reported below laboratory detection limits. Total BTEX concentrations were reported as less than 0.14 mg/kg in TH-1 at 0.5 ft and less than 0.146 mg/kg in TH-2 at 0.5 ft. TPH concentrations as GRO/DRO concentrations were reported below laboratory detection limits. Chloride concentrations ranged from less than 30 mg/kg in TH-2 at 4 ft up to 150 mg/kg in TH-1 at 0.5. Results are presented in Table 2 and on Figure 3. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH and Chloride
Albino Canyon #101 Release Assessment, June 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Chlorides (mg/kg)
*NMOCD Action Level**			*10*	*50*	*1,000*		*NE*
TH-1	6/24/14	0.5	<0.028	<0.14	<2.8	<10	150
TH-1	6/24/14	4	NA	NA	NA	NA	81
TH-2	6/24/14	0.5	<0.029	<0.146	<2.9	<10	49
TH-2	6/24/14	4	NA	NA	NA	NA	<30

NA – not analyzed, NE – not established
*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 June 24, 2014, AES conducted a release assessment of potentially impacted soils associated with a release of produced water at the Albino Canyon #101. 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 10.

Release assessment field sampling results below the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH were reported in all samples. The highest VOC concentration was reported in TH-1 with 1.9 ppm, and the highest TPH concentration was also reported in TH-1 at 54.0 mg/kg.

Laboratory analytical results for TH-1 and TH-2 showed that benzene and total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively, in each sample. TPH concentrations as GRO/DRO were also below NMOCD action levels. Chloride concentrations ranged from less than 30 mg/kg up to 150 mg/kg in TH-1.

Based on final field sampling and laboratory analytical results of the release assessment at the Albino Canyon #101, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels. No further work is recommended.

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

Sincerely,

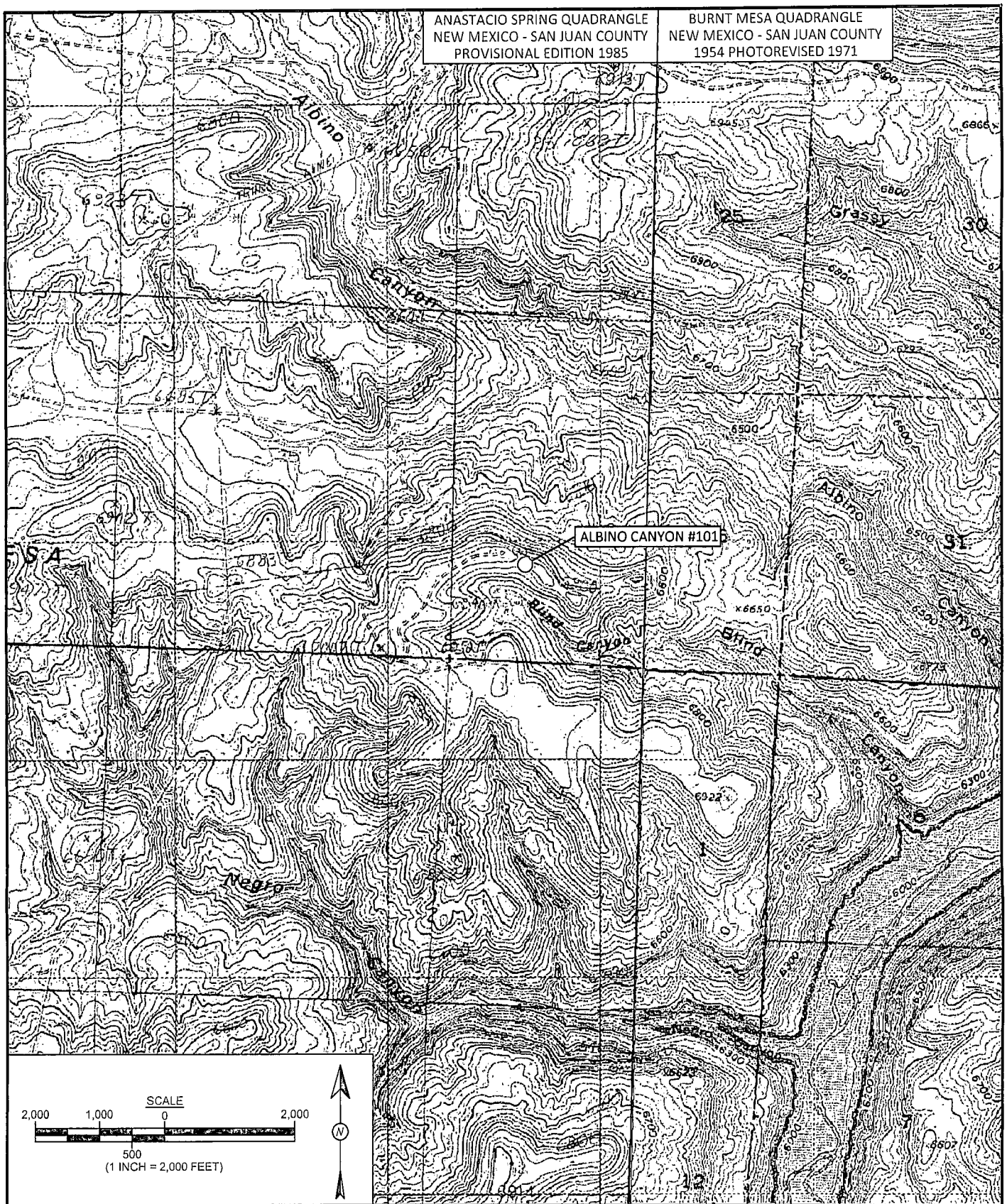
Emilee Skyles
Staff Geologist

Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, June 2014
Figure 3. Release Assessment Sample Locations and Results, June 2014
AES Field Sampling Report 062414
Hall Laboratory Analytical Report 1406B91

C:\Users\emcnally.AES\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\Albino Canyon #101\CoP Albino Canyon #101 Release Assessment Report 090514.docx



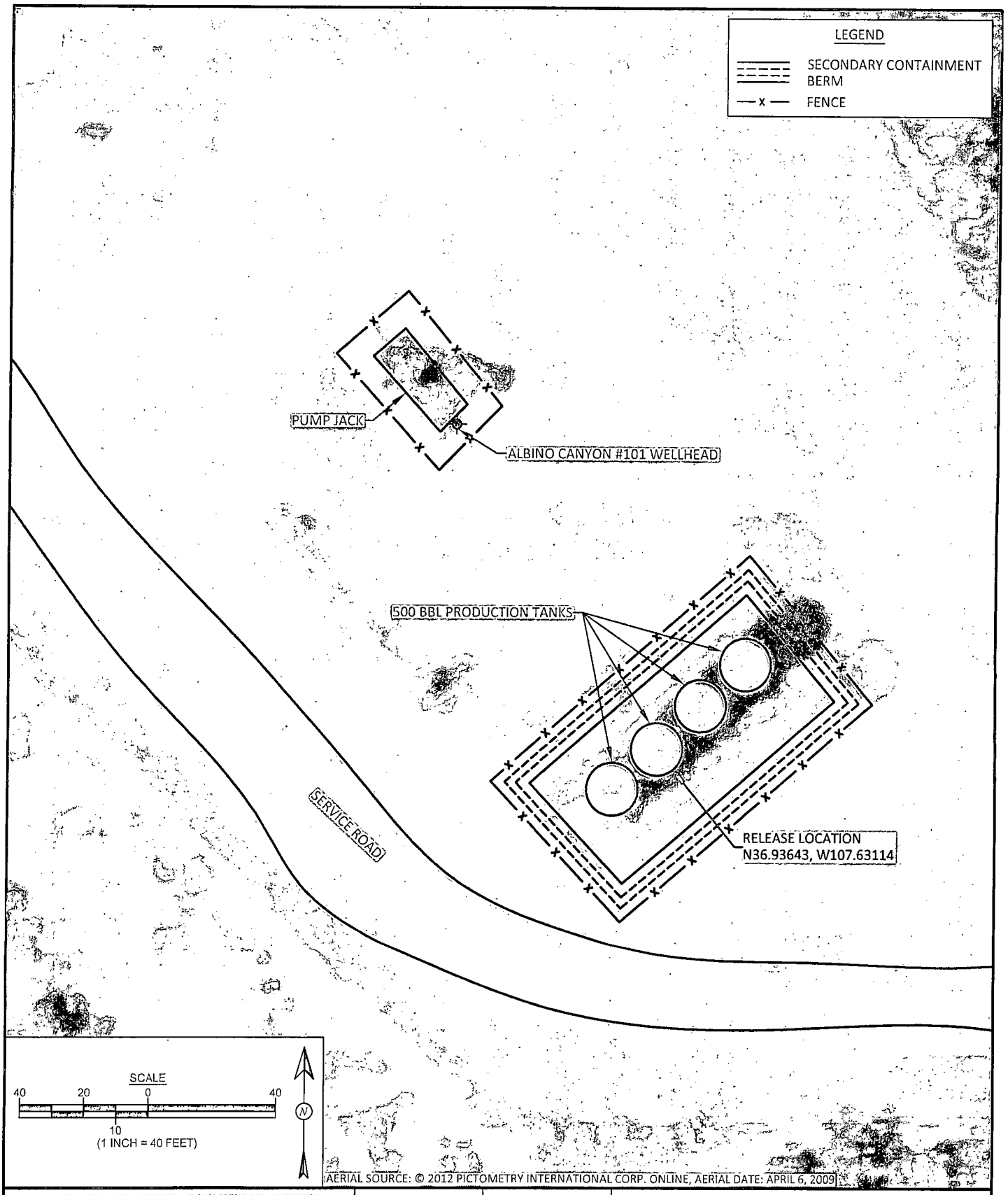
AES

Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** July 7, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** August 8, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** August 8, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** August 8, 2014

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
ALBINO CANYON #101
NE¼ SW¼, SECTION 36, T32N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.93669, W107.63140

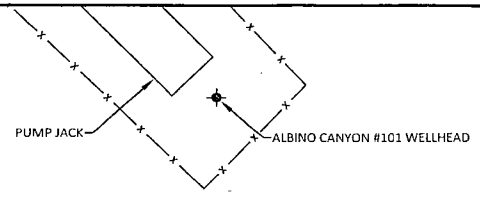


Animas Environmental Services, LLC

DRAWN BY: S. Glasses	**DATE DRAWN:** July 8, 2014	**FIGURE 2**
REVISIONS BY: C. Lameman	**DATE REVISED:** August 8, 2014	**AERIAL SITE MAP JUNE 2014** ConocoPhillips ALBINO CANYON #101 NE¼ SW¼, SECTION 36, T32N, R8W SAN JUAN COUNTY, NEW MEXICO N36.93669, W107.63140
CHECKED BY: D. Watson	**DATE CHECKED:** August 8, 2014	
APPROVED BY: E. McNally	**DATE APPROVED:** August 8, 2014	

FIGURE 3

RELEASE ASSESSMENT SAMPLE LOCATIONS AND RESULTS
JUNE 2014
ConocoPhillips
ALBINO CANYON #101
NE¼ SW¼, SECTION 36, T32N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.93669, W107.63140



Laboratory Analytical Results

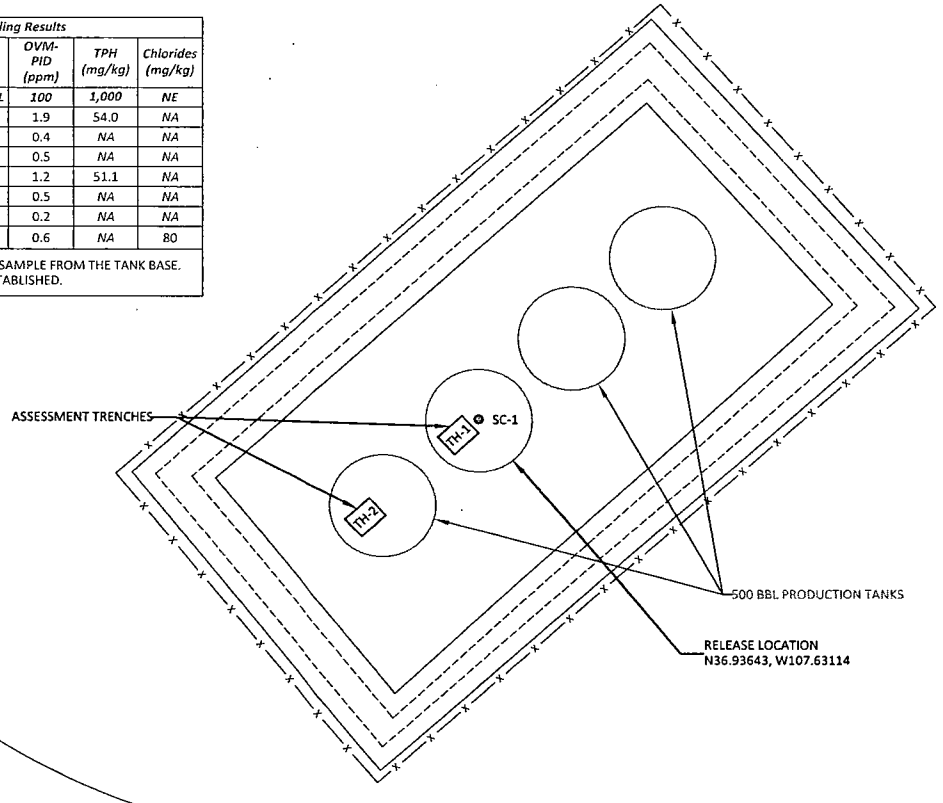
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000		NE
TH-1	6/24/14	0.5	<0.028	<0.14	<2.8	<10	150
		4	NA	NA	NA	NA	81
TH-2	6/24/14	0.5	<0.029	<0.146	<2.9	<10	49
		4	NA	NA	NA	NA	<30

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B, 8015D, AND/OR 300.0.
NE - NOT ESTABLISHED, NA - NOT ANALYZED

Field Sampling Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			100	1,000	NE
TH-1	6/24/14	0.5	1.9	54.0	NA
		4	0.4	NA	NA
		6	0.5	NA	NA
TH-2	6/24/14	0.5	1.2	51.1	NA
		4	0.5	NA	NA
		6	0.2	NA	NA
SC-1	6/24/14	0.5	0.6	NA	80

SC-1 WAS A 5-POINT COMPOSITE SAMPLE FROM THE TANK BASE.
NA - NOT ANALYZED. NE - NOT ESTABLISHED.

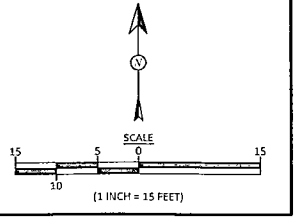


Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	June 25, 2014
REVISIONS BY:	DATE REVISED:
C. Lameman	August 8, 2014
CHECKED BY:	DATE CHECKED:
D. Watson	August 8, 2014
APPROVED BY:	DATE APPROVED:
E. McNally	August 8, 2014

LEGEND

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



AES Field Sampling Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3084

Client: ConocoPhillips

Project Location: Albino Canyon #101

Date: 6/24/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field Chloride (mg/kg)	TPH* (mg/kg)	TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 0.5'	6/24/2014	16:15	1.9	NA	54.0	16:34	20.0	1	SL
TH-1 @ 4'	6/24/2014	16:40	0.4	NA	*Not Analyzed for TPH*				
TH-1 @ 6'	6/24/2014	16:43	0.5	NA	*Not Analyzed for TPH*				
TH-2 @ 0.5'	6/24/2014	16:20	1.2	NA	51.1	16:38	20.0	1	SL
TH-2 @ 4'	6/24/2014	16:50	0.5	NA	*Not Analyzed for TPH*				
TH-2 @ 6'	6/24/2014	16:54	0.2	NA	*Not Analyzed for TPH*				
SC-1 @ 0.5'	6/24/2014	16:35	0.6	80.0	*Not Analyzed for TPH*				

DF	Dilution Factor
NA	Not Analyzed
ND	Not Detected at the Reporting Limit
PQL	Practical Quantitation Limit

**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: Stephanie Allyn

Report Finalized: 6/24/14

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 30, 2014

Debbie Watson
Animas Environmental
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: CoP Albino Canyon 101 OrderNo.: 1406B91

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/26/2014 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1406B91**
Date Reported: **6/30/2014**

CLIENT: Animas Environmental
Project: CoP Albino Canyon 101
Lab ID: 1406B91-001 **Matrix:** SOIL

Client Sample ID: TH-1 @ 0.5'
Collection Date: 6/24/2014 4:15:00 PM
Received Date: 6/26/2014 8:10:00 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	6/26/2014 10:25:12 AM	13911
Surr: DNOP	88.8	57.9-140		%REC	1	6/26/2014 10:25:12 AM	13911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	2.8		mg/Kg	1	6/26/2014 9:37:40 AM	R19524
Surr: BFB	91.9	80-120		%REC	1	6/26/2014 9:37:40 AM	R19524
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.028		mg/Kg	1	6/26/2014 9:37:40 AM	R19524
Toluene	ND	0.028		mg/Kg	1	6/26/2014 9:37:40 AM	R19524
Ethylbenzene	ND	0.028		mg/Kg	1	6/26/2014 9:37:40 AM	R19524
Xylenes, Total	ND	0.056		mg/Kg	1	6/26/2014 9:37:40 AM	R19524
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	6/26/2014 9:37:40 AM	R19524
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	150	30		mg/Kg	20	6/26/2014 9:49:32 AM	13914

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		

Analytical Report
Lab Order **1406B91**
Date Reported: **6/30/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Albino Canyon 101
Lab ID: 1406B91-002 **Matrix:** SOIL

Client Sample ID: TH-1 @ 4'
Collection Date: 6/24/2014 4:40:00 PM
Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: **JRR**
Chloride	81	30		mg/Kg	20	6/26/2014 10:01:57 AM	13914

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

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, Inc.

CLIENT: Animas Environmental
Project: CoP Albino Canyon 101
Lab ID: 1406B91-003 **Matrix:** SOIL

Client Sample ID: TH-2 @ 0.5'
Collection Date: 6/24/2014 4:30:00 PM
Received Date: 6/26/2014 8:10:00 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	6/26/2014 10:46:49 AM	13911
Surr: DNOP	88.4	57.9-140		%REC	1	6/26/2014 10:46:49 AM	13911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	6/26/2014 10:07:55 AM	R19524
Surr: BFB	96.9	80-120		%REC	1	6/26/2014 10:07:55 AM	R19524
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.029		mg/Kg	1	6/26/2014 10:07:55 AM	R19524
Toluene	ND	0.029		mg/Kg	1	6/26/2014 10:07:55 AM	R19524
Ethylbenzene	ND	0.029		mg/Kg	1	6/26/2014 10:07:55 AM	R19524
Xylenes, Total	ND	0.059		mg/Kg	1	6/26/2014 10:07:55 AM	R19524
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	6/26/2014 10:07:55 AM	R19524
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	49	30		mg/Kg	20	6/26/2014 10:14:22 AM	13914

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		

Analytical Report
Lab Order **1406B91**
Date Reported: **6/30/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Albino Canyon 101
Lab ID: 1406B91-004 **Matrix:** SOIL

Client Sample ID: TH-2 @ 4'
Collection Date: 6/24/2014 4:50:00 PM
Received Date: 6/26/2014 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	ND	30		mg/Kg	20	6/26/2014 10:26:46 AM	13914

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

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#: **1406B91**

30-Jun-14

Client: Animas Environmental

Project: CoP Albino Canyon 101

Sample ID **MB-13914**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **13914**	RunNo: **19547**
Prep Date: **6/26/2014**	Analysis Date: **6/26/2014**	SeqNo: **566119** Units: **mg/Kg**

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

Sample ID **LCS-13914**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **13914**	RunNo: **19547**
Prep Date: **6/26/2014**	Analysis Date: **6/26/2014**	SeqNo: **566120** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Qualifiers:

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- 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#: **1406B91**

30-Jun-14

Client: Animas Environmental

Project: CoP Albino Canyon 101

Sample ID **MB-13911**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13911**	RunNo: **19522**
Prep Date: **6/26/2014**	Analysis Date: **6/26/2014**	SeqNo: **564983** 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	7.1		10.00		70.6	57.9	140			

Sample ID **LCS-13911**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13911**	RunNo: **19522**
Prep Date: **6/26/2014**	Analysis Date: **6/26/2014**	SeqNo: **564984** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.3	68.6	130			
Surr: DNOP	3.4		5.000		67.1	57.9	140			

Sample ID **MB-13913**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **13913**	RunNo: **19522**
Prep Date: **6/26/2014**	Analysis Date: **6/26/2014**	SeqNo: **565609** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.6		10.00		66.4	57.9	140			

Sample ID **LCS-13913**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **13913**	RunNo: **19522**
Prep Date: **6/26/2014**	Analysis Date: **6/26/2014**	SeqNo: **565610** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		5.000		61.7	57.9	140			

Qualifiers:

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- 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#: **1406B91**

30-Jun-14

Client: Animas Environmental

Project: CoP Albino Canyon 101

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565533** 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	940		1000		93.6	80	120			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565534** 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	104	71.7	134			
Surr: BFB	940		1000		94.2	80	120			

Sample ID **1406B91-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **TH-1 @ 0.5'**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565536** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	14	2.8	14.00	0	99.2	71.8	132			
Surr: BFB	600		560.2		108	80	120			

Sample ID **1406B91-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **TH-1 @ 0.5'**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565537** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	13	2.8	14.00	0	94.0	71.8	132	5.38	20	
Surr: BFB	550		560.2		98.6	80	120	0	0	

Qualifiers:

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- E Value above quantitation range
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- 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#: **1406B91**

30-Jun-14

Client: Animas Environmental

Project: CoP Albino Canyon 101

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565547** 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		103	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565548** 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	110	80	120			
Toluene	1.1	0.050	1.000	0	109	80	120			
Ethylbenzene	1.1	0.050	1.000	0	108	80	120			
Xylenes, Total	3.3	0.10	3.000	0	110	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID **1406B91-003AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **TH-2 @ 0.5'**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565555** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.55	0.029	0.5886	0	94.0	77.4	142			
Toluene	0.54	0.029	0.5886	0	92.6	77	132			
Ethylbenzene	0.55	0.029	0.5886	0	94.1	77.6	134			
Xylenes, Total	1.8	0.059	1.766	0	100	77.4	132			
Surr: 4-Bromofluorobenzene	0.64		0.5886		108	80	120			

Sample ID **1406B91-003AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **TH-2 @ 0.5'**	Batch ID: **R19524**	RunNo: **19524**
Prep Date:	Analysis Date: **6/26/2014**	SeqNo: **565556** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.55	0.029	0.5886	0	93.7	77.4	142	0.277	20	
Toluene	0.54	0.029	0.5886	0	91.5	77	132	1.12	20	
Ethylbenzene	0.54	0.029	0.5886	0	92.2	77.6	134	2.10	20	
Xylenes, Total	1.7	0.059	1.766	0	97.9	77.4	132	2.19	20	
Surr: 4-Bromofluorobenzene	0.64		0.5886		109	80	120	0	0	

Qualifiers:

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- B Analyte detected in the associated Method Blank
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- 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: 1406B91 | RcptNo: 1

Received by/date: AT 06/26/14

Logged By: Anne Thorne 6/26/2014 8:10:00 AM Anne Thorne

Completed By: Anne Thorne 6/26/2014 Anne Thorne

Reviewed By: JO 06/26/14

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	1.6	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same day

Project Name: CoP Albino Canyon 101

Project #:

Project Manager: D. Watson

Sampler: ES / DW

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6

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. 1406391	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)	300.0 Chlorides				Air Bubbles (Y or N)
6-24-14	1615	Soil	TH-1 @ 0.5'	MeoH Kit / 4oz glass	MeoH / cold	-001	X		X									X				
6-24-14	1640	Soil	TH-1 @ 4'	1-4oz glass	cold	-002												X				
6-24-14	1630	Soil	TH-2 @ 0.5	MeoH Kit / 1-4oz glass	MeoH / cold	-003	X		X									X				
6-24-14	1650	Soil	TH-2 @ 4'	1-4oz glass	cold	-004												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/25/14	1621	Deborah Watson		6/25/14	1621
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/25/14	1740			06/26/14	0810

Remarks: Bill to ConocoPhillips

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.