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: **State Com H 4** | Facility Type: **Gas Well** |

| | | |
|---|---|---|
| Surface Owner **State** | Mineral Owner **State** | API No. **3004510159** |

## LOCATION OF RELEASE

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|---|---|---|---|---|---|---|---|---|
| **G** | **32** | **31N** | **09W** | **1650'** | **North** | **1850'** | **East** | **San Juan** |

**Latitude 36.856998 Longitude -107.801**

## NATURE OF RELEASE

| | | |
|---|---|---|
| Type of Release **Historic Contamination** | Volume of Release **Unkown** | Volume Recovered **840 c/yds** |
| Source of Release **Production Tank** | Date and Hour of Occurrence **Unknown** | Date and Hour of Discovery **05-12-14** |
| 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**

RCVD AUG 19 '14
OIL CONS. DIV.
DIST. 3

Describe Cause of Problem and Remedial Action Taken.*
**Historical hydrocarbon impacted soil was found during a facility reset.**

Describe Area Affected and Cleanup Action Taken.*
**Historical hydrocarbon impacted soil was found during a facility reset. The excavation was 40' x 60' x 14' in depth and 840 c/yds of soil was transported to IEI land farm and 840 c/yds of clean soil was transported from CF&M and placed in the excavation site. The soil sampling report is attached for review. Backfilled excavation per verbal authorization of Jonathan Kelly, NMOCD, May 21, 2014.**

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 |
| Printed Name: **Lisa Hunter** | Approved by Environmental Specialist: Jonathan O. Kelly |
| Title: **Field Environmental Specialist** | Approval Date: 11/6/2014 Expiration Date: |
| E-mail Address: **Lisa.Hunter@cop.com** | Conditions of Approval: Attached ☐ |
| Date: **August 18, 2014** Phone: **(505) 326-9786** | |

* Attach Additional Sheets If Necessary

nJK1431028360

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

July 25, 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: Initial Release Assessment and Final Excavation Report**
**State Com H #4**
**San Juan County, New Mexico**

Dear Ms. Hunter:

On May 12 and 20, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) State Com H #4, located in San Juan County, New Mexico. The release was discovered during facility reset activities at the location. The initial release assessment was completed by AES on May 12, 2014, and the final excavation was completed by CoP contractors prior to AES' arrival at the location on May 20, 2014.

## 1.0 Site Information

### *1.1 Location*

Site Name – State Com H #4
Legal Description – SW¼ NE¼, Section 32, T31N, R9W, San Juan County, New Mexico
Well Latitude/Longitude – N36.85754 and W107.80136, respectively
Release Latitude/Longitude – N36.85720 and W107.80134, respectively
Land Jurisdiction – State of New Mexico
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 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:** No depth to groundwater information specific to the location could be found. Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is interpreted to be greater than 100 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The tank location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** There is a small unnamed wash which discharges to the wash in Little Pump Canyon located approximately 210 feet northwest of the location. (10 points)

### *1.3 Assessment*

AES was initially contacted by Danny Rudder, CoP representative, on May 9, 2014, and on May 12, 2014, Emilee Skyles and Sam Glasses of AES completed the release assessment field work. The assessment included collection and field sampling of 22 soil samples from 10 assessment trenches in and around the release area. Test holes were terminated between 3 and 13 feet below grade. Based on the field sampling results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On May 20, 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 59 feet by 49 feet by 14 feet in depth. The depth of the excavation was limited due to a confining sandstone unit around 14 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

## 2.0 Soil Sampling

A total of 22 soil samples from 10 assessment trenches (TH-1 through TH-10) 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). Five composite samples (SC-1 and 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.

In addition, soil sample SC-5 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B.

## *2.3 Field and Laboratory Analytical Results*

On May 12, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.1 ppm in TH-4 and TH-5 up to 4,192 ppm in TH-1. Field TPH concentrations ranged from 25.0 mg/kg in TH-2 up to 7,010 mg/kg in TH-1.

On May 20, 2014, final excavation field screening results for VOCs via OVM ranged from 8.8 ppm in SC-3 up to 4,888 ppm in SC-5. Field TPH concentrations ranged from 74.2 mg/kg in SC-3 up to 3,210 mg/kg in SC-5. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Sampling Reports are attached.

Table 1. Field Sampling VOCs and TPH Results
State Com H #4 Initial Release Assessment and Final Excavation, May 2014

| ***Sample ID*** | ***Date Sampled*** | ***Sample Depth (ft bgs)*** | ***VOCs via OVM (ppm)*** | ***TPH 418.1 (mg/kg)*** |
|---|---|---|---|---|
| *NMOCD Action Level** | | | *100* | *1,000* |
| TH-1 | 5/12/14 | 0.5 | **4,192** | **7,010** |
| | | 3.5 | **4,187** | NA |
| | | 4.5 | **3,611** | NA |
| | | 7 | **3,321** | **>2,300** |
| | | 9 | **2,985** | **>2,300** |
| | | 12 | **3,168** | NA |
| | | 13 | **3,590** | **>2,300** |
| TH-2 | 5/12/14 | 1.5 | 0.3 | NA |
| | | 7 | 0.5 | 25.0 |
| TH-3 | 5/12/14 | 2 | 38.0 | 363 |
| | | 6.25 | **1,587** | **1,730** |
| TH-4 | 5/12/14 | 1.5 | 0.3 | NA |
| | | 6.25 | 0.1 | 45.0 |
| TH-5 | 5/12/14 | 1.5 | 0.1 | NA |
| | | 6.5 | 0.2 | 37.9 |
| TH-6 | 5/12/14 | 2 | 3.5 | 250 |
| | | 5.5 | **3,532** | **>2,300** |
| TH-7 | 5/12/14 | 3 | **2,960** | NA |
| TH-8 | 5/12/14 | 4.75 | 2.4 | 120 |
| TH-9 | 5/12/14 | 2 | 0.4 | NA |
| | | 6.75 | 0.3 | 142 |
| TH-10 | 5/12/14 | 6 | 2.1 | 32.1 |
| SC-1 | 5/20/14 | 1 to 14 | 26.9 | 293 |
| SC-2 | 5/20/14 | 1 to 14 | 19.2 | 88.1 |
| SC-3 | 5/20/14 | 1 to 14 | 8.8 | 74.2 |
| SC-4 | 5/20/14 | 1 to 14 | 36.3 | **1,320** |
| SC-5 | 5/20/14 | 14 | **4,888** | **3,210** |

NA – not analyzed

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

Laboratory analyses for SC-1 through SC-5 were used to confirm field sampling results from the final excavation. Benzene and total BTEX concentrations in SC-5 were reported below laboratory detection limits of 0.11 mg/kg and 44.3 mg/kg, respectively. TPH concentrations as GRO/DRO ranged from below the laboratory detection limit of 14.7 mg/kg in SC-3 up to 1,440 mg/kg in SC-5. 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
State Com H #4 Initial Release Assessment and Final Excavation
May 2014

| Sample ID | Date Sampled | Sample Depth (ft bgs) | Benzene (mg/kg) | Total BTEX (mg/kg) | GRO (mg/kg) | DRO (mg/kg) |
|---|---|---|---|---|---|---|
| *NMOCD Action Level** | | | *10* | *50* | *1,000* | |
| SC-1 | 5/20/14 | 1 to 14 | NA | NA | <4.9 | 36 |
| SC-2 | 5/20/14 | 1 to 14 | NA | NA | <4.9 | <10 |
| SC-3 | 5/20/14 | 1 to 14 | NA | NA | <4.8 | <9.9 |
| SC-4 | 5/20/14 | 1 to 14 | NA | NA | 4.3 | 79 |
| SC-5 | 5/20/14 | 14 | <0.11 | 44.3 | **590** | **850** |

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 May 12, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a historic release at the State Com H #4. 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.

Initial assessment field sampling results above the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH were reported in TH-1, TH-3, TH-6, and TH-7. The highest VOC concentration was reported in TH-1 with 4,192 ppm, and the highest TPH concentration was also reported in TH-1 with 7,010 mg/kg.

On May 20, 2014, final excavation of the impacted area was completed. Field sampling results of the excavation extents showed that VOC concentrations were below applicable NMOCD action levels for the final walls. The base (SC-5) had a VOC concentration of 4,888 ppm. Field TPH concentrations were below the applicable NMOCD action level of 1,000 mg/kg for the three of the final walls. Two samples reported concentrations above the NMOCD action level, the west wall (1,320 mg/kg) and the base (3,210 mg/kg). Laboratory analytical results reported benzene and total BTEX concentrations below NMOCD action levels in SC-5. TPH concentrations as GRO/DRO were reported below the NMOCD action levels in SC-1 through SC-4 but above NMOCD action level of 1,000 mg/kg in SC-5, with 1,440 mg/kg.

Based on the final field sampling and laboratory analytical results of the excavation of petroleum contaminated soils at the State Com H #4, benzene, total BTEX, and TPH concentrations were below the applicable NMOCD action levels for all of the final sidewalls of the excavation. However, the base of the excavation exceeded applicable NMOCD action levels for total TPH (as GRO/DRO). On May 20, 2014, CoP received approval to backfill the excavation from Jonathan Kelly of the NMOCD. No further work is recommended.

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

Sincerely,

Emilee Skyles
Staff Geologist

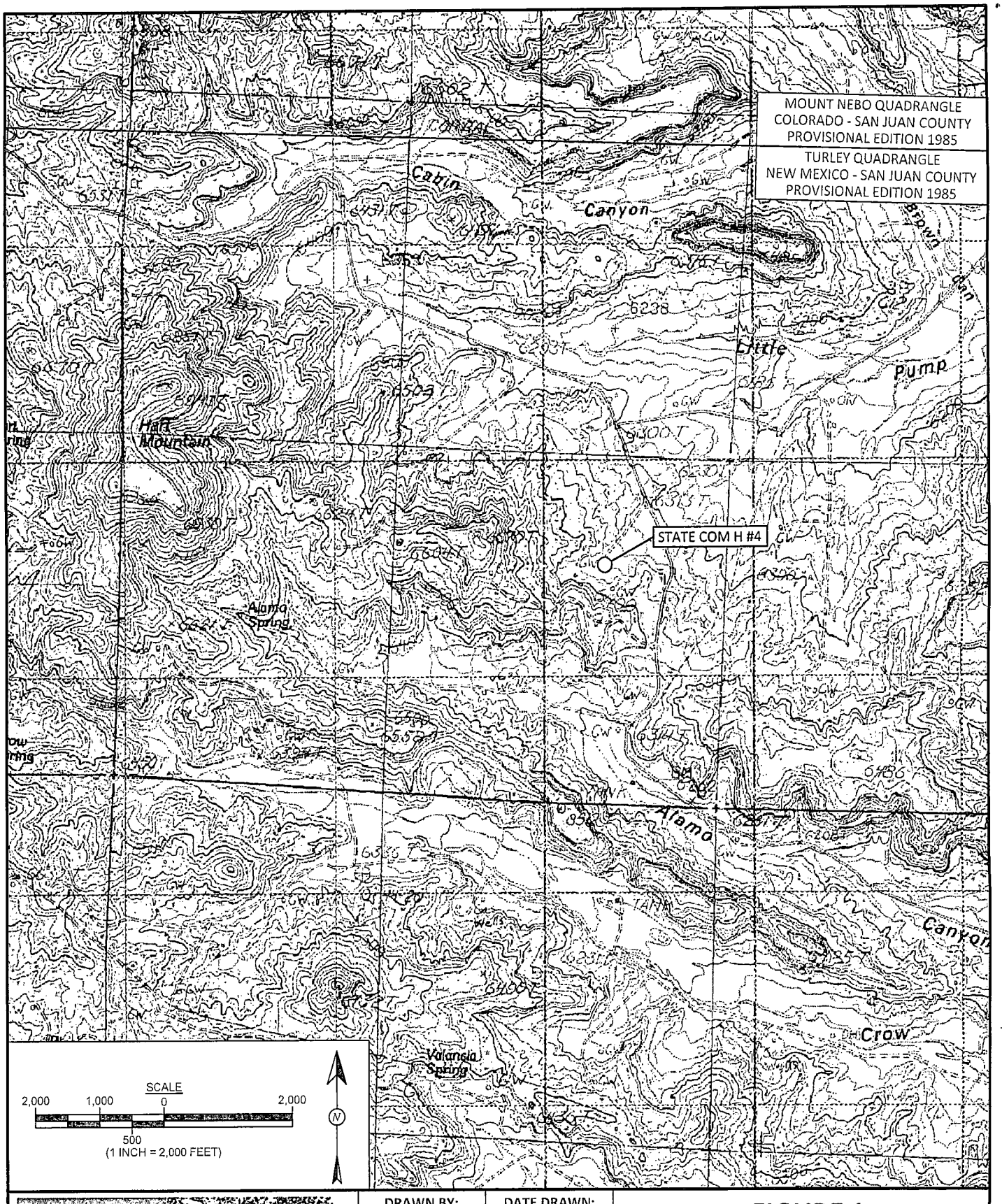
Elizabeth McNally, PE

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2014
Figure 3. Initial Assessment Sample Locations and Results, May 2014
Figure 4. Final Excavation Sample Locations and Results, May 2014
AES Field Sampling Report 051214

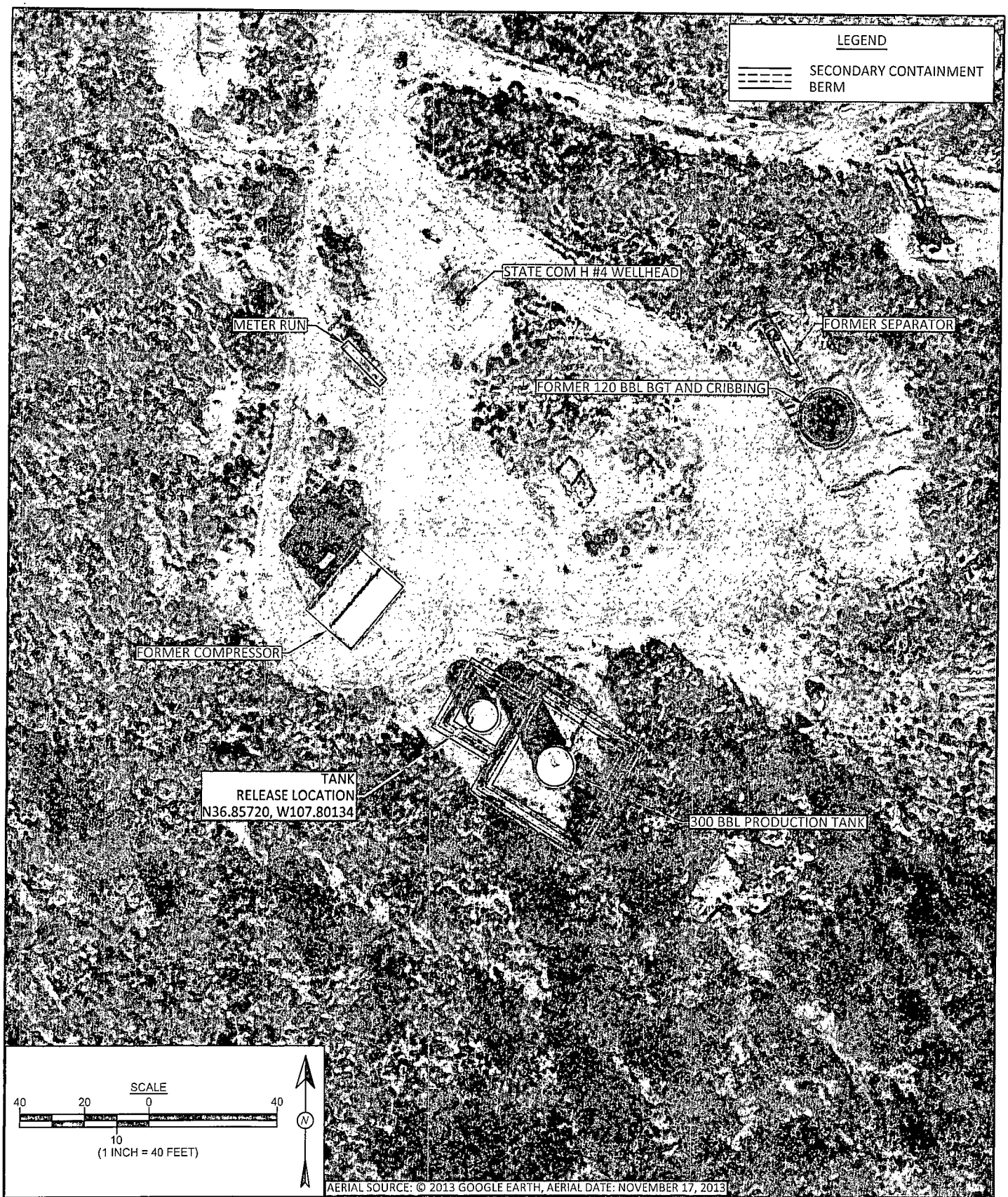
AES Field Sampling Report 052014
Hall Laboratory Analytical Report 1405886
Hall Laboratory Analytical Report 1405A39

SVRMAIN2\Shared\Animas 2000\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\State Com H #4\Release Assessment\CoP State Com H #4 Release and Final Excavation Report 072514.docx




| | | |
|---|---|---|
| **DRAWN BY:** S. Glasses | **DATE DRAWN:** May 13, 2014 | **FIGURE 1** |
| **REVISIONS BY:** C. Lameman | **DATE REVISED:** May 13, 2014 | **TOPOGRAPHIC SITE LOCATION MAP** |
| **CHECKED BY:** D. Watson | **DATE CHECKED:** May 13, 2014 | ConocoPhillips<br>STATE COM H #4<br>SW¼ NE¼, SECTION 32, T31N, R9W<br>SAN JUAN COUNTY, NEW MEXICO<br>N36.85754, W107.80136 |
| **APPROVED BY:** E. McNally | **DATE APPROVED:** May 13, 2014 | |

AES
Animas Environmental Services, LLC




Animas Environmental Services, LLC

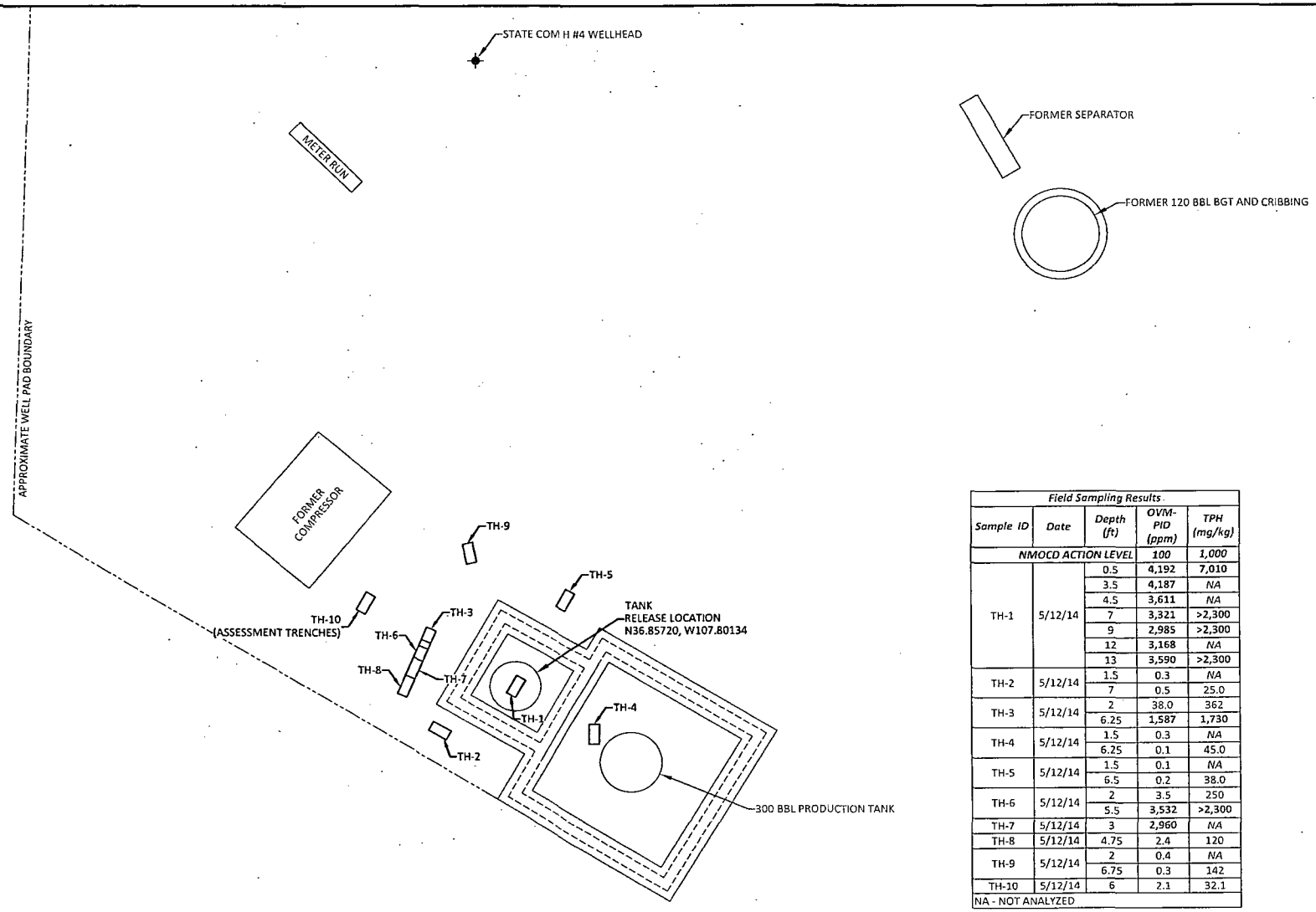
| | |
|---|---|
| **DRAWN BY:** S. Glasses | **DATE DRAWN:** May 13, 2014 |
| **REVISIONS BY:** C. Lameman | **DATE REVISED:** May 30, 2014 |
| **CHECKED BY:** D. Watson | **DATE CHECKED:** May 30, 2014 |
| **APPROVED BY:** E. McNally | **DATE APPROVED:** May 30, 2014 |

# FIGURE 2

**AERIAL SITE MAP**
**MAY 2014**
ConocoPhillips
STATE COM H #4
SW¼ NE¼, SECTION 32, T31N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.85754, W107.80136

# FIGURE 3

**INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS**
**MAY 2014**
ConocoPhillips
STATE COM H #4
SW¼ NE¼, SECTION 32, T31N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.85754, W107.80136




| Field Sampling Results | | | | |
|---|---|---|---|---|
| *Sample ID* | *Date* | *Depth (ft)* | *OVM-PID (ppm)* | *TPH (mg/kg)* |
| *NMOCD ACTION LEVEL* | | | *100* | *1,000* |
| TH-1 | 5/12/14 | 0.5 | 4,192 | 7,010 |
| | | 3.5 | 4,187 | *NA* |
| | | 4.5 | 3,611 | *NA* |
| | | 7 | 3,321 | >2,300 |
| | | 9 | 2,985 | >2,300 |
| | | 12 | 3,168 | *NA* |
| | | 13 | 3,590 | >2,300 |
| TH-2 | 5/12/14 | 1.5 | 0.3 | *NA* |
| | | 7 | 0.5 | 25.0 |
| TH-3 | 5/12/14 | 2 | 38.0 | 362 |
| | | 6.25 | 1,587 | 1,730 |
| TH-4 | 5/12/14 | 1.5 | 0.3 | *NA* |
| | | 6.25 | 0.1 | 45.0 |
| TH-5 | 5/12/14 | 1.5 | 0.1 | *NA* |
| | | 6.5 | 0.2 | 38.0 |
| TH-6 | 5/12/14 | 2 | 3.5 | 250 |
| | | 5.5 | 3,532 | >2,300 |
| TH-7 | 5/12/14 | 3 | 2,960 | *NA* |
| TH-8 | 5/12/14 | 4.75 | 2.4 | 120 |
| TH-9 | 5/12/14 | 2 | 0.4 | *NA* |
| | | 6.75 | 0.3 | 142 |
| TH-10 | 5/12/14 | 6 | 2.1 | 32.1 |
| NA - NOT ANALYZED | | | | |

Animas Environmental Services, LLC

| | |
|---|---|
| DRAWN BY: C. Lameman | DATE DRAWN: May 13, 2014 |
| REVISIONS BY: C. Lameman | DATE REVISED: May 30, 2014 |
| CHECKED BY: D. Watson | DATE CHECKED: May 30, 2014 |
| APPROVED BY: E. McNally | DATE APPROVED: May 30, 2014 |

**LEGEND**

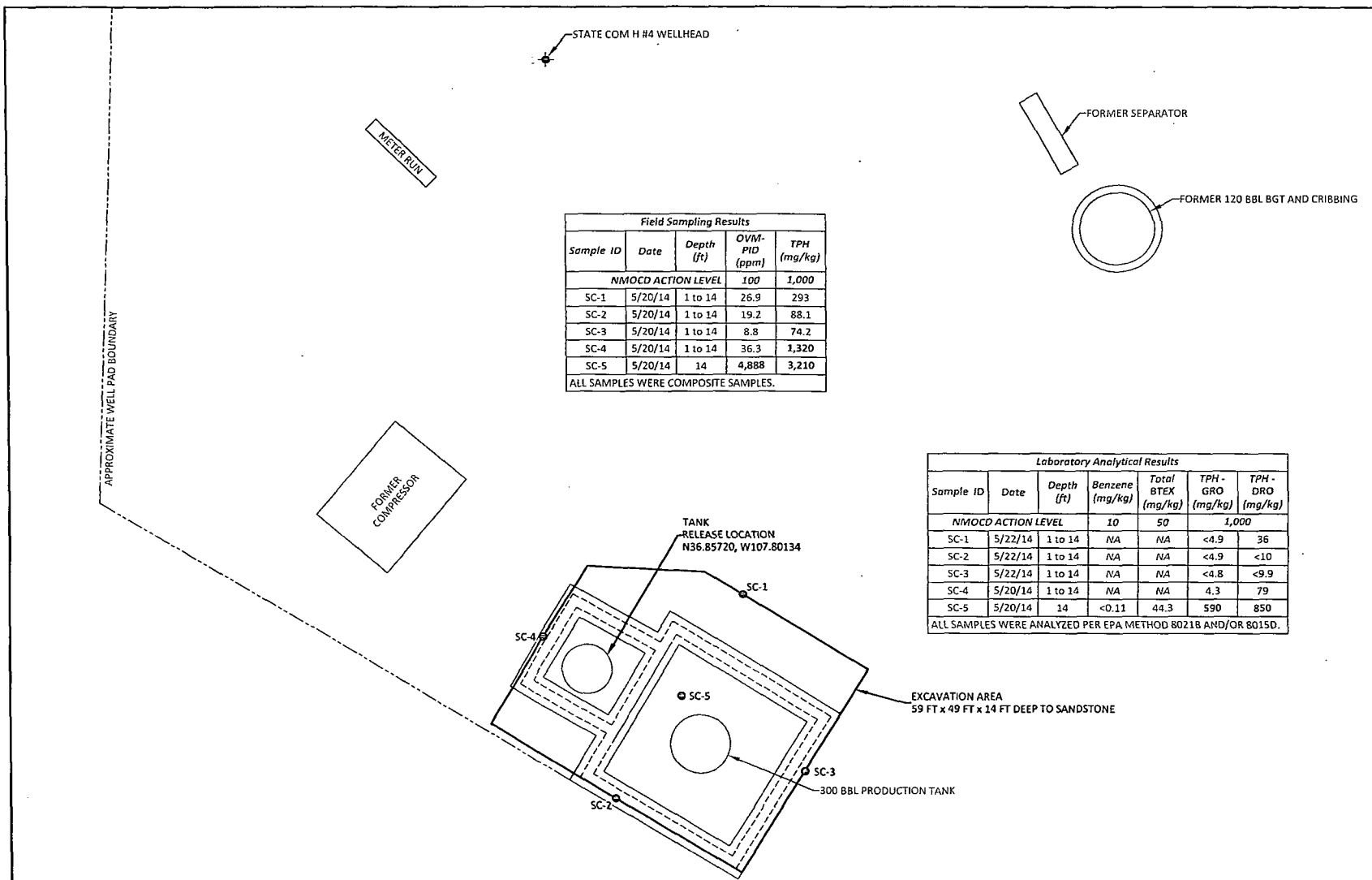
SECONDARY CONTAINMENT BERM

N

SCALE
20 10 0 20
5
(1 INCH = 20 FEET)

# FIGURE 4

**FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS**
**MAY 2014**
ConocoPhillips
STATE COM H #4
SW¼ NE¼, SECTION 32, T31N, R9W
SAN JUAN COUNTY, NEW MEXICO
N36.85754, W107.80136




*Field Sampling Results*

| Sample ID | Date | Depth (ft) | OVM-PID (ppm) | TPH (mg/kg) |
|---|---|---|---|---|
| NMOCD ACTION LEVEL | | | 100 | 1,000 |
| SC-1 | 5/20/14 | 1 to 14 | 26.9 | 293 |
| SC-2 | 5/20/14 | 1 to 14 | 19.2 | 88.1 |
| SC-3 | 5/20/14 | 1 to 14 | 8.8 | 74.2 |
| SC-4 | 5/20/14 | 1 to 14 | 36.3 | 1,320 |
| SC-5 | 5/20/14 | 14 | 4,888 | 3,210 |
| ALL SAMPLES WERE COMPOSITE SAMPLES. | | | | |

*Laboratory Analytical Results*

| Sample ID | Date | Depth (ft) | Benzene (mg/kg) | Total BTEX (mg/kg) | TPH - GRO (mg/kg) | TPH - DRO (mg/kg) |
|---|---|---|---|---|---|---|
| NMOCD ACTION LEVEL | | | 10 | 50 | 1,000 | |
| SC-1 | 5/22/14 | 1 to 14 | NA | NA | <4.9 | 36 |
| SC-2 | 5/22/14 | 1 to 14 | NA | NA | <4.9 | <10 |
| SC-3 | 5/22/14 | 1 to 14 | NA | NA | <4.8 | <9.9 |
| SC-4 | 5/20/14 | 1 to 14 | NA | NA | 4.3 | 79 |
| SC-5 | 5/20/14 | 14 | <0.11 | 44.3 | 590 | 850 |
| ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND/OR 8015D. | | | | | | |

Animas Environmental Services, LLC

| DRAWN BY: | DATE DRAWN: |
|---|---|
| C. Lameman | May 30, 2014 |
| **REVISIONS BY:** | **DATE REVISED:** |
| C. Lameman | May 30, 2014 |
| **CHECKED BY:** | **DATE CHECKED:** |
| D. Watson | May 30, 2014 |
| **APPROVED BY:** | **DATE APPROVED:** |
| E. McNally | May 30, 2014 |

**LEGEND**

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM

SCALE
20 10 0 20
5
(1 INCH = 20 FEET)

# 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: State Com H #4

Date: 5/12/2014

Matrix: Soil

| Sample ID | Collection Date | Collection Time | OVM (ppm) | TPH* (mg/kg) | TPH Analysis Time | TPH PQL (mg/kg) | DF | TPH Analysts Initials |
|---|---|---|---|---|---|---|---|---|
| TH-1 @ 0.5' | 5/12/2014 | 11:43 | 4,192 | 7,008 | 12:06 | 200 | 10 | EMS |
| TH-1 @ 3.5' | 5/12/2014 | 14:50 | 4,187 | *Not Analyzed for TPH* | | | | |
| TH-1 @ 4.5' | 5/12/2014 | 14:53 | 3,611 | *Not Analyzed for TPH* | | | | |
| TH-1 @ 7' | 5/12/2014 | 14:56 | 3,321 | >2,300 | 15:32 | 20.0 | 1 | EMS |
| TH-1 @ 9.25' | 5/12/2014 | 15:00 | 2,985 | >2,300 | 15:29 | 20.0 | 1 | EMS |
| TH-1 @ 12' | 5/12/2014 | 15:04 | 3,168 | *Not Analyzed for TPH* | | | | |
| TH-1 @ 13' | 5/12/2014 | 15:06 | 3,590 | >2,300 | 15:27 | 20.0 | 1 | EMS |
| TH-2 @ 1.5' | 5/12/2014 | 15:36 | 0.3 | *Not Analyzed for TPH* | | | | |
| TH-2 @ 7' | 5/12/2014 | 15:39 | 0.5 | 25.0 | 10:07** | 20.0 | 1 | EMS |
| TH-3 @ 2' | 5/12/2014 | 15:50 | 38.0 | 362 | 10:10** | 20.0 | 1 | EMS |
| TH-3 @ 6.25' | 5/12/2014 | 15:55 | 1,587 | 1,727 | 10:12** | 20.0 | 1 | EMS |
| TH-4 @ 1.5' | 5/12/2014 | 16:02 | 0.3 | *Not Analyzed for TPH* | | | | |
| TH-4 @ 6.25' | 5/12/2014 | 16:05 | 0.1 | 45.0 | 10:15** | 20.0 | 1 | EMS |
| TH-5 @ 1.5' | 5/12/2014 | 16:07 | 0.1 | *Not Analyzed for TPH* | | | | |
| TH-5 @ 6.5' | 5/12/2014 | 16:09 | 0.2 | 38.0 | 10:17** | 20.0 | 1 | EMS |
| TH-6 @ 2' | 5/12/2014 | 16:15 | 3.5 | 250 | 10:20** | 20.0 | 1 | EMS |
| TH-6 @ 5.5' | 5/12/2014 | 16:22 | 3,532 | >2,300 | 10:22** | 20.0 | 1 | EMS |
| TH-7 @ 3 ' | 5/12/2014 | 16:30 | 2,960 | *Not Analyzed for TPH* | | | | |
| TH-8 @ 4.75' | 5/12/2014 | 16:32 | 2.4 | 120 | 10:25** | 20.0 | 1 | EMS |
| TH-9 @ 2' | 5/12/2014 | 16:40 | 0.4 | *Not Analyzed for TPH* | | | | |
| TH-9 @ 6.75' | 5/12/2014 | 16:45 | 0.3 | 142 | 10:27** | 20.0 | 1 | EMS |
| TH-10 @ 6' | 5/12/2014 | 17:00 | 2.1 | 32.1 | 10:30** | 20.0 | 1 | EMS |


Report Finalized: 5/13/14

| | |
|---|---|
| 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.*

**Samples were analyzed on 5/13/14

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Erik Sky



Report Finalized: 5/13/14

# 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: State Com H #4

Date: 5/20/2014

Matrix: Soil

| Sample ID | Collection Date | Time of Sample Collection | Sample Location | OVM (ppm) | TPH Analysis Time | TPH* (mg/kg) | TPH PQL (mg/kg) | DF | TPH Analysts Initials |
|---|---|---|---|---|---|---|---|---|---|
| SC-1 | 5/20/2014 | 9:35 | North Wall | 26.9 | 10:29 | 293 | 20.0 | 1 | CL |
| SC-2 | 5/20/2014 | 9:40 | South Wall | 19.2 | 10:35 | 88.1 | 20.0 | 1 | CL |
| SC-3 | 5/20/2014 | 9:48 | East Wall | 8.8 | 10:41 | 74.2 | 20.0 | 1 | CL |
| SC-4 | 5/20/2014 | 9:52 | West Wall | 36.3 | 10:49 | 1,320 | 20.0 | 1 | CL |
| SC-5 | 5/20/2014 | 9:55 | Base | 4,888 | 10:57 | 3,208 | 200 | 10 | CL |

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:


Report Finalized: 5/20/14

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*

May 22, 2014

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

RE: CoP State Com H #4 OrderNo.: 1405886

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/21/2014 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

**Analytical Report**
Lab Order **1405886**
Date Reported: **5/22/2014**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental
**Client Sample ID:** SC-4
**Project:** CoP State Com H #4
**Collection Date:** 5/20/2014 9:52:00 AM
**Lab ID:** 1405886-001
**Matrix:** MEOH (SOIL)
**Received Date:** 5/21/2014 10:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8015D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **BCN** | |
| Diesel Range Organics (DRO) | 79 | 10 | | mg/Kg | 1 | 5/21/2014 11:41:49 AM | 13277 |
| Surr: DNOP | 92.5 | 57.9-140 | | %REC | 1 | 5/21/2014 11:41:49 AM | 13277 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** | |
| Gasoline Range Organics (GRO) | 4.3 | 3.3 | | mg/Kg | 1 | 5/21/2014 11:05:11 AM | R18771 |
| Surr: BFB | 128 | 80-120 | S | %REC | 1 | 5/21/2014 11:05:11 AM | R18771 |

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

**Qualifiers:**

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

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental
**Project:** CoP State Com H #4
**Lab ID:** 1405886-002

**Client Sample ID:** SC-5
**Collection Date:** 5/20/2014 9:55:00 AM
**Matrix:** MEOH (SOIL) **Received Date:** 5/21/2014 10:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8015D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **BCN** | |
| Diesel Range Organics (DRO) | 850 | 100 | | mg/Kg | 10 | 5/21/2014 2:19:48 PM | 13277 |
| Surr: DNOP | 0 | 57.9-140 | S | %REC | 10 | 5/21/2014 2:19:48 PM | 13277 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** | |
| Gasoline Range Organics (GRO) | 590 | 22 | | mg/Kg | 5 | 5/21/2014 11:33:49 AM | R18771 |
| Surr: BFB | 802 | 80-120 | S | %REC | 5 | 5/21/2014 11:33:49 AM | R18771 |
| **EPA METHOD 8021B: VOLATILES** | | | | | | Analyst: **NSB** | |
| Benzene | ND | 0.11 | | mg/Kg | 5 | 5/21/2014 11:33:49 AM | R18771 |
| Toluene | ND | 0.22 | | mg/Kg | 5 | 5/21/2014 11:33:49 AM | R18771 |
| Ethylbenzene | 3.3 | 0.22 | | mg/Kg | 5 | 5/21/2014 11:33:49 AM | R18771 |
| Xylenes, Total | 41 | 0.45 | | mg/Kg | 5 | 5/21/2014 11:33:49 AM | R18771 |
| Surr: 4-Bromofluorobenzene | 173 | 80-120 | S | %REC | 5 | 5/21/2014 11:33:49 AM | R18771 |

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#: **1405886**

*22-May-14*

**Client:** Animas Environmental
**Project:** CoP State Com H #4

| Sample ID **LCS-13258** | SampType: **LCS** | | | TestCode: **EPA Method 8015D: Diesel Range Organics** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **13258** | | | RunNo: **18749** | | | | | |
| Prep Date: **5/20/2014** | Analysis Date: **5/21/2014** | | | SeqNo: **541686** | | Units: **%REC** | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 4.3 | | 5.000 | | 86.5 | 57.9 | 140 | | | |

| Sample ID **LCS-13277** | SampType: **LCS** | | | TestCode: **EPA Method 8015D: Diesel Range Organics** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **13277** | | | RunNo: **18749** | | | | | |
| Prep Date: **5/21/2014** | Analysis Date: **5/21/2014** | | | SeqNo: **541687** | | 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 | 98.7 | 60.8 | 145 | | | |
| Surr: DNOP | 4.7 | | 5.000 | | 94.5 | 57.9 | 140 | | | |

| Sample ID **MB-13258** | SampType: **MBLK** | | | TestCode: **EPA Method 8015D: Diesel Range Organics** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **13258** | | | RunNo: **18749** | | | | | |
| Prep Date: **5/20/2014** | Analysis Date: **5/21/2014** | | | SeqNo: **541688** | | Units: **%REC** | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 9.8 | | 10.00 | | 97.6 | 57.9 | 140 | | | |

| Sample ID **MB-13277** | SampType: **MBLK** | | | TestCode: **EPA Method 8015D: Diesel Range Organics** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **13277** | | | RunNo: **18749** | | | | | |
| Prep Date: **5/21/2014** | Analysis Date: **5/21/2014** | | | SeqNo: **541689** | | 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 | 8.1 | | 10.00 | | 81.5 | 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#: **1405886**

*22-May-14*

**Client:** Animas Environmental

**Project:** CoP State Com H #4

| Sample ID | **MB-13266 MK** | SampType: | **MBLK** | | TestCode: | **EPA Method 8015D: Gasoline Range** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: | **PBS** | Batch ID: | **R18771** | | RunNo: | **18771** | | | | |
| Prep Date: | | Analysis Date: | **5/21/2014** | | SeqNo: | **542189** | 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 | 860 | | 1000 | | 86.5 | 80 | 120 | | | |

| Sample ID | **LCS-13266 MK** | SampType: | **LCS** | | TestCode: | **EPA Method 8015D: Gasoline Range** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: | **LCSS** | Batch ID: | **R18771** | | RunNo: | **18771** | | | | |
| Prep Date: | | Analysis Date: | **5/21/2014** | | SeqNo: | **542190** | Units: | **mg/Kg** | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 22 | 5.0 | 25.00 | 0 | 86.1 | 71.7 | 134 | | | |
| Surr: BFB | 1000 | | 1000 | | 100 | 80 | 120 | | | |

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1405886**

*22-May-14*

**Client:** Animas Environmental

**Project:** CoP State Com H #4

| Sample ID **MB-13266 MK** | SampType: **MBLK** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **R18771** | RunNo: **18771** |
| Prep Date: | Analysis Date: **5/21/2014** | SeqNo: **542226** 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 | 1.1 | | 1.000 | | 105 | 80 | 120 | | | |

| Sample ID **LCS-13266 MK** | SampType: **LCS** | TestCode: **EPA Method 8021B: Volatiles** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **R18771** | RunNo: **18771** |
| Prep Date: | Analysis Date: **5/21/2014** | SeqNo: **542228** 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 | 112 | 80 | 120 | | | |
| Toluene | 1.0 | 0.050 | 1.000 | 0 | 102 | 80 | 120 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 101 | 80 | 120 | | | |
| Xylenes, Total | 3.0 | 0.10 | 3.000 | 0 | 98.4 | 80 | 120 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 113 | 80 | 120 | | | |

**Qualifiers:**

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

**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: 1405886  RcptNo: 1

Received by/date: CS 05/21/14

Logged By: Lindsay Mangin 5/21/2014 10:00:00 AM

Completed By: Lindsay Mangin 5/21/2014 10:11:06 AM

Reviewed By: IO 05/21/14

## 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 | 1.0 | Good | Yes | | | |

# Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 624 E Comanche St Farmington NM 87401

Phone #: (505) 564-2281

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 State Comm #4

Project #:

Project Manager: D. Watson

Sampler: SG/CL

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.0°

**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. 1405886 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/20/14 | 0957 | soil | SC-2 | MeOH Kit (2) 4oz | MEOH | -001 | X | | X | | | | | | | | | |
| 5/20/14 | 0955 | soil | SC-5 | MeOH Kit (2) 4oz | MEOH | -002 | X | | X | | | | | | | | | |

per D-W. 05/21/14

| Date: | Time: | Relinquished by: | Received by: | Date | Time |
|---|---|---|---|---|---|
| 5/20/14 | 1645 | | Christa Waeler | 5/20/14 | 1645 |
| 5/20/14 | 1710 | Christa Waeler | Celina Sena | 05/21/14 | 10:00 |

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.

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*

May 29, 2014

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

RE: COP State Com H #4 OrderNo.: 1405A39

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/23/2014 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

**Analytical Report**
Lab Order **1405A39**
Date Reported: **5/29/2014**

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental
**Project:** COP State Com H #4
**Lab ID:** 1405A39-001 **Matrix:** SOIL

**Client Sample ID:** SC-1
**Collection Date:** 5/22/2014 9:45:00 AM
**Received Date:** 5/23/2014 10:06:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8015D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **JME** | |
| Diesel Range Organics (DRO) | 36 | 10 | | mg/Kg | 1 | 5/27/2014 10:38:54 PM | 13337 |
| Surr: DNOP | 100 | 57.9-140 | | %REC | 1 | 5/27/2014 10:38:54 PM | 13337 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** | |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 5/27/2014 3:59:32 PM | 13340 |
| Surr: BFB | 90.7 | 80-120 | | %REC | 1 | 5/27/2014 3:59:32 PM | 13340 |

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

**Qualifiers:**

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

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Animas Environmental
**Project:** COP State Com H #4
**Lab ID:** 1405A39-002 **Matrix:** SOIL

**Client Sample ID:** SC-2
**Collection Date:** 5/22/2014 9:50:00 AM
**Received Date:** 5/23/2014 10:06:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8015D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **JME** | |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 5/27/2014 11:09:26 PM | 13337 |
| Surr: DNOP | 105 | 57.9-140 | | %REC | 1 | 5/27/2014 11:09:26 PM | 13337 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** | |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 5/27/2014 4:28:05 PM | 13340 |
| Surr: BFB | 89.5 | 80-120 | | %REC | 1 | 5/27/2014 4:28:05 PM | 13340 |

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 State Com H #4
**Lab ID:** 1405A39-003 **Matrix:** SOIL

**Client Sample ID:** SC-3
**Collection Date:** 5/22/2014 9:55:00 AM
**Received Date:** 5/23/2014 10:06:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|---|---|---|---|---|---|---|---|
| **EPA METHOD 8015D: DIESEL RANGE ORGANICS** | | | | | | Analyst: **JME** | |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 5/27/2014 11:39:56 PM | 13337 |
| Surr: DNOP | 103 | 57.9-140 | | %REC | 1 | 5/27/2014 11:39:56 PM | 13337 |
| **EPA METHOD 8015D: GASOLINE RANGE** | | | | | | Analyst: **NSB** | |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 5/27/2014 4:56:42 PM | 13340 |
| Surr: BFB | 89.0 | 80-120 | | %REC | 1 | 5/27/2014 4:56:42 PM | 13340 |

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#: **1405A39**

*29-May-14*

**Client:** Animas Environmental

**Project:** COP State Com H #4

| Sample ID **MB-13337** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Diesel Range Organics** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **13337** | RunNo: **18843** |
| Prep Date: **5/23/2014** | Analysis Date: **5/27/2014** | SeqNo: **544843** 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 | 9.4 | | 10.00 | | 94.0 | 57.9 | 140 | | | |

| Sample ID **LCS-13337** | SampType: **LCS** | TestCode: **EPA Method 8015D: Diesel Range Organics** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **13337** | RunNo: **18843** |
| Prep Date: **5/23/2014** | Analysis Date: **5/27/2014** | SeqNo: **544844** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (DRO) | 64 | 10 | 50.00 | 0 | 128 | 60.8 | 145 | | | |
| Surr: DNOP | 6.5 | | 5.000 | | 129 | 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#: **1405A39**

*29-May-14*

**Client:** Animas Environmental
**Project:** COP State Com H #4

| Sample ID **MB-13340** | SampType: **MBLK** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **PBS** | Batch ID: **13340** | RunNo: **18869** |
| Prep Date: **5/23/2014** | Analysis Date: **5/27/2014** | SeqNo: **545108** 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 | 880 | | 1000 | | 88.4 | 80 | 120 | | | |

| Sample ID **LCS-13340** | SampType: **LCS** | TestCode: **EPA Method 8015D: Gasoline Range** |
|---|---|---|
| Client ID: **LCSS** | Batch ID: **13340** | RunNo: **18869** |
| Prep Date: **5/23/2014** | Analysis Date: **5/27/2014** | SeqNo: **545109** Units: **mg/Kg** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 109 | 71.7 | 134 | | | |
| Surr: BFB | 990 | | 1000 | | 99.3 | 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 | | |

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: 1405A39  RcptNo: 1

Received by/date: MB 05/23/14

Logged By: Lindsay Mangin 5/23/2014 10:06:00 AM

Completed By: Lindsay Mangin 5/23/2014 10:57:16 AM

Reviewed By: 05/23/14

## 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 | 3.6 | Good | Yes | | | |

# Chain of Custody Record

**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Animas Environmental Services, 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)

Turn Around Time:

☒ Standard ☐ Rush

Project Name: CP State Com H #4

Project #:

Project Manager: D. WATSON

Sampler: E. Sykes

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.6°

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. 1405139 | 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/22/14 | 9:45 | Soil | SC-1 | 1-4oz | non-cool | -001 | | | X | | | | | | | | | | | | | |
| 5/22/14 | 9:50 | Soil | SC-2 | 1-4oz | non-cool | -002 | | | X | | | | | | | | | | | | | |
| 5/22/14 | 9:55 | Soil | SC-3 | 1-4oz | non-cool | -003 | | | X | | | | | | | | | | | | | |

| Date: | Time: | Relinquished by: | Received by: | Date | Time |
|---|---|---|---|---|---|
| 5/22/14 | 1722 | | Chris Walters | 5/22/14 | 1722 |
| 5/22/14 | 1741 | Chris Walters | Mike Gee | 05/23/14 | 1004 |

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.