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: **Moore C 2E**	Facility Type: **Gas Well**

Surface Owner **BLM**	Mineral Owner **BLM (SF-078147)**	API No.**30-045-24651**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**26**	**32N**	**12W**	**1100**	**South**	**1550**	**West**	**San Juan**

Latitude 36.952564 Longitude 108.06786

NATURE OF RELEASE

Type of Release **Produced Fluids**	Volume of Release **Unknown**	Volume Recovered **None**
Source of Release **Below Grade Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **September 26, 2012**
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.	

RCVD FEB 22 '13
OIL CONS. DIV.
DIST. 3

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

Describe Cause of Problem and Remedial Action Taken.*
Below Grade Tank Re-set Activities

Describe Area Affected and Cleanup Action Taken.*
The below grade tank for the subject well was removed for a re-set and historic contamination was discovered. An area excavated was 54' x 36' x 19' and 1368 cubic yards of soil was transported to a third party landfarm. Excavation and confirmation sampling occurred. Sandstone was encountered on the base and permission to backfill due to depth to groundwater and presence of competent sandstone permission was granted to backfill from OCD (Brandon Powell) on 11/20/2012. Analytical results for TPH, BTEX and Chlorides 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	OIL CONSERVATION DIVISION Approved by Environmental Specialist: Jonathan D. Kelly
Printed Name: **Crystal Tafoya**	
Title: **Field Environmental Specialist**	Approval Date: 2/27/2013 Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: Attached ☐
Date: 2/19/2013 Phone: (505) 326-9837	

* Attach Additional Sheets If Necessary

nJR1305842791

46

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

January 30, 2013

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

RE: Initial Release Assessment and Final Excavation Report
Moore C #2E
San Juan County, New Mexico

Dear Ms. Tafoya:

On September 27, November 16, and November 20, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Moore C #2E, located in San Juan County, New Mexico. The historical release was discovered during a facility reset at the location. The initial release assessment was completed by AES on September 27, 2012. The final excavation was completed by CoP contractors while AES was on location November 16 and 20, 2012.

1.0 Site Information

1.1 Location

Location – SE¼ SW¼, Section 26, T32N, R12W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.95253 and W108.06850, respectively
Release Location Latitude/Longitude – N36.95230 and W108.06861, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Pit Remediation and Closure Report dated February 2000 for the Moore C #2E reported the depth to groundwater as greater than 100 feet below ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech

Petroleum Recovery Research Center online mapping tool (http://ford.nmt.edu/react/project.html) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. An unnamed wash is located approximately 500 feet north of the location. Based on this information, the location was assessed a ranking score of 10 per the *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993).

1.3 Assessments

AES was initially contacted by Danny Rudder, CoP representative, on September 26, 2012, and the next day, Heather Woods of AES completed the release assessment field work. The assessment included collection and field screening of 21 soil samples from six test holes (TH-1 through TH-6). Based on the field screening and laboratory analytical results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On November 16, 2012, 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) of the walls and base of the excavation. Based on the field screening and laboratory analytical results, AES recommended further excavation of the release area. On November 20, 2012, AES returned to the location to collect additional confirmation soil samples (SC-6 and SC-7) from the north wall and base of the expanded excavation. The final excavation was approximately 54 feet by 36 feet by 19 feet in depth. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

A total of 21 soil samples (TH-1 through TH-6) and 7 composite samples (SC-1 through SC-7) 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). Two of the soil samples (TH-1 and TH-5) collected during the initial assessment and seven composite soil samples (SC-1 through SC-7) collected during the excavation 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. Soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.

Soil samples SC-1, SC-3, SC-4, and SC-6 were laboratory analyzed for BTEX only per USEPA 8021B.

2.3 Field Screening and Laboratory Analytical Results

On September 27, 2012, initial assessment field screening readings for VOCs via OVM ranged from 5.3 ppm in TH-6 up to 4,743 ppm in TH-1. Field TPH concentrations ranged from 36.5 mg/kg in TH-4 to greater than 5,000 mg/kg in TH-1.

On November 16 and 20, 2012, final excavation field screening results for VOCs via OVM ranged from 405 ppm in SC-6 to greater than 10,000 ppm in SC-2, SC-3, SC-5, and SC-7. Field TPH concentrations ranged from 25.1 mg/kg in SC-6 to 4,350 mg/kg in SC-7. Results are included below in Table 1 and on Figures 3 and 4. The AES Field Screening Reports are attached.

Table 1. Soil Field Screening VOCs and TPH Results
Moore C #2E Release Assessment and Final Excavation
September and November 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
	*NMOCD Action Level**		*100*	*1,000*
TH-1	9/27/12	5	**4,410**	848
		7	**4,581**	**>5,000**
		10	**4,743**	**1,530**
		14.5	**4,208**	**2,220**
		17	**2,800**	88.4
TH-2	9/27/12	8.5	7.1	67.5
		12	12.1	73.9
TH-3	9/27/12	0.5	**229**	236
		5.5	**872**	892
		9	**4,030**	**3,240**
TH-4	9/27/12	3	8.8	NA
		7	9.4	NA
		9	**254**	136
		12	83.7	NA
		13.5	8.4	36.5
TH-5	9/27/12	6	9.4	NA
		7	10.7	NA
		9	**634**	341
TH-6	9/27/12	9	10.4	NA
		12	5.3	NA
		14	5.7	71.3
SC-1	11/16/12	1 to 15	**636**	49.0
SC-2	11/16/12	15	**>10,000**	**>2,500**

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
	NMOCD Action Level*		100	1,000
SC-3	11/16/12	1 to 15	**>10,000**	46.7
SC-4	11/16/12	1 to 15	**5,620**	41.9
SC-5	11/16/12	1 to 15	**>10,000**	**>2,500**
SC-6	11/20/12	1 to 19	**405**	25.1
SC-7	11/20/12	19	**>10,000**	**4,350**

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

Laboratory analyses for TH-1 and TH-5 were used to confirm field screening results from the initial assessment. Benzene concentrations in TH-1 and TH-5 were reported at less than 0.50 mg/kg and less than 0.25 mg/kg, respectively. Total BTEX concentrations ranged from less than 1.25 mg/kg (TH-5) to 6.9 mg/kg (TH-1). TPH concentrations (as GRO/DRO) were reported at 1,200 mg/kg (TH-1) and 212 mg/kg (TH-5).

Laboratory analytical results of SC-1 through SC-7 were used to confirm field screening results during excavation activities. Benzene concentrations ranged from less than 0.050 mg/kg up to 0.77 mg/kg in SC-2. Total BTEX concentrations ranged from less than 0.25 mg/kg up to 215 mg/kg in SC-2. TPH concentrations as GRO/DRO were reported in SC-2 (4,610 mg/kg), SC-5 (2,330 mg/kg), and SC-7 (3,200 mg/kg). Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, BTEX and TPH
Moore C #2E Release Assessment and Final Excavation
September and November 2012

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOCD Action Level*			10	50	1,000	
TH-1	9/27/12	14.5	<0.50	6.9	**260**	**940**
TH-5	9/27/12	9	<0.25	<1.25	42	170
SC-1	11/16/12	1 to 15	<0.050	<0.25	NA	NA
SC-2	11/16/12	15	0.77	**215**	**3,700**	**910**

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
NMOCD Action Level*			10	50	1,000	
SC-3	11/16/12	1 to 15	<0.050	<0.25	NA	NA
SC-4	11/16/12	1 to 15	<0.050	<0.25	NA	NA
SC-5	11/16/12	1 to 15	<1.0	**60**	**1,500**	**830**
SC-6	11/20/12	1 to 19	<0.050	<0.25	NA	NA
SC-7	11/20/12	19	<2.4	**159**	**1,800**	**1,400**

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

3.0 Conclusions and Recommendations

On September 27, 2012, AES conducted an initial assessment associated with a historical release discovered during a facility reset at the Moore C #2E. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the site was assigned a ranking of 10. Field screening results above the NMOCD action level of 100 ppm VOCs were reported in TH-1, TH-3, TH-4, and TH-5, with the highest VOC concentration reported in TH-1 with 4,743 ppm. Field screening TPH results above the NMOCD action level of 1,000 mg/kg were reported in TH-1 and TH-3. The highest TPH concentration was reported in TH-1 with a concentration greater than 5,000 mg/kg. Laboratory analytical results from September 27, 2012, reported benzene and total BTEX concentrations below the applicable NMOCD action levels in both TH-1 and TH-5. TPH concentrations as GRO/DRO in TH-5 exceeded the NMOCD action level with 1,200 mg/kg.

On November 16 and 20, 2012, final assessment of the excavation area was completed. Field screening results of the excavation showed that VOC concentrations exceeded the NMOCD action level of 100 ppm in the final four walls and base of the excavation. Field TPH concentrations were reported below the NMOCD action level of 1,000 mg/kg in each of the final four walls of the excavation, and field TPH concentrations at the base of the excavation were reported above the NMOCD action level with greater than 2,500 mg/kg in SC-2 and 4,350 mg/kg in SC-7. Laboratory analytical results from November 16 and 20, 2012 reported benzene and total BTEX concentrations below applicable NMOCD action levels in each of the sidewalls; however, the base sample (SC-7) exceeded applicable NMOCD action levels for total BTEX (159 mg/kg) and TPH as GRO/DRO (3,200 mg/kg).

Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at the Moore C #2E, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels for each of the final sidewalls of the excavation. However, the base of the excavation exceeded applicable NMOCD action levels for total BTEX and TPH. Because of approximate depth to groundwater and the presence of competent sandstone at the site, Brandon Powell of NMOCD granted approval to CoP to backfill the excavation on November 20, 2012. 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,

Heather M. Woods

Heather M. Woods
Staff Geologist

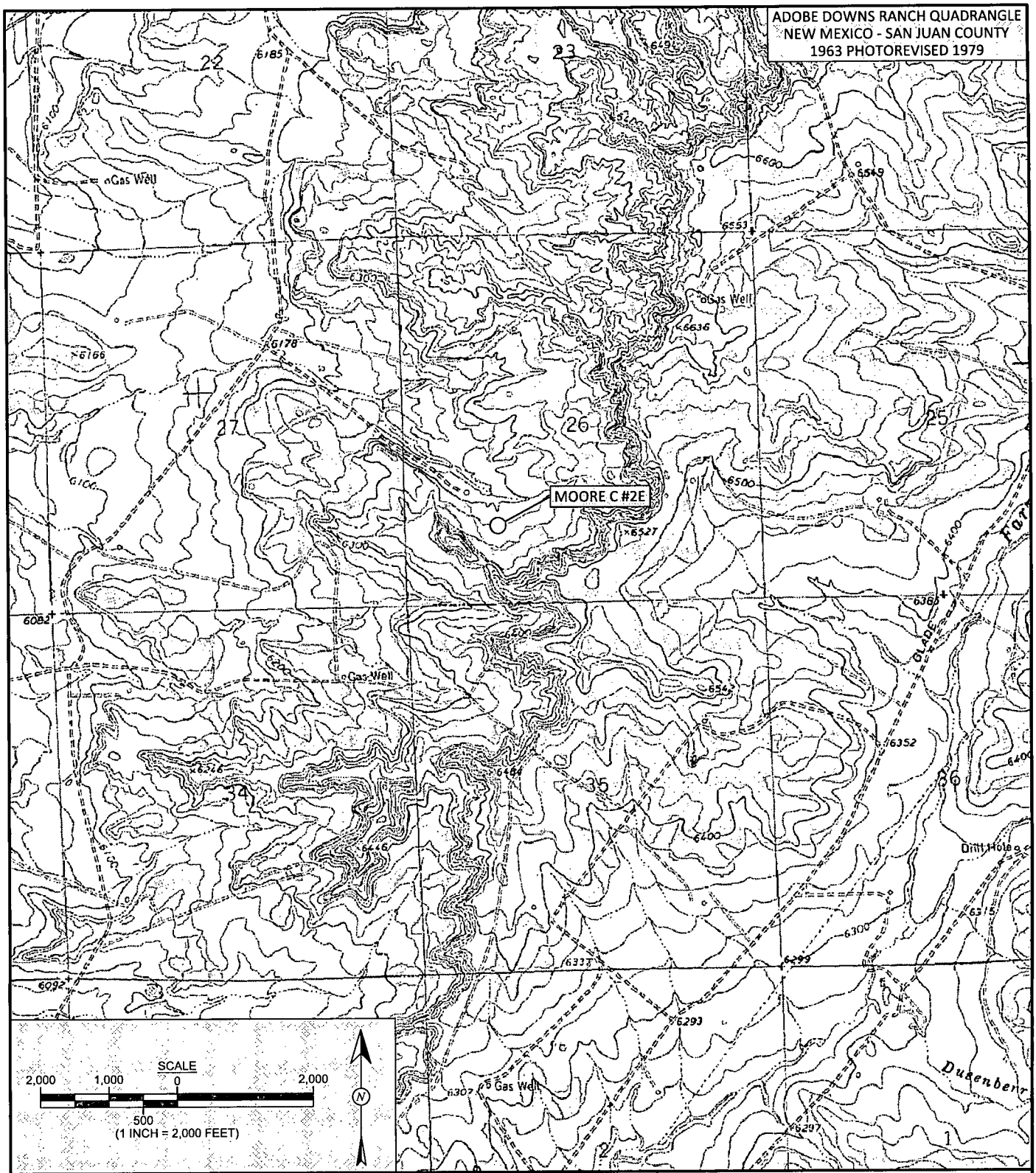
Elizabeth McNally

Elizabeth McNally, PE

Attachments:

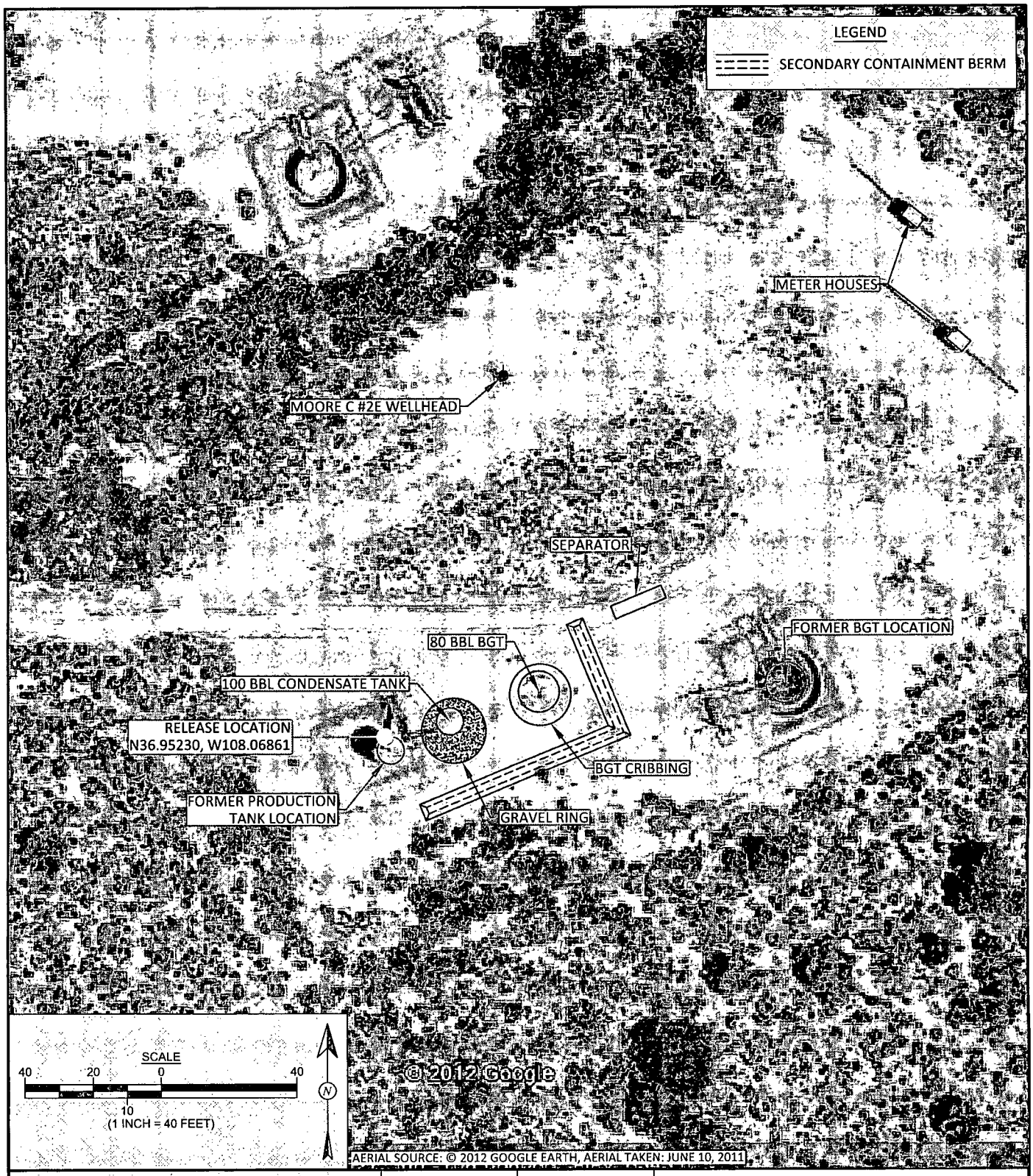
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2012
Figure 3. Initial Assessment Soil Sample Locations and Results, September 2012
Figure 4. Final Excavation Soil Sample Locations and Results, November 2012
AES Field Screening Reports 092712, 111612, and 112012
Hall Laboratory Analytical Reports 1209D10, 1211726, and 1211880

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\Moore C #2E\Moore C #2E Release and Final Excavation Report 013013.docx



DRAWN BY: C. Lameman	**DATE DRAWN:** September 28, 2012	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** September 28, 2012	**TOPOGRAPHIC SITE LOCATION MAP** ConocoPhillips MOORE C #2E SAN JUAN COUNTY, NEW MEXICO SE¼ SW¼, SECTION 26, T32N, R12W N36.95253, W108.06850
CHECKED BY: D. Watson	**DATE CHECKED:** September 28, 2012	
APPROVED BY: E. McNally	**DATE APPROVED:** September 28, 2012	

AES
Animas Environmental Services, LLC



Animas Environmental Services, LLC

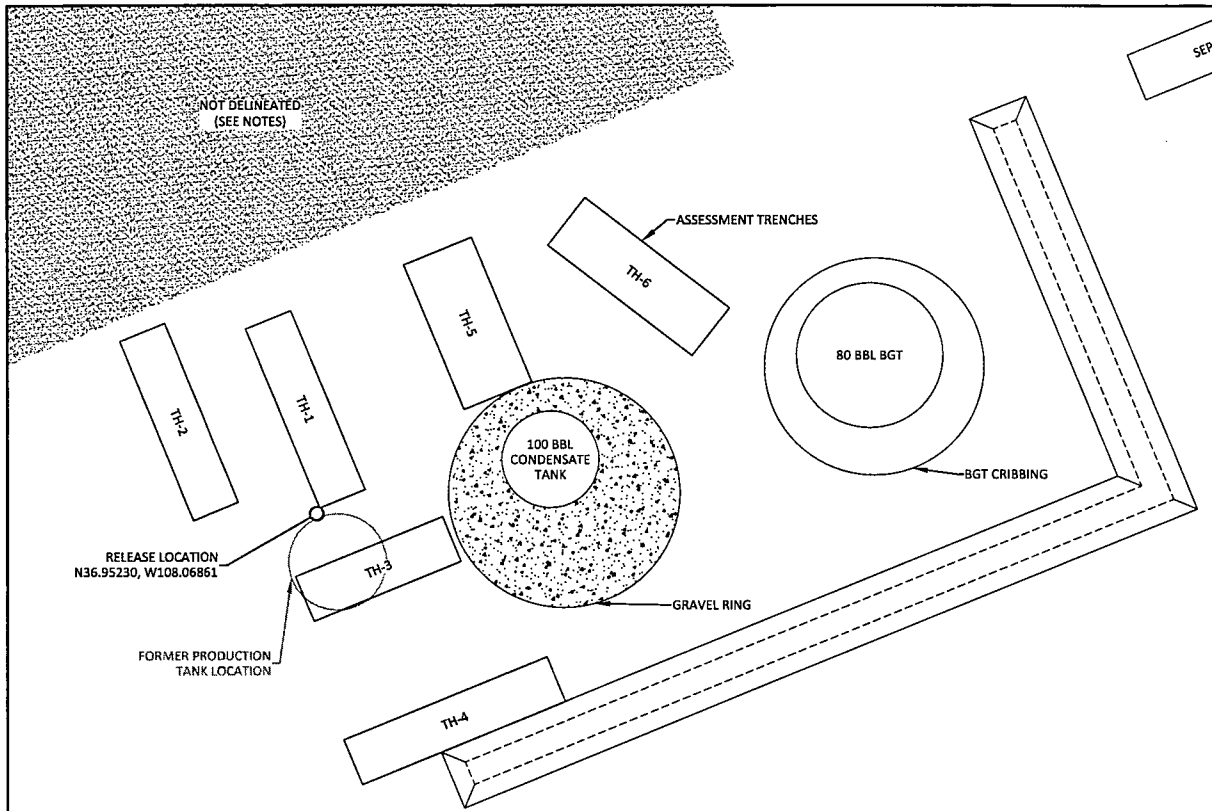
DRAWN BY: C. Lameman	**DATE DRAWN:** September 28, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** September 28, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** September 28, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** September 28, 2012

FIGURE 2

AERIAL SITE MAP
SEPTEMBER 2012
ConocoPhillips
MOORE C #2E
SAN JUAN COUNTY, NEW MEXICO
SE¼ SW¼, SECTION 26, T32N, R12W
N36.95253, W108.06850

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
SEPTEMBER 2012
ConocoPhillips
MOORE C #2E
SAN JUAN COUNTY, NEW MEXICO
SE¼ SW¼, SECTION 26, T32N, R12W
N36.95253, W108.06850



Field Screening Results				
Sample ID	**Date**	**Depth (ft)**	**OVM-PID (ppm)**	**TPH (mg/kg)**
NMOCD ACTION LEVEL			--	1,000
TH-1	9/27/12	5	4,410	848
		7	4,581	>5,000
		10	4,743	1,530
		14.5	4,208	2,220
		17	2,800	88.4
TH-2	9/27/12	8.5	7.1	67.5
		12	12.1	73.9
TH-3	9/27/12	0.5	229	236
		5.5	872	892
		9	4,030	3,240
TH-4	9/27/12	3	8.8	NA
		7	9.4	NA
		9	254	136
		12	83.7	NA
		13.5	8.4	36.5
TH-5	9/27/12	6	9.4	NA
		7	10.7	NA
		9	634	341
TH-6	9/27/12	9	10.4	NA
		12	5.3	NA
		14	5.7	71.3
NA - NOT ANALYZED				

Laboratory Analytical Results						
Sample ID	**Date**	**Depth (ft)**	**Benzene (mg/kg)**	**BTEX (mg/kg)**	**TPH - GRO (mg/kg)**	**TPH - DRO (mg/kg)**
NMOCD ACTION LEVEL			10	50	1,000	
TH-1	9/27/12	14.5	<0.50	6.9	260	940
TH-5	9/27/12	9	<0.25	<1.25	42	170
SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.						

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** October 1, 2012
REVISIONS BY: C. Lameman	**DATE REVISED:** November 16, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** November 16, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** November 16, 2012

LEGEND

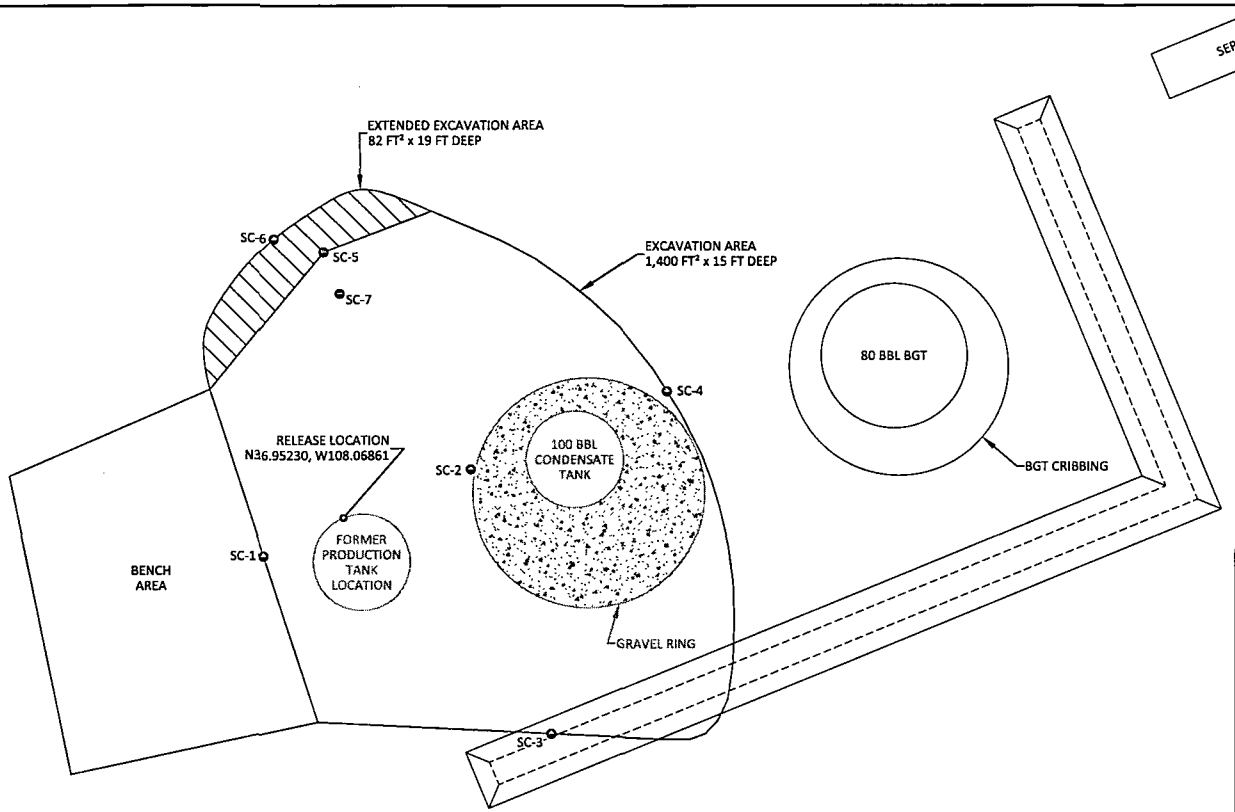
SECONDARY CONTAINMENT BERM

N

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

FIGURE 4

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
NOVEMBER 2012
ConocoPhillips
MOORE C #2E
SAN JUAN COUNTY, NEW MEXICO
SE¼ SW¼, SECTION 26, T32N, R12W
N36.95253, W108.06850



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SC-1	11/16/12	1 to 15	636	49.0
SC-2	11/16/12	15	>10,000	>2,500
SC-3	11/16/12	1 to 15	>10,000	46.7
SC-4	11/16/12	1 to 15	5,620	41.9
SC-5	11/16/12	1 to 15	>10,000	>2,500
SC-6	11/20/12	1 to 19	405	25.1
SC-7	11/20/12	19	>10,000	4,350
ALL SAMPLES WERE COMPOSITE SAMPLES.				

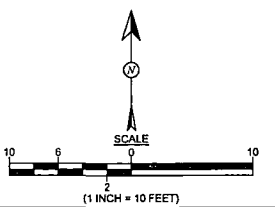
Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	1,000	
SC-1	11/16/12	1 to 15	<0.050	<0.25	NA	NA
SC-2	11/16/12	15	0.77	215	2,700	910
SC-3	11/16/12	1 to 15	<0.050	<0.25	NA	NA
SC-4	11/16/12	1 to 15	<0.050	<0.25	NA	NA
SC-5	11/16/12	1 to 15	<1.0	60	1,500	830
SC-6	11/20/12	1 to 19	<0.050	<0.25	NA	NA
SC-7	11/20/12	19	<2.4	159	1,800	1,400
SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.						

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: October 1, 2012
REVISIONS BY: C. Lameman	DATE REVISED: January 3, 2013
CHECKED BY: D. Watson	DATE CHECKED: January 3, 2013
APPROVED BY: E. McNally	DATE APPROVED: January 3, 2013

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM



AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: Moore C #2E

Date: 9/27/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-1 @ 5'	9/27/2012	9:52	4,410	10:18	848	40.0	1	HMW
TH-1 @ 7'	9/27/2012	9:54	4,581	10:22	>5,000	40.0	1	HMW
TH-1 @ 10'	9/27/2012	9:57	4,743	10:26	1,530	40.0	1	HMW
TH-1 @ 14.5'	9/27/2012	10:30	4,208	10:56	2,220	100	1	HMW
TH-1 @ 17'	9/27/2012	10:40	2,800	10:59	88.4	40.0	1	HMW
TH-2 @ 8.5'	9/27/2012	10:46	7.1	13:02	67.5	20.0	1	HMW
TH-2 @ 12'	9/27/2012	11:47	12.1	13:05	73.9	20.0	1	HMW
TH-3 @ 0.5'	9/27/2012	10:55	229	13:07	236	40.0	1	HMW
TH-3 @ 5.5'	9/27/2012	11:00	872	13:10	892	40.0	1	HMW
TH-3 @ 9'	9/27/2012	13:42	4,030	14:07	3,240	40.0	1	HMW
TH-4 @ 3'	9/27/2012	11:09	8.8	*Not Analyzed for TPH*				
TH-4 @ 7'	9/27/2012	11:14	9.4	*Not Analyzed for TPH*				
TH-4 @ 9'	9/27/2012	11:21	254	13:40	136	20.0	1	HMW

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
TH-4 @ 12'	9/27/2012	11:32	83.7	*Not Analyzed for TPH*				
TH-4 @ 13.5'	9/27/2012	11:40	8.4	13:13	36.5	20.0	1	HMW
TH-5 @ 6'	9/27/2012	11:50	9.4	*Not Analyzed for TPH*				
TH-5 @ 7'	9/27/2012	11:53	10.7	*Not Analyzed for TPH*				
TH-5 @ 9'	9/27/2012	11:56	634	13:15	341	40.0	1	HMW
TH-6 @ 9'	9/27/2012	12:03	10.4	*Not Analyzed for TPH*				
TH-6 @ 12'	9/27/2012	12:06	5.3	*Not Analyzed for TPH*				
TH-6 @ 14'	9/27/2012	12:10	5.7	13:18	71.3	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: Moore C #2E

Date: 11/16/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	11/16/2012	8:43	West Wall	636	9:50	49.0	20.0	1	HMW
SC-2	11/16/2012	8:46	Base	>10,000	9:52	>2,500	20.0	1	HMW
SC-3	11/16/2012	8:50	South Wall	>10,000	9:57	46.7	20.0	1	HMW
SC-4	11/16/2012	8:53	East Wall	5,620	10:00	41.9	20.0	1	HMW
SC-5	11/16/2012	9:03	North Wall	>10,000	10:03	>2,500	20.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

Report Finalized: 11/16/12

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: Moore C #2E

Date: 11/20/2012

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-6	11/20/2012	9:58	North Wall	405	10:22	25.1	20.0	1	HMW
SC-7	11/20/2012	10:00	Base	>10,000	10:19	4,350	40.0	1	HMW

Total Petroleum Hydrocarbons - USEPA 418.1

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

Analyst: Heather M. Woods

Report Finalized: 11/20/12

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

October 01, 2012

Debbie Watson

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

RE: COP Moore C #2E OrderNo.: 1209D10

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/28/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1209D10**
Date Reported: **10/1/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: TH-1@14.5'
Project: COP Moore C #2E
Collection Date: 9/27/2012 10:30:00 AM
Lab ID: 1209D10-001
Matrix: MEOH (SOIL)
Received Date: 9/28/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	940	9.9		mg/Kg	1	9/28/2012 11:00:44 AM
Surr: DNOP	113	77.6-140		%REC	1	9/28/2012 11:00:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	260	100		mg/Kg	20	9/28/2012 2:54:44 PM
Surr: BFB	345	84-116	S	%REC	20	9/28/2012 2:54:44 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	20	9/28/2012 2:54:44 PM
Toluene	ND	1.0		mg/Kg	20	9/28/2012 2:54:44 PM
Ethylbenzene	ND	1.0		mg/Kg	20	9/28/2012 2:54:44 PM
Xylenes, Total	6.9	2.0		mg/Kg	20	9/28/2012 2:54:44 PM
Surr: 4-Bromofluorobenzene	107	80-120		%REC	20	9/28/2012 2:54:44 PM

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
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 Services
Client Sample ID: TH-5@9'
Project: COP Moore C #2E
Collection Date: 9/27/2012 11:56:00 AM
Lab ID: 1209D10-002
Matrix: MEOH (SOIL)
Received Date: 9/28/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	170	10		mg/Kg	1	9/28/2012 11:22:25 AM
Surr: DNOP	111	77.6-140		%REC	1	9/28/2012 11:22:25 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	42	25		mg/Kg	5	9/28/2012 2:26:00 PM
Surr: BFB	247	84-116	S	%REC	5	9/28/2012 2:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.25		mg/Kg	5	9/28/2012 2:26:00 PM
Toluene	ND	0.25		mg/Kg	5	9/28/2012 2:26:00 PM
Ethylbenzene	ND	0.25		mg/Kg	5	9/28/2012 2:26:00 PM
Xylenes, Total	ND	0.50		mg/Kg	5	9/28/2012 2:26:00 PM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	5	9/28/2012 2:26:00 PM

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
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#: **1209D10**

01-Oct-12

Client: Animas Environmental Services

Project: COP Moore C #2E

Sample ID **MB-3974**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **3974**	RunNo: **5816**
Prep Date: **9/27/2012**	Analysis Date: **9/28/2012**	SeqNo: **167266** 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	10		10.00		101	77.6	140			

Sample ID **LCS-3974**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **3974**	RunNo: **5816**
Prep Date: **9/27/2012**	Analysis Date: **9/28/2012**	SeqNo: **167486** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.3	52.6	130			
Surr: DNOP	4.9		5.000		97.1	77.6	140			

Sample ID **1209B93-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3974**	RunNo: **5816**
Prep Date: **9/27/2012**	Analysis Date: **9/28/2012**	SeqNo: **167922** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	940	9.8	49.16	958.7	-40.2	57.2	146			S
Surr: DNOP	4.8		4.916		98.6	77.6	140			

Sample ID **1209B93-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **3974**	RunNo: **5816**
Prep Date: **9/27/2012**	Analysis Date: **9/28/2012**	SeqNo: **168423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	950	9.6	48.22	958.7	-22.3	57.2	146	0.958	24.5	S
Surr: DNOP	4.9		4.822		101	77.6	140	0	0	

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
- P Sample pH greater than 2
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209D10**

01-Oct-12

Client: Animas Environmental Services

Project: COP Moore C #2E

Sample ID	**MB-3952**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **3952**			RunNo: **5841**					
Prep Date:	**9/26/2012**	Analysis Date: **9/28/2012**			SeqNo: **168202**		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	990		1000		98.9	84	116			

Sample ID	**LCS-3952**	SampType: **LCS**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **3952**			RunNo: **5841**					
Prep Date:	**9/26/2012**	Analysis Date: **9/28/2012**			SeqNo: **168203**		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	106	74	117			
Surr: BFB	1000		1000		102	84	116			

Sample ID	**MB-3940**	SampType: **MBLK**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **3940**			RunNo: **5841**					
Prep Date:	**9/26/2012**	Analysis Date: **9/29/2012**			SeqNo: **168217**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.4	84	116			

Sample ID	**LCS-3940**	SampType: **LCS**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **3940**			RunNo: **5841**					
Prep Date:	**9/26/2012**	Analysis Date: **9/29/2012**			SeqNo: **168218**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		105	84	116			

Sample ID	**1209A69-002AMS**	SampType: **MS**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**BatchQC**	Batch ID: **3940**			RunNo: **5856**					
Prep Date:	**9/26/2012**	Analysis Date: **9/29/2012**			SeqNo: **168360**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		964.3		110	84	116			

Sample ID	**1209A69-002AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**BatchQC**	Batch ID: **3940**			RunNo: **5856**					
Prep Date:	**9/26/2012**	Analysis Date: **9/29/2012**			SeqNo: **168361**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		968.1		107	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209D10**

01-Oct-12

Client: Animas Environmental Services

Project: COP Moore C #2E

Sample ID **MB-3952**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3952**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/28/2012**	SeqNo: **168229** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.0	80	120			

Sample ID **LCS-3952**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3952**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/28/2012**	SeqNo: **168230** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.050	1.000	0	93.8	76.3	117			
Toluene	0.95	0.050	1.000	0	95.1	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	77	116			
Xylenes, Total	3.0	0.10	3.000	0	98.6	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

Sample ID **MB-3940**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168236** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	80	120			

Sample ID **LCS-3940**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **3940**	RunNo: **5841**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168237** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **1209A90-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168389** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.9		1.896		102	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209D10**

01-Oct-12

Client: Animas Environmental Services

Project: COP Moore C #2E

Sample ID **1209A90-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **3940**	RunNo: **5856**
Prep Date: **9/26/2012**	Analysis Date: **9/29/2012**	SeqNo: **168390** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.9		1.901		101	80	120	0	0	

Qualifiers:

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

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: 1209D10

Received by/date: 09/28/12

Logged By: Lindsay Mangin 9/28/2012 10:00:00 AM

Completed By: Lindsay Mangin 9/28/2012 10:20:43 AM

Reviewed By: 09/28/12

Chain of Custody

1. Were seals intact?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	Courier		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ☑	No ☐	NA ☐
5. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
7. Sample(s) in proper container(s)?	Yes ☑	No ☐	
8. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
9. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
10. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
11. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
12. Were any sample containers received broken?	Yes ☐	No ☑	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
14. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
15. Is it clear what analyses were requested?	Yes ☑	No ☐	
16. 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)

17. 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:			

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

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 Moore C #2E

Project #:

Project Manager:
D. Watson

Sampler: H. Woods
On Ice: ☒ Yes ☐ No

Sample Temperature: 1.5

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. 1209810	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel) (Gro/Dro)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
9/27/12	1030	Soil	TH-1@14.5'	MeOH Kit/4oz	MeOH/Non	-001	X		X													
9/27/12	1156	Soil	TH-5@9'	MeOH Kit/4oz	MeOH/Non	-002	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/27/12	1659	Heather M. Woods	Christine Walters	9/27/12	1659
9/27/12	1717	Christine Walters		09/28/12	1000

Remarks: Bill to ConocoPhillips
WO: 10337285
Activity: B110
Super: Sheldon Montoya
User ID: BENALE
Work ordered by: Danny Budden
Area: 1

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

November 21, 2012

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

RE: CoP Moore C #2E OrderNo.: 1211726

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 11/17/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1211726**
Date Reported: **11/21/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-1
Project: CoP Moore C #2E
Collection Date: 11/16/2012 8:43:00 AM
Lab ID: 1211726-001
Matrix: MEOH (SOIL)
Received Date: 11/17/2012 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	11/19/2012 11:47:10 AM
Toluene	ND	0.050		mg/Kg	1	11/19/2012 11:47:10 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/19/2012 11:47:10 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/19/2012 11:47:10 AM
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	11/19/2012 11:47:10 AM

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
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 Services
Client Sample ID: SC-2
Project: CoP Moore C #2E
Collection Date: 11/16/2012 8:46:00 AM
Lab ID: 1211726-002
Matrix: MEOH (SOIL)
Received Date: 11/17/2012 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	910	20		mg/Kg	2	11/19/2012 9:12:40 AM
Surr: DNOP	99.7	77.6-140		%REC	2	11/19/2012 9:12:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3700	100		mg/Kg	20	11/19/2012 1:13:26 PM
Surr: BFB	897	84-116	S	%REC	20	11/19/2012 1:13:26 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.77	0.50		mg/Kg	20	11/19/2012 1:13:26 PM
Toluene	14	1.0		mg/Kg	20	11/19/2012 1:13:26 PM
Ethylbenzene	20	1.0		mg/Kg	20	11/19/2012 1:13:26 PM
Xylenes, Total	180	10		mg/Kg	100	11/20/2012 2:09:24 AM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	100	11/20/2012 2:09:24 AM

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
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 Services
Client Sample ID: SC-3
Project: CoP Moore C #2E
Collection Date: 11/16/2012 8:50:00 AM
Lab ID: 1211726-003
Matrix: MEOH (SOIL)
Received Date: 11/17/2012 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	11/19/2012 12:16:00 PM
Toluene	ND	0.050		mg/Kg	1	11/19/2012 12:16:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	11/19/2012 12:16:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	11/19/2012 12:16:00 PM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	11/19/2012 12:16:00 PM

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
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 Services
Client Sample ID: SC-4
Project: CoP Moore C #2E
Collection Date: 11/16/2012 8:53:00 AM
Lab ID: 1211726-004
Matrix: MEOH (SOIL)
Received Date: 11/17/2012 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	11/19/2012 12:44:42 PM
Toluene	ND	0.050		mg/Kg	1	11/19/2012 12:44:42 PM
Ethylbenzene	ND	0.050		mg/Kg	1	11/19/2012 12:44:42 PM
Xylenes, Total	ND	0.10		mg/Kg	1	11/19/2012 12:44:42 PM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	11/19/2012 12:44:42 PM

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
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 Services
Client Sample ID: SC-5
Project: CoP Moore C #2E
Collection Date: 11/16/2012 9:03:00 AM
Lab ID: 1211726-005
Matrix: MEOH (SOIL)
Received Date: 11/17/2012 2:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	830	10		mg/Kg	1	11/19/2012 8:50:54 AM
Surr: DNOP	91.0	77.6-140		%REC	1	11/19/2012 8:50:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1500	100		mg/Kg	20	11/20/2012 3:06:54 AM
Surr: BFB	232	84-116	S	%REC	20	11/20/2012 3:06:54 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		mg/Kg	20	11/20/2012 3:06:54 AM
Toluene	ND	1.0		mg/Kg	20	11/20/2012 3:06:54 AM
Ethylbenzene	7.7	1.0		mg/Kg	20	11/20/2012 3:06:54 AM
Xylenes, Total	52	2.0		mg/Kg	20	11/20/2012 3:06:54 AM
Surr: 4-Bromofluorobenzene	133	80-120	S	%REC	20	11/20/2012 3:06:54 AM

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
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#: **1211726**

21-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C #2E

Sample ID **MB-4873**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **4873**	RunNo: **6963**
Prep Date: **11/18/2012**	Analysis Date: **11/19/2012**	SeqNo: **201425** 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		81.4	77.6	140			

Sample ID **LCS-4873**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **4873**	RunNo: **6963**
Prep Date: **11/18/2012**	Analysis Date: **11/19/2012**	SeqNo: **201426** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	77.9	47.4	122			
Surr: DNOP	4.1		5.000		81.8	77.6	140			

Sample ID **1211698-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **4873**	RunNo: **6963**
Prep Date: **11/18/2012**	Analysis Date: **11/19/2012**	SeqNo: **201428** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.66	0	111	12.6	148			
Surr: DNOP	4.1		5.066		80.6	77.6	140			

Sample ID **1211698-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **4873**	RunNo: **6963**
Prep Date: **11/18/2012**	Analysis Date: **11/19/2012**	SeqNo: **201429** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	49.75	0	115	12.6	148	1.35	22.5	
Surr: DNOP	3.9		4.975		77.6	77.6	140	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211726**

21-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C #2E

Sample ID **MB-4868**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202787** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	950		1000		95.4	84	116			

Sample ID **LCS-4868**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202788** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		99.9	84	116			

Sample ID **1211698-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202793** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		961.5		111	84	116			

Sample ID **1211698-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202794** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		981.4		110	84	116	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211726**

21-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C #2E

Sample ID **MB-4868**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202807** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID **LCS-4868**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202808** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID **1211698-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202816** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9390		109	80	120			

Sample ID **1211698-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **4868**	RunNo: **6976**
Prep Date: **11/16/2012**	Analysis Date: **11/19/2012**	SeqNo: **202817** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9785		106	80	120	0	0	

Qualifiers:

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

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: 1211726

Received by/date: MG 11/17/12

Logged By: Michelle Garcia 11/17/2012 2:00:00 PM Michelle Garcia

Completed By: Michelle Garcia 11/17/2012 3:01:45 PM Michelle Garcia

Reviewed By: SPL 11/17/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

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 Moore C#2E

Project #:

Project Manager:
D. Watson

Sampler: H. Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.0

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. 1211-246	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel) (C20/D22)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/16/12	843	Soil	SC-1	MeOH KH / 4oz	MeOH / Non	001	X															
11/16/12	846	Soil	SC-2	MeOH KH / 4oz	MeOH / Non	002	X		X													
11/16/12	850	Soil	SC-3	MeOH KH / 4oz	MeOH / Non	003	X															
11/16/12	853	Soil	SC-4	MeOH KH / 4oz	MeOH / Non	004	X															
11/16/12	903	Soil	SC-5	MeOH KH / 4oz	MeOH / Non	005	X		X													

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/16/12	1740	Heather M. Woods	Christin Walters	11/16/12	1740
11/16/12	1757	Christin Walters	Michelle Gee	11/17/12	1400

Remarks: Bill to ConocoPhillips
WO: 92166884
Supervisor: Kendall Bussing
User ID: ~~KGARCIA~~ KGARCIA
Activity: D150
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.

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

November 30, 2012

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

RE: CoP Moore C#2E OrderNo.: 1211880

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/21/2012 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. 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. 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.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1211880**
Date Reported: **11/30/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-6
Project: CoP Moore C#2E
Collection Date: 11/20/2012 9:58:00 AM
Lab ID: 1211880-001
Matrix: MEOH (SOIL)
Received Date: 11/21/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	11/27/2012 1:23:51 AM
Toluene	ND	0.050		mg/Kg	1	11/27/2012 1:23:51 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/27/2012 1:23:51 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/27/2012 1:23:51 AM
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	11/27/2012 1:23:51 AM

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
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 Services
Client Sample ID: SC-7
Project: CoP Moore C#2E
Collection Date: 11/20/2012 10:00:00 AM
Lab ID: 1211880-002
Matrix: SOIL
Received Date: 11/21/2012 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	1400	49		mg/Kg	5	11/29/2012 10:06:12 PM
Surr: DNOP	116	77.6-140		%REC	5	11/29/2012 10:06:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1800	240		mg/Kg	50	11/28/2012 2:01:48 PM
Surr: BFB	249	84-116	S	%REC	50	11/28/2012 2:01:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.4		mg/Kg	50	11/28/2012 2:01:48 PM
Toluene	ND	2.4		mg/Kg	50	11/28/2012 2:01:48 PM
Ethylbenzene	19	2.4		mg/Kg	50	11/28/2012 2:01:48 PM
Xylenes, Total	140	4.8		mg/Kg	50	11/28/2012 2:01:48 PM
Surr: 4-Bromofluorobenzene	118	80-120		%REC	50	11/28/2012 2:01:48 PM

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
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#: **1211880**

30-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C#2E

Sample ID **MB-5006**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **5006**	RunNo: **7200**
Prep Date: **11/28/2012**	Analysis Date: **11/29/2012**	SeqNo: **208701** 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	10		10.00		103	77.6	140			

Sample ID **LCS-5006**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **5006**	RunNo: **7200**
Prep Date: **11/28/2012**	Analysis Date: **11/29/2012**	SeqNo: **208704** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.0	47.4	122			
Surr: DNOP	4.6		5.000		91.7	77.6	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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211880**

30-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C#2E

Sample ID **MB-4943**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4943**	RunNo: **7098**
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205883** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		95.6	84	116			

Sample ID **LCS-4943**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4943**	RunNo: **7098**
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205884** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		98.9	84	116			

Sample ID **1211877-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **4943**	RunNo: **7098**
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205887** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		939.0		104	84	116			

Sample ID **1211877-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **4943**	RunNo: **7098**
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205888** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		943.4		105	84	116	0	0	

Sample ID **MB-4994**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **4994**	RunNo: **7164**
Prep Date: **11/27/2012**	Analysis Date: **11/28/2012**	SeqNo: **207710** 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	960		1000		95.9	84	116			

Sample ID **LCS-4994**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **4994**	RunNo: **7164**
Prep Date: **11/27/2012**	Analysis Date: **11/28/2012**	SeqNo: **207711** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.0	74	117			
Surr: BFB	1000		1000		100	84	116			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211880**

30-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C#2E

Sample ID **1211942-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **4994**	RunNo: **7164**
Prep Date: **11/27/2012**	Analysis Date: **11/28/2012**	SeqNo: **207714** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.58	3.125	78.3	70	130			
Surr: BFB	970		943.4		102	84	116			

Sample ID **1211942-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **BatchQC**	Batch ID: **4994**	RunNo: **7164**
Prep Date: **11/27/2012**	Analysis Date: **11/28/2012**	SeqNo: **207715** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.45	3.125	78.7	70	130	0.0850	22.1	
Surr: BFB	970		938.1		104	84	116	0	0	

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
- P Sample pH greater than 2
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211880**

30-Nov-12

Client: Animas Environmental Services
Project: CoP Moore C#2E

Sample ID **MB-4943**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **4943**	RunNo: **7098**							
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205970**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID **LCS-4943**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **4943**	RunNo: **7098**							
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205971**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID **1211877-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **BatchQC**	Batch ID: **4943**	RunNo: **7098**							
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205982**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9881		109	80	120			

Sample ID **1211877-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **BatchQC**	Batch ID: **4943**	RunNo: **7098**							
Prep Date: **11/21/2012**	Analysis Date: **11/26/2012**	SeqNo: **205983**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		0.9852		112	80	120	0	0	

Sample ID **MB-4994**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **PBS**	Batch ID: **4994**	RunNo: **7164**							
Prep Date: **11/27/2012**	Analysis Date: **11/28/2012**	SeqNo: **207762**	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		107	80	120			

Sample ID **LCS-4994**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**							
Client ID: **LCSS**	Batch ID: **4994**	RunNo: **7164**							
Prep Date: **11/27/2012**	Analysis Date: **11/28/2012**	SeqNo: **207763**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	98.9	76.3	117			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	77	116			

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
- P Sample pH greater than 2
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1211880**

30-Nov-12

Client: Animas Environmental Services

Project: CoP Moore C#2E

Sample ID **LCS-4994** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **4994** RunNo: **7164**

Prep Date: **11/27/2012** Analysis Date: **11/28/2012** SeqNo: **207763** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.1	0.10	3.000	0	103	76.7	117			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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
P	Sample pH greater than 2	R	RPD 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: 1211880

Received by/date: MG 11/21/12

Logged By: Michelle Garcia 11/21/2012 10:00:00 AM Michelle Garcia

Completed By: Michelle Garcia 11/21/2012 10:47:38 AM Michelle Garcia

Reviewed By: MG 11/21/12

Chain of Custody

1. Were seals intact? Yes ☐ No ☐ Not Present ☑
2. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Coolers are present? (see 19. for cooler specific information) Yes ☑ No ☐ NA ☐
5. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☑ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
10. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
11. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
12. Were any sample containers received broken? Yes ☐ No ☑
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
15. Is it clear what analyses were requested? Yes ☑ No ☐
16. 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)

17. 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: _____

18. Additional remarks:

19. 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

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: CoP Moore C#2E

Project #:

Project Manager: D. Watson

Sampler: H. Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.5

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. 1211680	BTEX + ~~MBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
11/20/12	958	Soil	SC-6	MeOH Kit/4oz	MeOH/Non	-001	X											
11/20/12	1000	Soil	SC-7	4oz	Non	-002	X		X									

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/20/12	1719	Heather M. Woods	Christine Walters	11/20/12	1719
11/20/12	1752	Christine Walters	Mitchell Tee	11/21/12	1000

Remarks: Bill to ConocoPhillips

WO: 9216884

Super: Kendee Bassing

User ID: KGARCIA

Activity: D150

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.