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 **Crystal Tafoya**
Address 3401 East 30th St, Farmington, NM	Telephone No.(505) 326-9837
Facility Name: **Decker Primo 1**	Facility Type: **Gas Well**

Surface Owner **Fee**	Mineral Owner **BLM (SF-08051)**	API No.**30-045-11354**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
H	**19**	**32N**	**10W**	**1650**	**North**	**990**	**East**	**San Juan**

Latitude 36.97310 Longitude -107.91792

NATURE OF RELEASE

Type of Release **Produced Fluids**	Volume of Release **Unknown**	Volume Recovered **540 cu.yds.**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **January 13, 2014**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
Facility Re-set Activities.

RCVD APR 16 '14
OIL CONS. DIV.
DIST. 3

Describe Area Affected and Cleanup Action Taken.*
Historical hydrocarbon impacted soil was found during the facility re-set of the subject well. Sample results were above regulatory standards by USEPA method 418.1 for TPH confirming a release. The excavation was 35'x 25' x 18' and 540 yds of soil was transported to IEI landfarm and 500 yds of clean soil was transported from Aztec Machine and placed in the excavation site. The soil sampling report is attached for review. Excavation and confirmation sampling occurred. Analytical results for TPH, and BTEX were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The final report is attached for review.

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

Signature: Crystal L. Tafoya

Printed Name: **Crystal Tafoya**

Title: **Field Environmental Specialist**

E-mail Address: crystal.tafoya@conocophillips.com

Date: 4/15/2014 Phone: (505) 326-9837

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 5/7/14 Expiration Date:

Conditions of Approval:
LAB Sample Was Before Email 4/4/14

Attached ☐

* Attach Additional Sheets If Necessary

#NCS1412730662

23

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

April 4, 2014

Crystal Tafoya
ConocoPhillips
San Juan Business Unit
Office 214-05
5525 Hwy 64
Farmington, New Mexico 87401

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

RE: Initial Release Assessment and Final Excavation Report
Decker Primo #1
San Juan County, New Mexico

Dear Ms. Tafoya:

On, January 13, February 5, and February 7, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Decker Primo #1, located in San Juan County, New Mexico. The historic release was discovered during a facility reset at the location. The initial release assessment was completed by AES on January 13, 2014, and the final excavation was completed by CoP contractors while AES was on location on February 7, 2014.

1.0 Site Information

1.1 Location

Site Name – Decker Primo #1
Location – SE¼ NE¼, Section 19, T32N, R10W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.97310 and W107.91792, respectively
Release Location Latitude/Longitude – N36.97301 and W107.91784, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, January 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 20 based on the following factors:

- **Depth to Groundwater:** A water well (SJ 03429), located approximately 2,100 feet southeast of the location and 25 feet lower in elevation, reported the depth to groundwater at 54 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:** An unnamed wash which discharges to the wash in Cox Canyon is located approximately 850 southwest of location. (10 points)

1.3 Assessment

AES was initially contacted by Crystal Tafoya of CoP on January 13, 2014, and on the same day, Debbie Watson and Emilee Skyles of AES completed the initial release assessment field work. The assessment included collection and field screening of 17 soil samples from 8 assessment trenches (TH-1 through TH-8) in and around the release area. Based on the field screening results, AES recommended further excavation of the release area. Sample locations are shown on Figure 3.

On February 5, 2014, AES returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-1 through SC-5) from the walls and base of the excavation. A final confirmation soil sample (SC-6) from the east wall was collected on February 7, 2014, following removal of additional petroleum impacted soils. The area of the final excavation measured approximately 35 feet by 25 feet by 18 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 17 soil samples from 8 assessment trenches (TH-1 through TH-8) and 6 composite samples (SC-1 through SC-6) 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). Three composite samples (SC-2, SC-3, and SC-5) collected during the excavation clearance were submitted for confirmation laboratory analysis.

2.1 Field Screening

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 Screening and Laboratory Analytical Results

On January 13, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.4 ppm in TH-8 up to 9,711 ppm in TH-1. Field TPH concentrations ranged from less than 20.0 mg/kg in TH-6 up to 3,150 mg/kg in TH-1.

On February 5 and February 7, 2014, excavation field screening results for VOCs via OVM ranged from 0.0 ppm in SC-1, SC-2, and SC-4 up to 173 ppm in SC-5. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-6 up to 174 mg/kg in SC-3. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Field Screening VOCs and TPH Results
Decker Primo #1 Initial Release Assessment and Final Excavation
January and February 2014

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*
*NMOCD Action Level**			*100*	*100*
TH-1	1/13/14	7	**9,711**	**>2500**
		12	**6,821**	NA
		14	**4,199**	**3,150**
TH-2	1/13/14	5	**2,825**	NA
TH-3	1/13/14	8	10.4	60.7
TH-4	1/13/14	7	**1,127**	**1,090**
		9	6.4	52.7
TH-5	1/13/14	Surface	7.6	NA
		4	2.1	NA
		7	1.1	NA
		8.5	73.0	**335**
TH-6	1/13/14	4	87.6	88.8
		8	0.8	<20.0
TH-7	1/13/14	4	**585**	**858**
		8	2.3	NA
TH-8	1/13/14	4	3.0	NA
		8	0.4	NA
SC-1	2/5/14	1 to 18	0.0	21.5
SC-2	2/5/14	1 to 18	0.0	**110**
SC-3	2/5/14	1 to 18	8.2	**174**
SC-4	2/5/14	1 to 18	0.0	28.0
SC-5	2/5/14	18	**173**	NA
SC-6	2/7/14	1 to 18	0.1	<20.0

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-2, SC-3, and SC-5 were used to confirm field screening results from the final excavation. Benzene and total BTEX concentrations in SC-5 were reported at less than 0.033 mg/kg and 0.21 mg/kg, respectively. TPH concentrations as GRO/DRO were reported above laboratory detection limits in SC-3 with 540 mg/kg and in SC-5 with 77 mg/kg. Results are presented in Table 2 and on Figure 4. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
Decker Primo #1 Final Excavation
February 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*	*100*	
SC-2	2/5/14	1 to 18	NA	NA	<3.4	<10
SC-3	2/5/14	1 to 18	NA	NA	<3.1	**540**
SC-5	2/5/14	18	<0.033	0.21	14	63

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 January 13, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a historic release at the Decker Primo #1. 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 20.

Initial assessment field screening results above the NMOCD action level of 100 ppm VOCs and 100 mg/kg TPH were reported in TH-1, TH-2, TH-4, and TH-7. The highest VOC concentration was reported in TH-1 with 9,711 ppm, and the highest TPH concentration was also reported in TH-1 with 3,150 mg/kg.

On February 5, 2014, final clearance of the excavation area was completed. Field screening results of the excavation showed VOC concentrations below the NMOCD action level of 100 ppm for the final walls of the excavation. The base of the excavation had a VOC concentration of 173 ppm. Field TPH concentrations were below the NMOCD action level of 100 mg/kg for the north (SC-1) and west (SC-4) walls. However, the remaining sidewalls (SC-2 and SC-3) exceeded the NMOCD action level of 100 mg/kg TPH. Laboratory analytical results from February 5, 2014, reported TPH as GRO/DRO in

SC-2 and SC-5 below the NMOCD action level of 100 mg/kg. Benzene and total BTEX concentrations were reported below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively, in SC-5. However, TPH concentrations as GRO/DRO were above the NMCOD action level in SC-3 (east wall). On February 7, 2014, additional impacted soil was removed from the east wall, and sample SC-6 was collected. Field screening results for SC-6 reported VOC and field TPH concentrations below applicable NMOCD action levels for the east wall of the excavation.

Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the Decker Primo #1, benzene, total BTEX, VOC, and TPH concentrations were below the applicable NMOCD action levels for each of the final 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 Deborah Watson at (505) 564-2281.

Sincerely,

Emilee Skyles
Staff Geologist

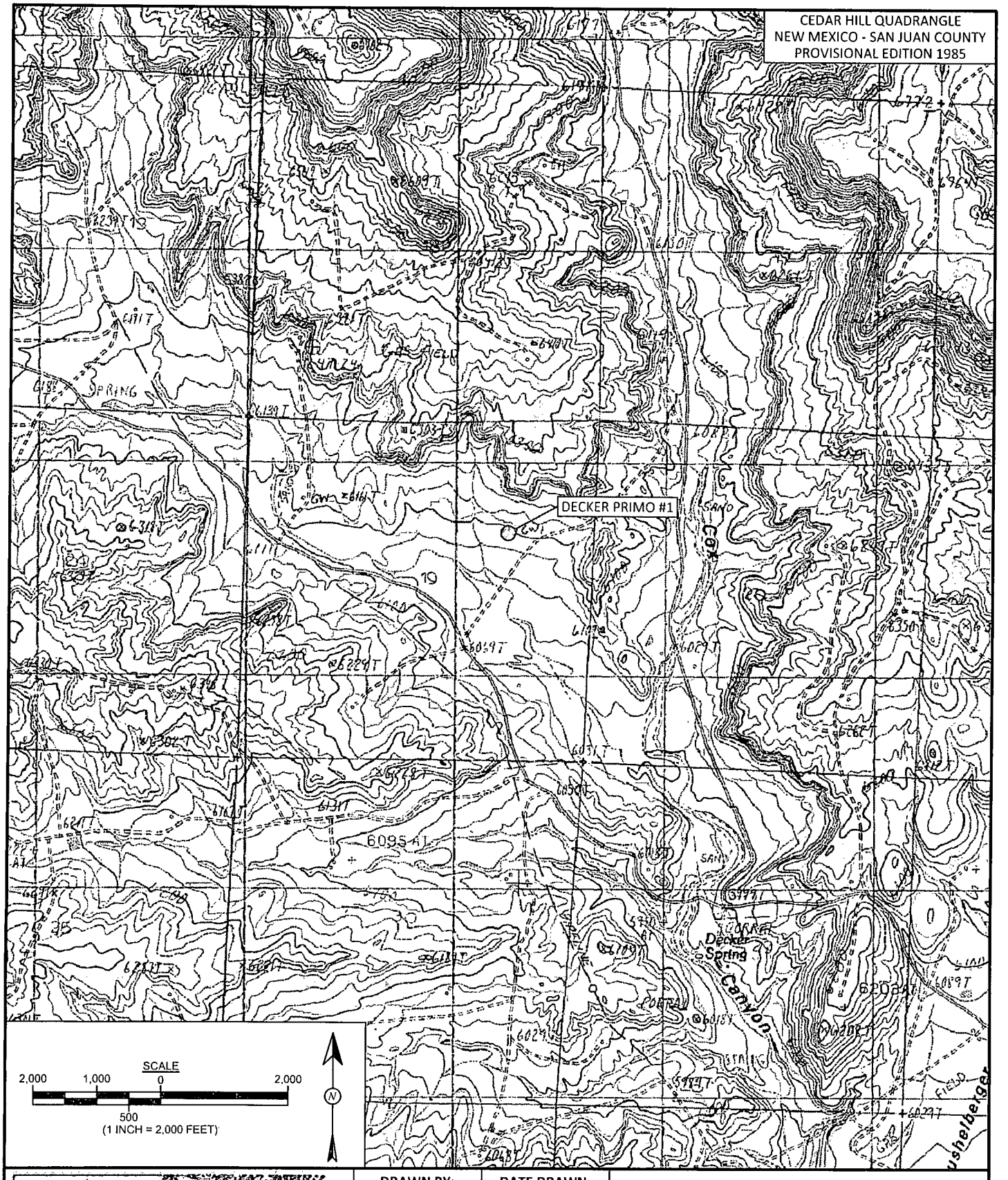
Deborah Watson, P.G.
Project Manager

Elizabeth McNally, PE

Attachments:

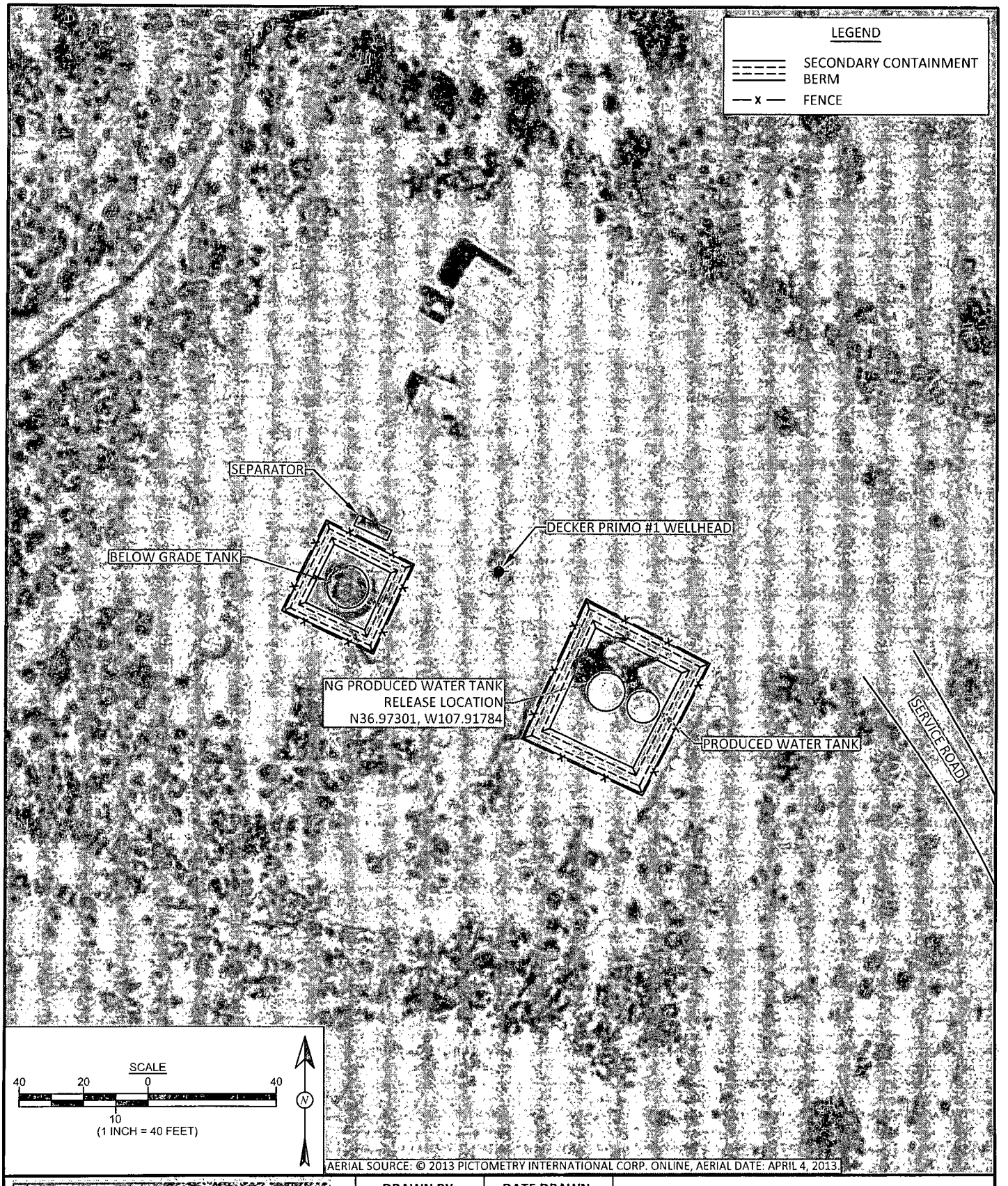
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, January 2014
- Figure 3. Initial Assessment Sample Locations and Results, January 2014
- Figure 4. Final Excavation Sample Locations and Results, February 2014
- AES Field Screening Report 011314
- AES Field Screening Report 020514
- AES Field Screening Report 020714
- Hall Laboratory Analytical Report 1402208

R:\Animas 2000\Dropbox\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\Decker Primo #1\Decker Primo #1 Release and Final Excavation Report 040414.docx



DRAWN BY: S. Glasses	**DATE DRAWN:** February 12, 2014	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** February 12, 2014	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: D. Watson	**DATE CHECKED:** February 12, 2014	ConocoPhillips DECKER PRIMO #1 SE¼ NE¼, SECTION 19, T32N, R10W SAN JUAN COUNTY, NEW MEXICO N36.97310, W107.91792
APPROVED BY: E. McNally	**DATE APPROVED:** February 12, 2014	

AES
Animas Environmental Services, LLC



AERIAL SOURCE: © 2013 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: APRIL 4, 2013.

Animas Environmental Services, LLC

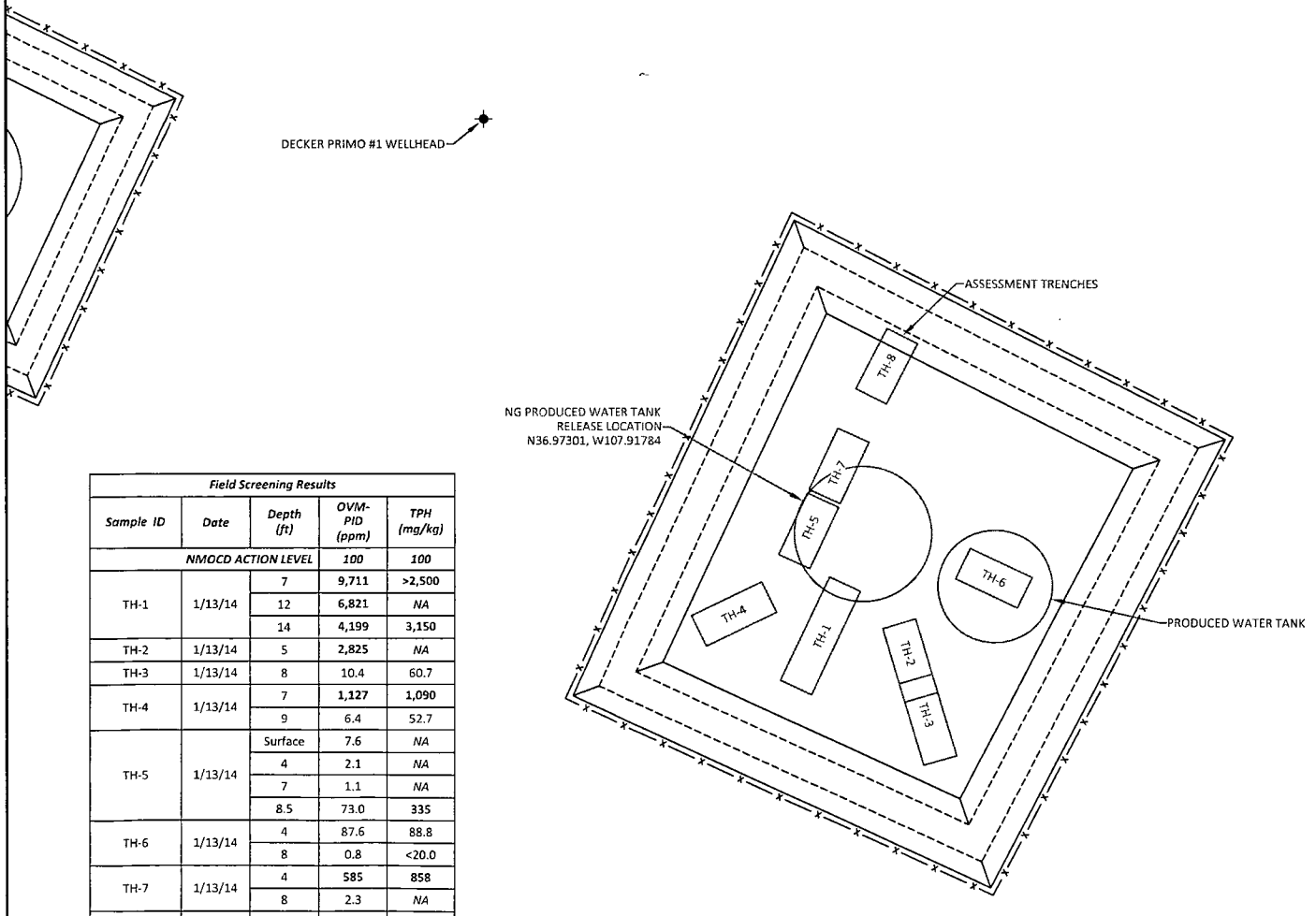
DRAWN BY: C. Lameman	**DATE DRAWN:** February 13, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** February 13, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** February 13, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** February 13, 2014

FIGURE 2

AERIAL SITE MAP
JANUARY 2014
ConocoPhillips
DECKER PRIMO #1
SE¼ NE¼, SECTION 19, T32N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.97310, W107.91792

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
JANUARY 2014
ConocoPhillips
DECKER PRIMO #1
SE¼ NE¼, SECTION 19, T32N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.97310, W107.91792



Field Screening Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*100*
TH-1	1/13/14	7	**9,711**	**>2,500**
		12	**6,821**	*NA*
		14	**4,199**	**3,150**
TH-2	1/13/14	5	**2,825**	*NA*
TH-3	1/13/14	8	10.4	60.7
TH-4	1/13/14	7	**1,127**	**1,090**
		9	6.4	52.7
TH-5	1/13/14	Surface	7.6	*NA*
		4	2.1	*NA*
		7	1.1	*NA*
		8.5	73.0	**335**
TH-6	1/13/14	4	87.6	88.8
		8	0.8	<20.0
TH-7	1/13/14	4	**585**	**858**
		8	2.3	*NA*
TH-8	1/13/14	4	3.0	*NA*
		8	0.4	*NA*
NA - NOT ANALYZED				

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** January 14, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** January 14, 2014
CHECKED BY: D. Watson	**DATE CHECKED:** January 14, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** January 14, 2014

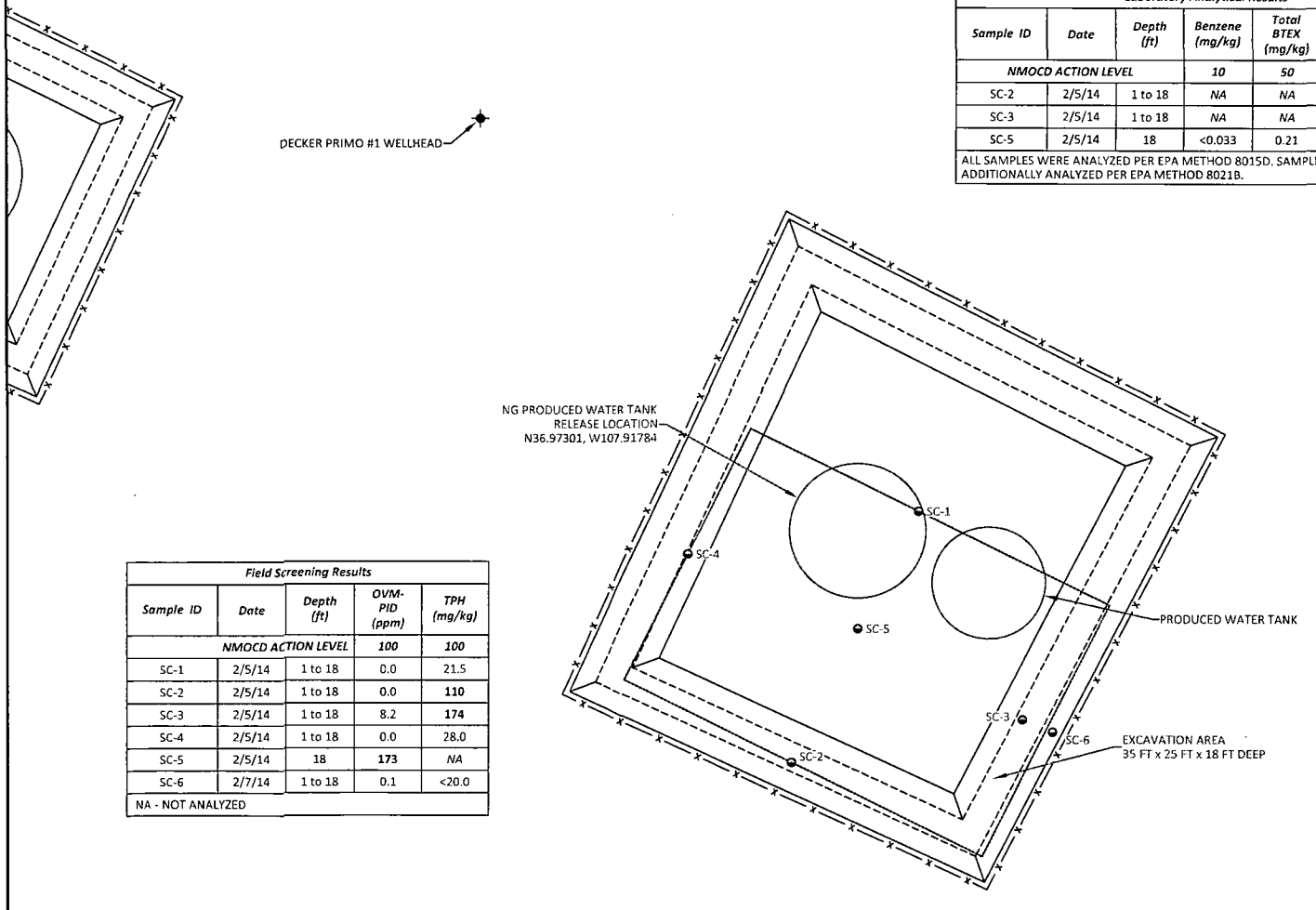
LEGEND

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

SCALE
10 5 0 10
2
(1 INCH = 10 FEET)

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
FEBRUARY 2014
ConocoPhillips
DECKER PRIMO #1
SE¼ NE¼, SECTION 19, T32N, R10W
SAN JUAN COUNTY, NEW MEXICO
N36.97310, W107.91792



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	100	
SC-2	2/5/14	1 to 18	NA	NA	<3.4	<10
SC-3	2/5/14	1 to 18	NA	NA	<3.1	540
SC-5	2/5/14	18	<0.033	0.21	14	63

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8015D. SAMPLE SC-5 WAS ADDITIONALLY ANALYZED PER EPA METHOD 8021B.

Field Screening Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-1	2/5/14	1 to 18	0.0	21.5
SC-2	2/5/14	1 to 18	0.0	110
SC-3	2/5/14	1 to 18	8.2	174
SC-4	2/5/14	1 to 18	0.0	28.0
SC-5	2/5/14	18	173	NA
SC-6	2/7/14	1 to 18	0.1	<20.0
NA - NOT ANALYZED				

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	February 13, 2014
REVISIONS BY:	DATE REVISED:
C. Lameman	February 13, 2014
CHECKED BY:	DATE CHECKED:
D. Watson	February 13, 2014
APPROVED BY:	DATE APPROVED:
E. McNally	February 13, 2014

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- FENCE

N

SCALE
10 6 0 10
2
(1 INCH = 10 FEET)

AES Field Screening 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: Decker Primo #1

Date: 1/13/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 7'	1/13/2014	12:45	9,711	>2,500	13:07	20.0	1	DAW
TH-1 @ 12'	1/13/2014	13:17	6,821	*Not Analyzed for TPH*				
TH-1 @ 14'	1/13/2014	13:27	4,199	3,148	15:20	200	10	DAW
TH-2 @ 5'	1/13/2014	13:29	2,825	*Not Analyzed for TPH*				
TH-3 @ 8'	1/13/2014	13:32	10.4	60.7	14:40	20.0	1	DAW
TH-4 @ 7'	1/13/2014	13:39	1,127	1,092	15:03	20.0	1	DAW
TH-4 @ 9'	1/13/2014	13:42	6.4	52.7	14:49	20.0	1	DAW
TH-5 @ surf	1/13/2014	13:51	7.6	*Not Analyzed for TPH*				
TH-5 @ 4'	1/13/2014	13:50	2.1	*Not Analyzed for TPH*				
TH-5 @ 7'	1/13/2014	13:54	1.1	*Not Analyzed for TPH*				
TH-5 @ 8.5'	1/13/2014	13:58	73.0	335	14:45	20.0	1	DAW
TH-6 @ 4'	1/13/2014	14:08	87.6	88.8	15:10	20.0	1	DAW
TH-6 @ 8'	1/13/2014	14:10	0.8	12.6	15:07	20.0	1	DAW
TH-7 @ 4'	1/13/2014	14:45	585	858	15:39	20.0	1	DAW
TH-7 @ 8'	1/13/2014	14:48	2.3	*Not Analyzed for TPH*				
TH-8 @ 4'	1/13/2014	15:30	3.0	*Not Analyzed for TPH*				
TH-8 @ 8'	1/13/2014	15:31	0.4	*Not Analyzed for TPH*				

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: Deborah Watson

Report Finalized: 1/13/14

AES Field Screening 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: Decker Primo #1

Date: 2/5/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	2/5/2014	10:35	North Wall	0.0	21.5	11:27	20.0	1	DAW
SC-2	2/5/2014	10:40	South Wall	0.0	110	11:31	20.0	1	DAW
SC-3	2/5/2014	10:42	East Wall	8.2	174	11:35	20.0	1	DAW
SC-4	2/5/2014	10:45	West Wall	0.0	28.0	11:41	20.0	1	DAW
SC-5	2/5/2014	11:45	Base	173	*Not Analyzed for TPH*				

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

Analysts: Deborah Watson

Report Finalized: 2/5/14

AES Field Screening 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: Decker Primo #1

Date: 2/7/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	2/7/2014	9:00	East Wall	0.1	2.8	9:45	20.0	1	ES

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

Analysts:

Report Finalized: 2/7/14

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

February 07, 2014

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

RE: CoP Decker Primo 1 OrderNo.: 1402208

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/6/2014 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 **1402208**
Date Reported: **2/7/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: CoP Decker Primo 1
Lab ID: 1402208-001

Client Sample ID: SC-2
Collection Date: 2/5/2014 10:40:00 AM
Matrix: MEOH (SOIL) **Received Date:** 2/6/2014 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)	ND	10		mg/Kg	1	2/6/2014 12:52:42 PM	11588
Surr: DNOP	78.6	66-131		%REC	1	2/6/2014 12:52:42 PM	11588
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	2/6/2014 11:37:03 AM	R16565
Surr: BFB	84.1	74.5-129		%REC	1	2/6/2014 11:37:03 AM	R16565

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
Client Sample ID: SC-3
Project: CoP Decker Primo 1
Collection Date: 2/5/2014 10:42:00 AM
Lab ID: 1402208-002
Matrix: MEOH (SOIL)
Received Date: 2/6/2014 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)	540	10		mg/Kg	1	2/6/2014 1:14:47 PM	11588
Surr: DNOP	103	66-131		%REC	1	2/6/2014 1:14:47 PM	11588
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	2/6/2014 12:05:36 PM	R16565
Surr: BFB	89.0	74.5-129		%REC	1	2/6/2014 12:05:36 PM	R16565

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 Decker Primo 1
Lab ID: 1402208-003

Client Sample ID: SC-5
Collection Date: 2/5/2014 11:45:00 AM
Matrix: MEOH (SOIL) **Received Date:** 2/6/2014 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)	63	10		mg/Kg	1	2/6/2014 1:36:44 PM	11588
Surr: DNOP	97.3	66-131		%REC	1	2/6/2014 1:36:44 PM	11588
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMP**	
Gasoline Range Organics (GRO)	14	3.3		mg/Kg	1	2/6/2014 12:34:09 PM	R16565
Surr: BFB	293	74.5-129	S	%REC	1	2/6/2014 12:34:09 PM	R16565
EPA METHOD 8021B: VOLATILES						Analyst: **JMP**	
Benzene	ND	0.033		mg/Kg	1	2/6/2014 12:34:09 PM	R16565
Toluene	ND	0.033		mg/Kg	1	2/6/2014 12:34:09 PM	R16565
Ethylbenzene	0.036	0.033		mg/Kg	1	2/6/2014 12:34:09 PM	R16565
Xylenes, Total	0.17	0.066		mg/Kg	1	2/6/2014 12:34:09 PM	R16565
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	2/6/2014 12:34:09 PM	R16565

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1402208**

07-Feb-14

Client: Animas Environmental

Project: CoP Decker Primo 1

Sample ID **MB-11588**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **11588**	RunNo: **16554**
Prep Date: **2/5/2014**	Analysis Date: **2/6/2014**	SeqNo: **476907** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	7.5		10.00		75.2	66	131			

Sample ID **LCS-11588**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **11588**	RunNo: **16554**
Prep Date: **2/5/2014**	Analysis Date: **2/6/2014**	SeqNo: **476909** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.6	60.8	145			
Surr: DNOP	3.7		5.000		74.9	66	131			

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#: **1402208**

07-Feb-14

Client: Animas Environmental

Project: CoP Decker Primo 1

Sample ID **MB-11577 MK**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R16565**	RunNo: **16565**
Prep Date: **2/5/2014**	Analysis Date: **2/6/2014**	SeqNo: **477081** 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		83.5	74.5	129			

Sample ID **LCS-11577 MK**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R16565**	RunNo: **16565**
Prep Date: **2/5/2014**	Analysis Date: **2/6/2014**	SeqNo: **477082** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	74.5	126			
Surr: BFB	890		1000		88.7	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

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: 1402208 RcptNo: 1

Received by/date: 02/06/14

Logged By: Lindsay Mangin 2/6/2014 10:00:00 AM

Completed By: Lindsay Mangin 2/6/2014 10:17:10 AM

Reviewed By: 02/04/14

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	1.3	Good	Yes			

Chain-of-Custody Record

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 same day

Project Name: CoP Decker Primo 1

Project #:

Project Manager: D Watson

Sampler: J. Sprague

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1402208	BTEX + [redacted] (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)
2-5-14	1040	soil	SC-2	~~MeOH Kit~~ 1-4oz	~~MeOH~~ —	-001			X													
-5-14	1042	soil	SC-3	~~MeOH Kit~~ 1-4oz	~~MeOH~~ —	-002			X													
-5-14	1145	soil	SC-5	~~MeOH Kit~~ 1-4oz	~~MeOH~~ —	-003	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/5/14	1732	Jesse E Sprague	Christine Walls	2/5/14	1732
2/5/14	1750	Christine Walls		02/06/14	1000

Remarks: Bill to ConocoPhillips
WO: 9954229 act: D150
Area: 2 user KGARCIA
Supervisor: Mike Smith ordered by: Eric Smith

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.