

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 <b>ConocoPhillips Company</b>	Contact <b>Lindsay Dumas</b>	
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 599-4089</b>	
Facility Name: <b>Lindrith B 8</b>	Facility Type: <b>Oil</b>	
Surface Owner <b>Fee</b>	Mineral Owner <b>BLM (SF-078913)</b>	API No. <b>30-039-22422</b>

**LOCATION OF RELEASE**

Unit Letter <b>M</b>	Section <b>27</b>	Township <b>24N</b>	Range <b>03W</b>	Feet from the <b>940'</b>	North/South Line <b>South Line</b>	Feet from the <b>825'</b>	East/West Line <b>West Line</b>	County <b>Rio Arriba</b>
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Latitude 36.276859 Longitude -107.14959

**NATURE OF RELEASE**

Type of Release <b>Hydrocarbon</b>	Volume of Release <b>63 BBLS</b>	Volume Recovered <b>0 BBLS</b>
Source of Release <b>Production Tank</b>	Date and Hour of Occurrence <b>3/19/14 12:00PM</b>	Date and Hour of Discovery <b>3/19/2014 12:00PM</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Shari Ketcham (BLM) &amp; Brandon Powell (OCD)</b>	
By Whom? <b>Lindsay Dumas</b>	Date and Hour <b>3/19/14 4:30PM</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

**OIL CONS. DIV DIST. 3**

**OCT 22 2014**

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

A tank fire resulted in a release of 63 bbls of condensate. 56 bbls were consumed during the fire and 7 bbls were deposited on the adjacent production tank and secondary containment. The fire was monitored and burned out on its own.

Describe Area Affected and Cleanup Action Taken.\*

Excavation was 35' x 55' x 2' Deep. 143 c/yds of soil was transported to TNT Land Farm and 143 c/yds of clean soil was transported from Aztec Machine and placed in the excavation site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>Lindsay Dumas</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Lindsay Dumas</b>	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>11/19/20</b>	Expiration Date:
E-mail Address: <b>Lindsay.Dumas@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>10/18/2014</b>	Phone: <b>(505) 599-4089</b>	

\* Attach Additional Sheets If Necessary

#NCS 1432335558

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Animas Environmental Services, LLC

[www.animasenvironmental.com](http://www.animasenvironmental.com)

August 11, 2014

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

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3084

*Via electronic mail to:*

[SJBUE-Team@ConocoPhillips.com](mailto:SJBUE-Team@ConocoPhillips.com)

**RE: Initial Release Assessment and Final Excavation Report  
Lindrith B #8 (North Excavation)  
Rio Arriba County, New Mexico**

Dear Ms. Dumas:

On April 11 and May 14, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits (north excavation) at the ConocoPhillips (CoP) Lindrith B #8, located in Rio Arriba County, New Mexico. The release consisted of approximately 63 barrels (bbls) of produced water and condensate and was the result of an tank explosion during a facility reset at the location. The initial release assessment was completed by AES on April 11, 2014, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on May 14, 2014.

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## 1.0 Site Information

### 1.1 Location

Site Name – Lindrith B #8

Location – SW¼ SW¼, Section 27, T24N, R3W, Rio Arriba County, New Mexico

Well Head Latitude/Longitude – N36.27684 and W107.15009, respectively

Release Location Latitude/Longitude – N36.27715 and W107.14998, respectively

Land Jurisdiction – Private

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, April 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 30 based on the following factors:

- **Depth to Groundwater:** A pit closure report form dated April 1995 for the Lindrith B #8 reported the depth to groundwater at 50 to 99 feet below ground surface (bgs). (10 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** There are two unnamed washes located approximately 180 feet to the east and west of the location. Both washes flow into the wash in Medio Canyon. (20 points)

## 1.3 Assessment

AES was initially contacted by Lindsay Dumas of CoP on April 8, 2014, and on April 11, 2014, Deborah Watson and Sam Glasses of AES completed the release assessment field work. The assessment included collection and field sampling of 34 soil samples from 14 borings in and around the release area. Soil borings were terminated between 1 and 4 feet. Based on the field sampling results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On May 14, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field sampling activities included collection of five confirmation soil samples from the walls and base of the excavation. The area of the final excavation measured approximately 49 feet by 37 feet by 1.5 to 4 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

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## 2.0 Soil Sampling

A total of 34 soil samples from 14 borings (SB-1 through SB-14) and 5 composite samples (SC-1 through SC-5) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), and selected samples were also analyzed for total petroleum hydrocarbons (TPH). One discrete soil sample (SB-1) collected during the initial assessment and five composite samples (SC-1 through SC-5) collected during the excavation clearance were submitted for confirmation laboratory analysis.

## 2.1 *Field Sampling*

### 2.1.1 **Volatile Organic Compounds**

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

### 2.1.2 **Total Petroleum Hydrocarbons**

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

## 2.2 *Laboratory Analyses*

The soil samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All soil samples were laboratory analyzed for:

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

## 2.3 *Field and Laboratory Analytical Results*

On April 11, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.0 ppm (SB-3, SB-5 through SB-9, SB-12, SB-13, and SB-14) up to 12.5 ppm (SB-10). Field TPH concentrations ranged from 24.4 mg/kg in SB-4 to greater than 2,500 mg/kg in SB-1.

On May 14, 2014, final excavation field screening results for VOCs via OVM ranged from 0.5 ppm in SC-2 up to 1.8 ppm in SC-4. Field TPH concentrations ranged from 25.7 mg/kg in SC-4 up to 137 mg/kg in SC-1. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Field Sampling VOCs and TPH Results  
Lindrith B #8 Initial Release Assessment and Final Excavation (North Excavation)  
April and May 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>TPH 418.1 (mg/kg)</i>
<i>NMOCD Action Level*</i>			100	100
SB-1	4/11/14	0.5	12.3	>2,500
		1	1.9	2,007
		2	0.1	NA
		3	0.9	448
SB-2	4/11/14	0.5	0.3	NA
		2	0.1	149
SB-3	4/11/14	0.5	0.4	NA
		1	5.7	NA
		2	0.0	NA
		3	0.2	390
SB-4	4/11/14	0.5	0.1	NA
		3	1.1	24.4
SB-5	4/11/14	0.5	0.0	NA
SB-6	4/11/14	Surface	0.0	NA
		1	0.0	25.7
SB-7	4/11/14	Surface	0.0	NA
		1	0.0	130
SB-8	4/11/14	Surface	0.0	NA
		1	0.0	161
SB-9	4/11/14	Surface	0.0	138
		1	0.0	NA
SB-10	4/11/14	0.5	12.5	NA
		1	1.7	111
		2	1.6	448
		3	1.2	NA
		4	0.6	25.7
SB-11	4/11/14	Surface	0.1	NA

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>VOCs via OVM (ppm)</i>	<i>TPH 418.1 (mg/kg)</i>
<i>NMOCD Action Level*</i>			100	100
		2	0.1	41.2
SB-12	4/11/14	Surface	0.9	NA
		2	0.0	<b>609</b>
SB-13	4/11/14	0.5	0.5	NA
		2	0.0	42.5
SB-14	4/11/14	Surface	0.0	NA
		2	0.0	68.2
SC-1	5/14/14	1 to 4	0.6	<b>137</b>
SC-2	5/14/14	1 to 2.5	0.5	41.2
SC-3	5/14/14	1 to 4	0.9	32.1
SC-4	5/14/14	1 to 4	1.8	25.7
SC-5	5/14/14	1.5 to 4	1.5	<b>113</b>

NA – not analyzed

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

Laboratory analyses for SB-1 at 3 feet were used to confirm field sampling results of the initial release assessment, and TPH concentrations as GRO/DRO were reported at 310 mg/kg.

Laboratory analyses for SC-1 through SC-5 were used to confirm field sampling results from the final excavation. TPH concentrations as GRO/DRO were reported below the detection limits in all samples, except SC-5 with 26 mg/kg DRO. Results are presented in Table 2 and on Figure 4. The laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH  
Lindrith B #8 Initial Release Assessment and Final Excavation (North Excavation)  
April and May 2014

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>10</i>	<i>50</i>	<i>100</i>	
SB-1	4/11/14	3	NA	NA	<5.0	310
SC-1	5/14/14	1 to 4	NA	NA	<3.3	<9.8
SC-2	5/14/14	0.5 to 2.5	NA	NA	<4.7	<10
SC-3	5/14/14	1 to 4	NA	NA	<4.9	<9.9
SC-4	5/14/14	1 to 4	NA	NA	<4.9	<9.9
SC-5	5/14/14	1.5 to 4	NA	NA	<3.3	26

NA – not analyzed

\*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 April 11, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a release of produced water and condensate at the Lindrith B #8. 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 30.

Initial assessment field sampling results above the NMOCD action level of 100 mg/kg TPH were reported in SB-1, SB-2, SB-3, SB-7, SB-8, SB-9, SB-10 and SB-12. The highest VOC concentration was reported in SB-10 with 12.5 ppm, and the highest TPH concentration was reported in SB-1 with greater than 2,500 mg/kg. Laboratory analyses for SB-1 were used to confirm field sampling results, and the TPH concentration as GRO/DRO exceeded the NMOCD action level of 100 mg/kg with 310 mg/kg.

On May 14, 2014, final clearance of the excavation area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the final walls and base of the excavation. Field TPH concentrations were also below the applicable NMOCD action level of 100 mg/kg for the final walls and base of the excavation, with the exception of SC-1 (north wall) and SC-5 (base) which had TPH concentrations of 137 and 113 mg/kg, respectively. However,

laboratory analytical results reported TPH concentrations as GRO/DRO below the applicable NMOCD action level in all samples.

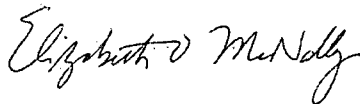
Based on final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the Lindrith B #8 (North Excavation), VOCs, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the sidewalls and base of the excavation. No further work is recommended.

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

Sincerely,



Emilee Skyles  
Staff Geologist

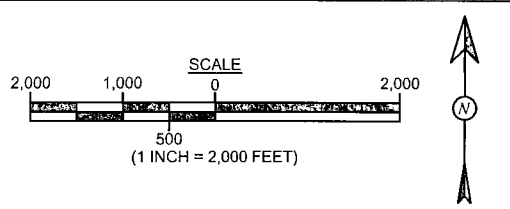
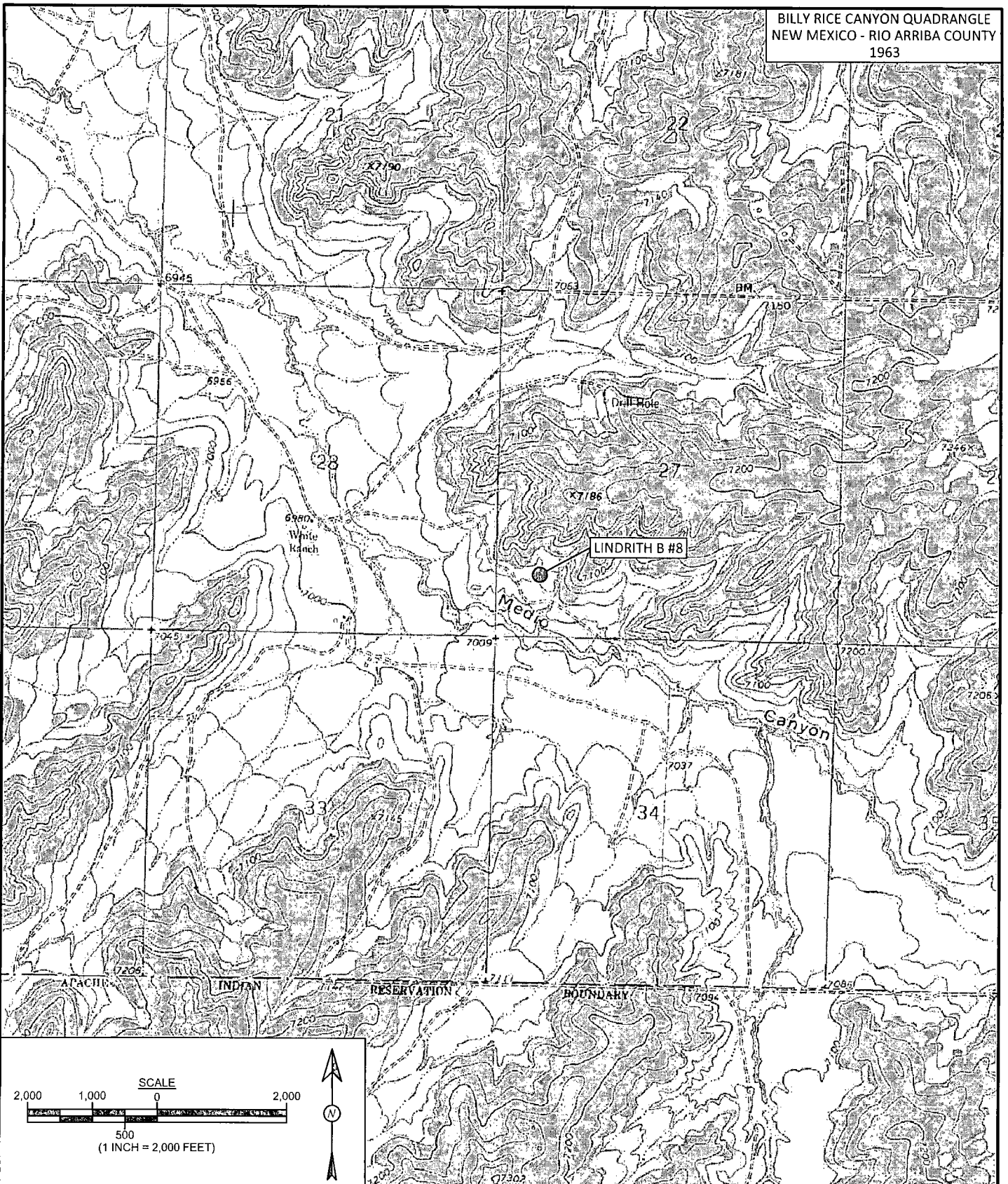


Elizabeth McNally, PE

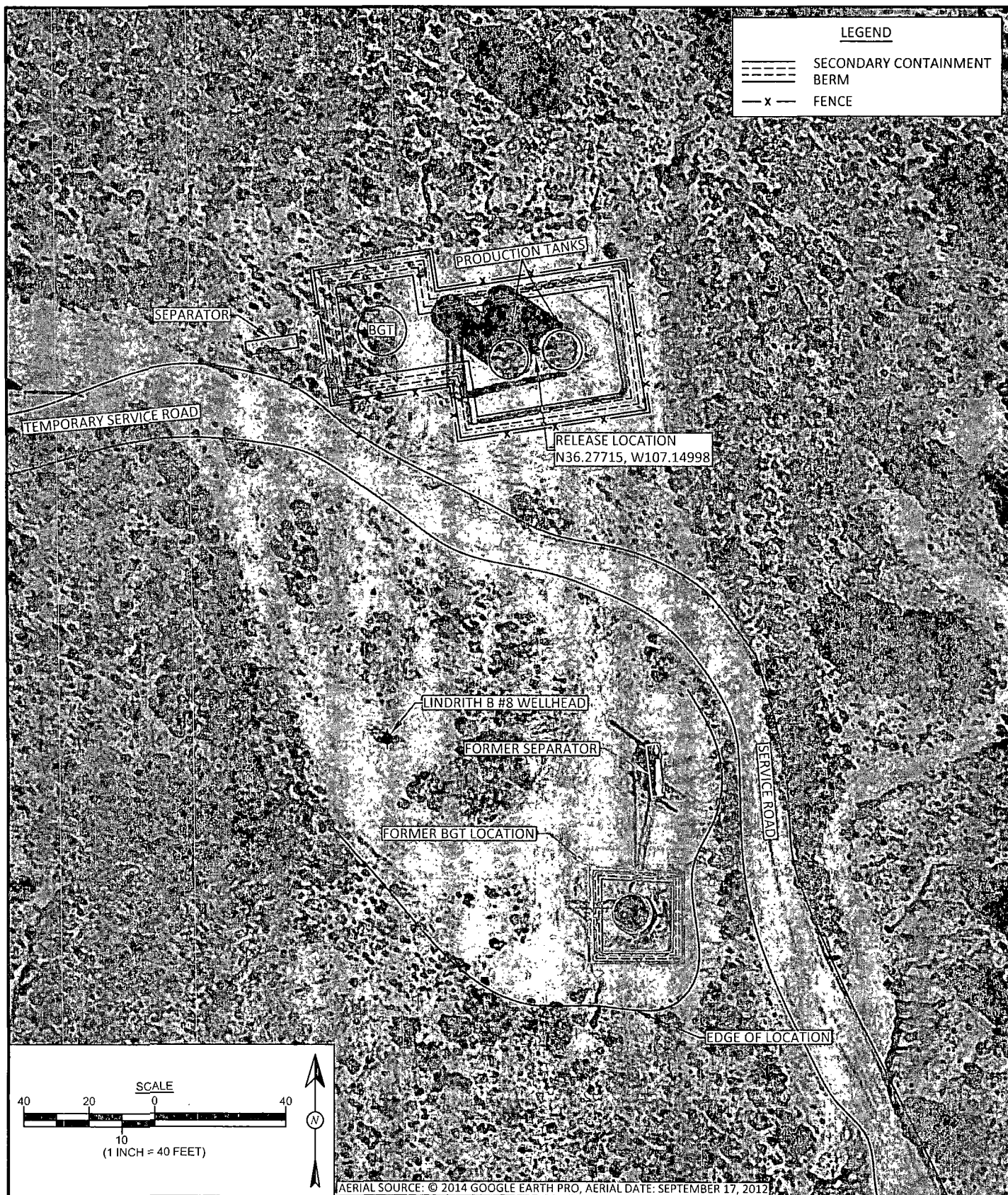
Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, April 2014
- Figure 3. Initial Assessment Sample Locations and Results, April 2014
- Figure 4. Final Excavation Sample Locations and Results, May 2014
- AES Field Sampling Report 041114
- AES Field Sampling Report 051414
- Hall Laboratory Analytical Report 1404743
- Hall Laboratory Analytical Report 1405659
- Hall Laboratory Analytical Report 1405664

C:\Users\emcnally.AES\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014  
Projects\ConocoPhillips\Lindrith B #8\North Excavation\Lindrith B #8 Release and Final Excavation Report  
North 081114.docx



<b>DRAWN BY:</b> S. Glasses	<b>DATE DRAWN:</b> March 24, 2014	<b>FIGURE 1</b>  <b>TOPOGRAPHIC SITE LOCATION MAP</b> ConocoPhillips LINDRITH B #8 SW¼ SW¼, SECTION 27, T24N, R3W RIO ARriba COUNTY, NEW MEXICO N36.27684, W107.15009
<b>REVISIONS BY:</b> C. Lameman	<b>DATE REVISED:</b> June 25, 2014	
<b>CHECKED BY:</b> D. Watson	<b>DATE CHECKED:</b> June 25, 2014	
<b>APPROVED BY:</b> E. McNally	<b>DATE APPROVED:</b> June 25, 2014	



Animas Environmental Services, LLC

**DRAWN BY:**

S. Glasses

**DATE DRAWN:**

April 15, 2014

**REVISIONS BY:**

C. Lameman

**DATE REVISED:**

June 25, 2014

**CHECKED BY:**

D. Watson

**DATE CHECKED:**

June 25, 2014

**APPROVED BY:**

E. McNally

**DATE APPROVED:**

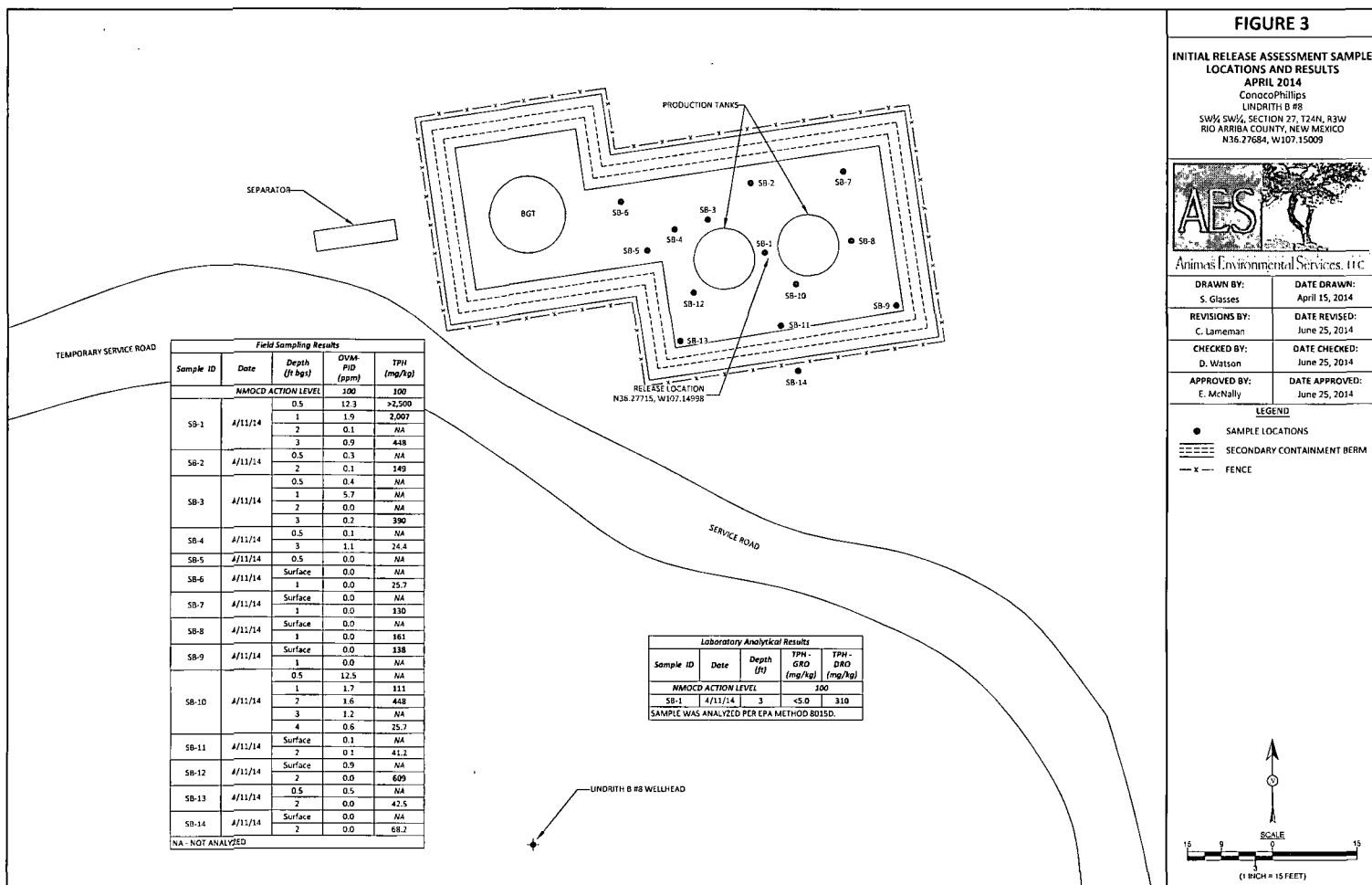
June 25, 2014

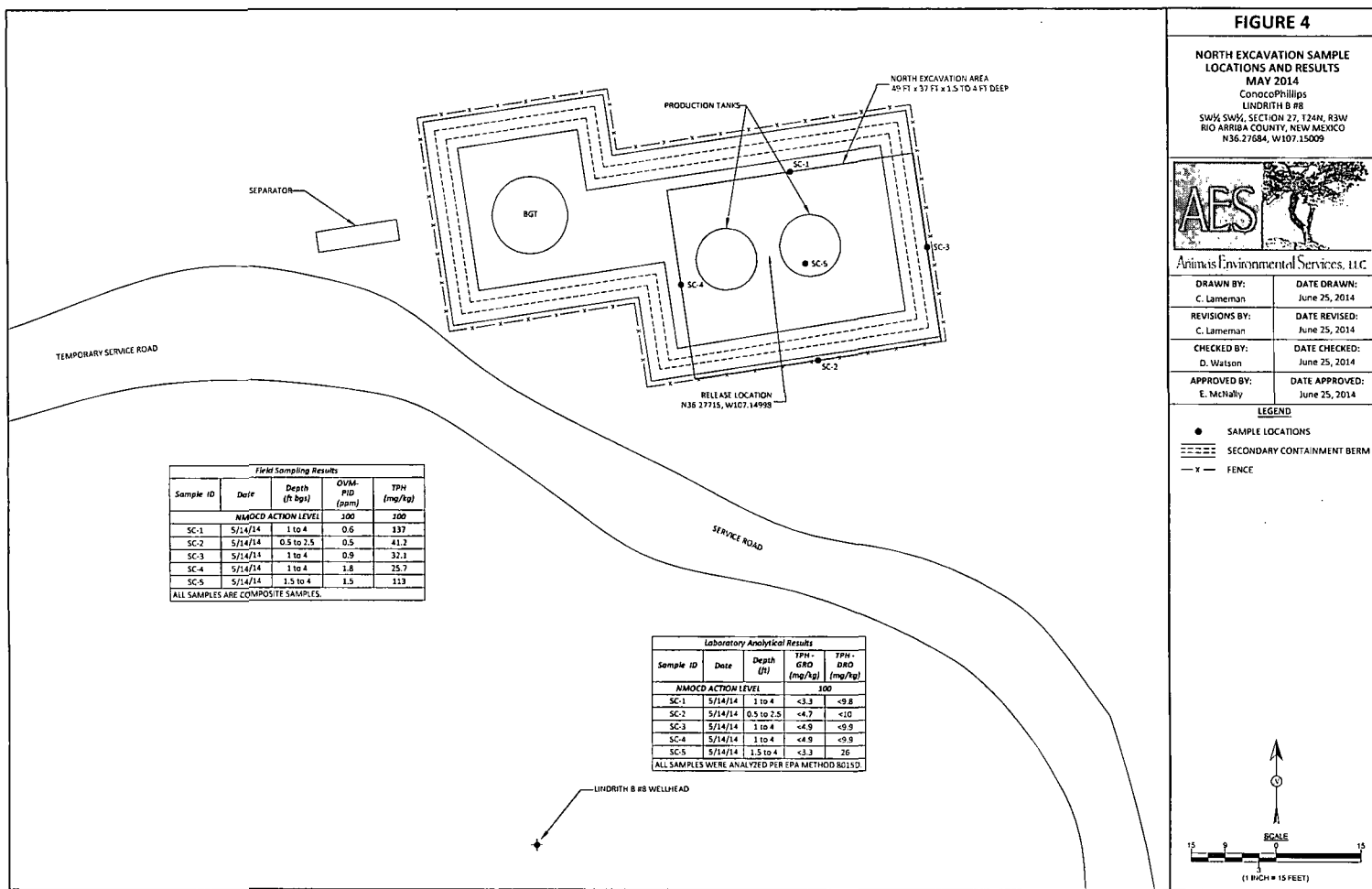
## FIGURE 2

### AERIAL SITE MAP APRIL 2014

ConocoPhillips  
LINDRITH B #8

SW $\frac{1}{4}$  SW $\frac{1}{4}$ , SECTION 27, T24N, R3W  
RIO ARRIBA COUNTY, NEW MEXICO  
N36.27684, W107.15009





# AES Field Sampling Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: Lindrith B #8

Date: 4/11/2014

Matrix: Soil

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3084

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 0.5'	4/11/2014	11:15	12.3	>2,500	11:54	20.0	1	DAW
SB-1 @ 1'	4/11/2014	11:18	1.9	2,007	11:56	20.0	1	DAW
SB-1 @ 2'	4/11/2014	11:22	0.1	Not Analyzed for TPH				
SB-1 @ 3'	4/11/2014	12:55	0.9	448	13:10	20.0	1	DAW
SB-2 @ 0.5'	4/11/2014	12:30	0.3	Not Analyzed for TPH				
SB-2 @ 2'	4/11/2014	12:35	0.1	149	12:49	20.0	1	DAW
SB-3 @ 0.5'	4/11/2014	11:25	0.4	Not Analyzed for TPH				
SB-3 @ 1'	4/11/2014	11:30	5.7	Not Analyzed for TPH				
SB-3 @ 2'	4/11/2014	11:35	0.0	Not Analyzed for TPH				
SB-3 @ 3'	4/11/2014	11:35	0.2	390	12:49	20.0	1	DAW
SB-4 @ 0.5'	4/11/2014	13:00	0.1	Not Analyzed for TPH				
SB-4 @ 3'	4/11/2014	13:15	1.1	24.4	12:53	20.0	1	DAW
SB-5 @ 0.5'	4/11/2014	13:25	0.0	Not Analyzed for TPH				
SB-6 @ surface	4/11/2014	13:30	0.0	Not Analyzed for TPH				
SB-6 @ 1'	4/11/2014	13:35	0.0	25.7	13:50	20.0	1	DAW
SB-7 @ surface	4/11/2014	13:40	0.0	Not Analyzed for TPH				
SB-7 @ 1'	4/11/2014	13:42	0.0	130	13:52	20.0	1	DAW
SB-8 @ surface	4/11/2014	13:43	0.0	Not Analyzed for TPH				
SB-8 @ 1'	4/11/2014	13:45	0.0	161	13:58	20.0	1	DAW
SB-9 @ surface	4/11/2014	13:50	0.0	138	14:02	20.0	1	DAW
SB-9 @ 1'	4/11/2014	13:55	0.0	Not Analyzed for TPH				
SB-10 @ 0.5'	4/11/2014	11:38	12.5	Not Analyzed for TPH				
SB-10 @ 1'	4/11/2014	11:40	1.7	111	12:00	20.0	1	DAW

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-10 @ 2'	4/11/2014	11:45	1.6	448	12:02	20.0	1	DAW
SB-10 @ 3'	4/11/2014	12:58	1.2	Not Analyzed for TPH				
SB-10 @ 4'	4/11/2014	13:05	0.6	25.7	13:20	20.0	1	DAW
SB-11 @ surface	4/11/2014	12:40	0.1	Not Analyzed for TPH				
SB-11 @ 2'	4/11/2014	12:45	0.1	41.2	12:58	20.0	1	DAW
SB-12 @ surface	4/11/2014	12:48	0.9	Not Analyzed for TPH				
SB-12 @ 2'	4/11/2014	12:50	0.0	609	13:05	20.0	1	DAW
SB-13 @ 0.5'	4/11/2014	14:20	0.5	Not Analyzed for TPH				
SB-13 @ 2'	4/11/2014	14:25	0.0	42.5	14:45	20.0	1	DAW
SB-14 @ surface	4/11/2014	14:30	0.0	Not Analyzed for TPH				
SB-14 @ 2'	4/11/2014	14:35	0.0	68.2	14:58	20.0	1	DAW

DF Dilution Factor  
 NA Not Analyzed  
 ND Not Detected at the Reporting Limit  
 PQL Practical Quantitation Limit  
 \*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: 

## AES Field Sampling Report



Animas Environmental Services, LLC

[www.animaseenvironmental.com](http://www.animaseenvironmental.com)

624 E. Comanche  
Farmington, NM 87401  
505-564-2281

Durango, Colorado  
970-403-3084

Client: ConocoPhillips

Project Location: Lindrith B #8

Date: 5/14/2014

Matrix: Soil

Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	5/14/2014	10:45	North Wall	0.6	11:40	137	20.0	1	DAW
SC-2	5/14/2014	10:48	South Wall	0.5	11:42	41.2	20.0	1	DAW
SC-3	5/14/2014	10:50	East Wall	0.9	11:45	32.1	20.0	1	DAW
SC-4	5/14/2014	10:52	West Wall	1.8	11:47	25.7	20.0	1	DAW
SC-5	5/14/2014	10:55	Base	1.5	11:50	113	20.0	1	DAW

DF Dilution Factor

NA Not Analyzed

ND Not Detected at the Reporting Limit

PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

*Debrah Water*



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

April 24, 2014

Debbie Watson

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

RE: CoP Lindrith B #8

OrderNo.: 1404743

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/16/2014 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](http://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 qualifiers 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order 1404743

Date Reported: 4/24/2014

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SB-1@3'**Project:** CoP Lindrith B #8**Collection Date:** 4/11/2014 12:55:00 PM**Lab ID:** 1404743-001**Matrix:** SOIL**Received Date:** 4/16/2014 10:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	310	99		mg/Kg	10	4/22/2014 10:44:49 AM	12726
Surr: DNOP	0	57.9-140	S	%REC	10	4/22/2014 10:44:49 AM	12726
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/17/2014 7:44:39 PM	12739
Surr: BFB	86.9	74.5-129		%REC	1	4/17/2014 7:44:39 PM	12739

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

<b>Qualifiers:</b>	*	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#: 1404743

24-Apr-14

Client: Animas Environmental

Project: CoP Lindrith B #8

Sample ID	MB-12726	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	12726	RunNo:	18017					
Prep Date:	4/15/2014	Analysis Date:	4/17/2014	SeqNo:	521794	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	8.4		10.00		84.4	57.9	140			

Sample ID	LCS-12726	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	12726	RunNo:	18017					
Prep Date:	4/15/2014	Analysis Date:	4/17/2014	SeqNo:	521795	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.5	60.8	145			
Surr: DNOP	4.3		5.000		86.4	57.9	140			

## 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#: 1404743

24-Apr-14

Client: Animas Environmental

Project: CoP Lindrith B #8

Sample ID	MB-12739	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	12739	RunNo:	18070					
Prep Date:	4/16/2014	Analysis Date:	4/17/2014	SeqNo:	521280	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	850		1000		85.3	74.5	129			

Sample ID	LCS-12739	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	12739	RunNo:	18070					
Prep Date:	4/16/2014	Analysis Date:	4/17/2014	SeqNo:	521281	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	71.7	134			
Surr: BFB	980		1000		97.8	74.5	129			

### 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

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1404743

RcptNo: 1

Received by/date:

*Jim*

04/16/14

Logged By: Ashley Gallegos

4/16/2014 10:10:00 AM

*Ag*

Completed By: Ashley Gallegos

4/16/2014 11:14:12 AM

*Ag*

Reviewed By:

*Ar 04/16/14*

### 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?           | <u>Courier</u> |    |               |

### Log In

- |   |       |      |  |
|---|-------|------|--|
| 4. Was an attempt made to cool the samples?   | Yes ✓ | No   | NA                                     |
| 5. Were all samples received at a temperature of >0° C to 6.0°C                           | Yes ✓ | No   | NA                                     |
| 6. Sample(s) in proper container(s)?  | Yes ✓ | No   |  |
| 7. Sufficient sample volume for indicated test(s)?  | Yes ✓ | No   |  |
| 8. Are samples (except VOA and ONG) properly preserved?                                   | Yes ✓ | No   |  |
| 9. Was preservative added to bottles?   | Yes   | No ✓ | NA                                     |
| 10. VOA vials have zero headspace?  | Yes   | No   | No VOA Vials ✓                         |
| 11. Were any sample containers received broken?   | Yes   | No ✓ | # of preserved bottles checked for pH: |
| 12. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)       | Yes ✓ | No   | ( <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?<br>(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:

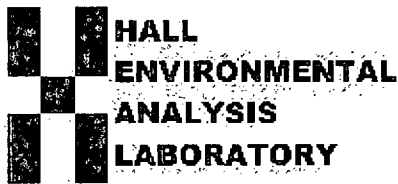
Client Instructions:

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good	Yes			





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

May 16, 2014

Debbie Watson

Animas Environmental

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: CoP Lindrith B #8 North Excavation

OrderNo.: 1405659

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/15/2014 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](http://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 qualifiers 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**Lab Order **1405659**Date Reported: **5/16/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-1**Project:** CoP Lindrith B #8 North Excavation**Collection Date:** 5/14/2014 10:45:00 AM**Lab ID:** 1405659-001**Matrix:** MEOH (SOIL)**Received Date:** 5/15/2014 10:08:00 AM

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>	<b>Batch</b>
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/15/2014 2:00:05 PM	13180
Surr: DNOP	106	57.9-140		%REC	1	5/15/2014 2:00:05 PM	13180
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/15/2014 2:38:56 PM	R18624
Surr: BFB	84.5	80-120		%REC	1	5/15/2014 2:38:56 PM	R18624

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 4
	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.

## Analytical Report

Lab Order 1405659

Date Reported: 5/16/2014

**CLIENT:** Animas Environmental

**Client Sample ID:** SC-5

**Project:** CoP Lindrith B #8 North Excavation

**Collection Date:** 5/14/2014 10:55:00 AM

**Lab ID:** 1405659-002

**Matrix:** MEOH (SOIL)

**Received Date:** 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	26	10		mg/Kg	1	5/15/2014 2:31:05 PM	13180
Surr: DNOP	111	57.9-140		%REC	1	5/15/2014 2:31:05 PM	13180
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	5/15/2014 3:07:34 PM	R18624
Surr: BFB	84.7	80-120		%REC	1	5/15/2014 3:07:34 PM	R18624

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

<b>Qualifiers:</b>	*	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#: 1405659

16-May-14

**Client:** Animas Environmental  
**Project:** CoP Lindrith B #8 North Excavation

Sample ID	MB-13155		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	13155		RunNo:	18605				
Prep Date:	5/13/2014		Analysis Date:	5/15/2014		SeqNo:	537633		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP	11		10.00		115	57.9	140				

Sample ID	LCS-13155		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 13155		RunNo: 18605					
Prep Date:	5/13/2014		Analysis Date: 5/15/2014		SeqNo: 537661		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.0		5.000		120	57.9	140			

Sample ID	MB-13180		SampType:	MBLK		TestCode:	EPA Method 8015D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	13180		RunNo:	18605				
Prep Date:	5/15/2014		Analysis Date:	5/15/2014		SeqNo:	537900		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	9.7		10.00		96.7	57.9	140				

Sample ID	LCS-13180		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 13180		RunNo: 18605					
Prep Date:	5/15/2014		Analysis Date: 5/15/2014		SeqNo: 537901		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	60.8	145			
Surr: DNOP	5.1		5.000		103	57.9	140			

### 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#: 1405659

16-May-14

**Client:** Animas Environmental  
**Project:** CoP Lindrith B #8 North Excavation

Sample ID	MB-13175 MK		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	R18624		RunNo:	18624				
Prep Date:			Analysis Date:	5/15/2014		SeqNo:	538752		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	850		1000		85.3	80	120				

Sample ID	LCS-13175 MK		SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS		Batch ID:	R18624		RunNo:	18624				
Prep Date:			Analysis Date:	5/15/2014		SeqNo:	538753		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	71.7	134				
Surr: BFB	930		1000		93.5	80	120				

### 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 |  |

# Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1405659

RcptNo: 1

Received by/date:	CS	05/15/14
Logged By:	Michelle Garcia	5/15/2014 10:08:00 AM <i>Michelle Garcia</i>
Completed By:	Michelle Garcia	5/15/2014 10:39:03 AM <i>Michelle Garcia</i>
Reviewed By:	<i>[Signature]</i>	05/15/14

## Chain of Custody

- Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
- Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
- How was the sample delivered? Courier

## Log In

- Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
- Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
- Sample(s) in proper container(s)? Yes ☒ No ☐
- Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
- Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
- Was preservative added to bottles? Yes ☐ No ☒ NA ☐
- VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
- Were any sample containers received broken? Yes ☐ No ☒
- Does paperwork match bottle labels? Yes ☒ No ☐  
(Note discrepancies on chain of custody)
- Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
- Is it clear what analyses were requested? Yes ☒ No ☐
- Were all holding times able to be met? Yes ☒ No ☐  
(If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
(<2 or >12 unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

## Special Handling (if applicable)

- Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

- Additional remarks:

## Cooler Information

Cooler No.	Temp °C	Condition	Seal Intact	Seal No.	Seal Date	Signed By
1	1.2	Good	Yes			

### MULTI-AROUND TIME:

☐ Standard ☒ Rush Same day

Project Name:
---------------

CoP Lindenth B#8 North Excavation

Project #:

Project Manager:

Dr. Watson

☐ Level 4 (Full Validation)

Sampler: D Watson

☐ Other \_\_\_\_\_

EDD (Type)

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.2°

## Analysis Request

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

Received by:	Date	Time
Christine White	5/14/14	1733

Received by: Celia Silva Date 05/15/14 Time 10:08

Remarks: Bill is Conozo Phelleya

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  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 20, 2014

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

RE: CoP Lindrith B #8 North Excavation

OrderNo.: 1405664

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/15/2014 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](http://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 qualifiers 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental **Client Sample ID:** SC-2  
**Project:** CoP Lindrith B #8 North Excavation **Collection Date:** 5/14/2014 10:48:00 AM  
**Lab ID:** 1405664-001 **Matrix:** SOIL **Received Date:** 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/16/2014 9:29:04 PM	13180
Surr: DNOP	102	57.9-140		%REC	1	5/16/2014 9:29:04 PM	13180
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/16/2014 3:30:29 PM	13192
Surr: BFB	87.8	80-120		%REC	1	5/16/2014 3:30:29 PM	13192

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

<b>Qualifiers:</b>	*	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 1405664

Date Reported: 5/20/2014

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Animas Environmental**Client Sample ID:** SC-3**Project:** CoP Lindrith B #8 North Excavation**Collection Date:** 5/14/2014 10:50:00 AM**Lab ID:** 1405664-002**Matrix:** SOIL**Received Date:** 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/16/2014 9:59:21 PM	13180
Surr: DNOP	127	57.9-140		%REC	1	5/16/2014 9:59:21 PM	13180
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2014 3:59:08 PM	13192
Surr: BFB	87.4	80-120		%REC	1	5/16/2014 3:59:08 PM	13192

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 5
	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.

## Analytical Report

Lab Order 1405664

Date Reported: 5/20/2014

CLIENT: Animas Environmental

Client Sample ID: SC-4

Project: CoP Lindrith B #8 North Excavation

Collection Date: 5/14/2014 10:52:00 AM

Lab ID: 1405664-003

Matrix: SOIL

Received Date: 5/15/2014 10:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BCN</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/16/2014 10:29:55 PM	13180
Surr: DNOP	148	57.9-140	S	%REC	1	5/16/2014 10:29:55 PM	13180
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/16/2014 4:27:40 PM	13192
Surr: BFB	87.7	80-120		%REC	1	5/16/2014 4:27:40 PM	13192

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#: 1405664

20-May-14

Client: Animas Environmental  
Project: CoP Lindrith B #8 North Excavation

Sample ID	MB-13180	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	13180	RunNo:	18605					
Prep Date:	5/15/2014	Analysis Date:	5/15/2014	SeqNo:	537900	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.7		10.00		96.7	57.9	140			

Sample ID	LCS-13180	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	13180	RunNo:	18605					
Prep Date:	5/15/2014	Analysis Date:	5/15/2014	SeqNo:	537901	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	60.8	145			
Surr: DNOP	5.1		5.000		103	57.9	140			

## 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#: 1405664

20-May-14

**Client:** Animas Environmental  
**Project:** CoP Lindrith B #8 North Excavation

Sample ID	MB-13192	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	13192	RunNo:	18658					
Prep Date:	5/15/2014	Analysis Date:	5/16/2014	SeqNo:	539584	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	840		1000		84.4	80	120			

Sample ID	LCS-13192	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	13192	RunNo:	18658					
Prep Date:	5/15/2014	Analysis Date:	5/16/2014	SeqNo:	539585	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.2	71.7	134			
Surr: BFB	970		1000		97.3	80	120			

## 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  
4901 Hawkins NE  
Albuquerque, NM 87105  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1405664

RcptNo: 1

Received by/date:

CS

05/15/14

Logged By: Michelle Garcia

5/15/2014 10:08:00 AM

Michelle Garcia

Completed By: Michelle Garcia

5/15/2014 11:03:44 AM

Michelle Garcia

Reviewed By:

[Signature]

05/15/14

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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	1.2	Good	Yes			

Client: Animas Environmental  
Services LLC  
Mailing Address: 624 E Comanche  
Farmington NM 87401  
Phone #: 505 564 2281  
email or Fax#:  
QA/QC Package:  
☒ Standard ☐ Level 4 (Full Validation)  
Accreditation  
☐ NELAP ☐ Other \_\_\_\_\_  
☐ EDD (Type)

☒ Standard      ☐ Rush

Project Name:

CoP Linduth B#8 North Excavation

Project #:

**Project Manager:**

Debbie Watson

Sampler: Debbie Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 12°

[illegible]

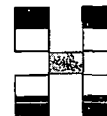
Date:	Time:	Relinquished by:
5/14/14	1733	Debrah Wate

Received by:	Date	Time
<i>Christa Waack</i>	<i>5/14/14</i>	<i>1733</i>

Remarks:	Full to ConocoPhillips
----------	------------------------

Date:	Time:	Relinquished by:
7/4/14	1754	Christopher White

Received by: Celine Simon Date 05/15/14 Time 10:08



[www.hallenvironmental.com](http://www.hallenvironmental.com)

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## Analysis Request

[illegible]