

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company	Contact Lisa Hunter
Address 3401 E. 30th St., Farmington, NM 87402	Telephone No. 505-326-9786
Facility Name Huerfano Unit #52	Facility Type Gas Well

Surface Owner Federal	Mineral Owner Federal	API No. 3004526128 SF 078518
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
F	04	25N	9W	1550'	NORTH	1480'	WEST	San Juan

Latitude 36.43313 Longitude -107.79736

NATURE OF RELEASE

Type of Release— Crude Oil	Volume of Release— 79.5 BBLs	Volume Recovered 0 BBLs
Source of Release— Production Tank	Date and Hour of Occurrence – Unknown	Date and Hour of Discovery 1/2/2013 @ 11:20 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Brandon Powell, OCD Mark Kelly, BLM	RCVD MAR 22 '13 OIL CONS. DIV.
By Whom? Ashley Maxwell	Date and Hour Brandon Powell, OCD – 1/3/2013 @ 7:00 AM Mark Kelly, BLM – 1/3/2013 @ 7:03 AM	DIST. 3
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

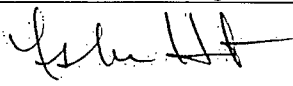
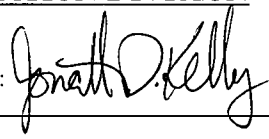
If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* **A hole in the oil production tank developed causing the release of 79.5 BBLs crude oil. The release remained within the berm with 0 BBLs recovered. The well was shut in and impacted surface soil will be excavated.**

Describe Area Affected and Cleanup Action Taken.*

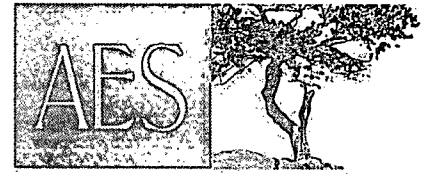
Excavation will be required. ConocoPhillips will have the soil assessed and excavation will occur. Per the request of Brandon Powell, OCD, excavation will be expedited. **02/04/2013 Excavation was 30' x 45' x 18' Deep. 1050 c/yds of soil was transported to IEI Land Farm and 1050 c/yds of clean soil was transported from Aztec Machine Co., and placed in the exaction site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.**

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

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Lisa Hunter	Approved by Environmental Specialist: 	
Title: Field Environmental Specialist	Approval Date: 4/17/2013	Expiration Date:
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: March 21, 2013	Phone: 505-326-9786	

* Attach Additional Sheets If Necessary

nJK1310753323



Animas Environmental Services, LLC

www.animasenvironmental.com

March 18, 2013

Lisa Hunter
ConocoPhillips
San Juan Business Unit
Office 214-4
5525 Hwy 64
Farmington, New Mexico 87401

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

Durango, Colorado
970-403-3084

**RE: Initial Release Assessment and Final Excavation Report
Huerfano #52
San Juan County, New Mexico**

**RCVD APR 10 '13
OIL CONS. DIV.
DIST. 3**

Dear Ms. Hunter:

On January 7 and February 6, 2013, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Huerfano #52, located in San Juan County, New Mexico. The release was reported to be associated with a leak from the production tank at the location. The initial release assessment was completed by AES on January 7, 2013, and the final excavation was completed by contractors while AES was on location on February 6, 2013.

1.0 Site Information

1.1 Location

Location - SW¼ NW¼, Section 4, T25N, R9W, San Juan County, New Mexico
Well Head Latitude/Longitude - N36.43330 and W107.79807, respectively
Release Location Latitude/Longitude - N36.43358 and W107.79775, respectively
Land Jurisdiction - Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, January 2013

Figure 3. Initial Assessment Sample Locations and Results, January 2013

Figure 4. Final Excavation Sample Locations and Results, February 2013

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a cathodic report dated May 1991 for the Huerfano #52 well reported the depth to groundwater as 90 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 between 50 and 100 feet bgs. The nearest surface water consisted of a small stock pond located approximately 820 feet northwest of the release location. Based on this information, the location was assessed a ranking score of 20 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Assessments

AES was initially contacted by Ashley Maxwell of CoP on January 2, 2013, and on January 7, 2013, Heather Woods and Zach Trujillo of AES completed the release assessment field work. The assessment was limited due to frozen conditions and included collection and field screening of nine discrete surface samples from the area surrounding the release location. Based on the field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On February 6, 2013, AES returned to the location to collect confirmation soil samples of the final excavation. The field screening activities included collecting five confirmation soil samples of the walls and base of the excavation. The final excavation was approximately 1,210 square feet by 18 feet in depth. Sample locations and final excavation extents are shown on Figure 4.

2.0 Soil Sampling

A total of nine discrete soil samples (SB-1 through SB-9) were collected from the area surrounding the release location and five 5-point composite soil samples (SC-1 through SC-5) were collected from the four walls and the base of the excavation during the assessments. All soil samples were field screened for volatile organic compounds (VOCs) and were also analyzed for total petroleum hydrocarbons (TPH). Two of the soil samples collected during the initial assessment (SB-5 and SB-9) and two of the soil samples collected during the confirmation sampling (SC-1 and SC-5) were also submitted for 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 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:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B;

Soil samples SB-5, SB-9, and SC-5 were also laboratory analyzed for:

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

2.3 Field Screening and Laboratory Analytical Results

On January 7, 2013, initial assessment field screening readings for VOCs via OVM ranged from 15.8 ppm in SB-8 up to 1,926 ppm in SB-4. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-8 up to greater than 2,500 mg/kg in SB-1, SB-2, and SB-6.

On February 6, 2013, final excavation field screening results for VOCs via OVM showed concentrations ranging from 11.5 ppm in SC-4 to 263 ppm in SC-1. Field TPH concentrations ranged from less than 20.0 mg/kg in SC-2 and SC-3 up to 170 mg/kg in SC-5. 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
Huerfano #52 Release Assessment and Final Excavation, January and February 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Field TPH (mg/kg)
<i>NMOCD Action Level*</i>			100	100
SB-1	1/7/13	Surface	1,494	>2,500
SB-2	1/7/13	Surface	1,658	>2,500
SB-3	1/7/13	Surface	57.0	107
SB-4	1/7/13	Surface	1,926	2,410
SB-5	1/7/13	Surface	135	116
SB-6	1/7/13	Surface	1,234	>2,500
SB-7	1/7/13	Surface	116	94.6
SB-8	1/7/13	Surface	15.8	<20.0
SB-9	1/7/13	Surface	134	158
SC-1	2/6/13	1 to 18	263	85.1
SC-2	2/6/13	1 to 18	58.6	<20.0
SC-3	2/6/13	1 to 18	44.0	<20.0
SC-4	2/6/13	1 to 18	11.5	38.0
SC-5	2/6/13	18	135	170

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

Laboratory analyses for SB-5 and SB-9 were used to confirm field screening results from the initial assessment. Benzene and total BTEX concentrations were reported below laboratory detection limits for each sample (SB-5 and SB-9). TPH concentrations as GRO were reported below laboratory detection limits for SB-5 and SB-9, but TPH as DRO was reported at 14 mg/kg in SB-5 and 100 mg/kg in SB-9.

Laboratory analyses for SC-1 and SC-5 were used to provide final excavation clearance. Benzene and total BTEX concentrations were below laboratory detection limits, except for in SC-1, which had reported toluene and xylene concentrations of 0.068 mg/kg and 0.30 mg/kg, respectively. TPH as GRO was reported below laboratory detection limits, and TPH as DRO was 16 mg/kg in SC-5. Results are presented in Table 2 and on Figures 3 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH
Huerfano #52 Release Assessment and Final Excavation, January and February 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft bgs)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>GRO (mg/kg)</i>	<i>DRO (mg/kg)</i>
<i>NMOCD Action Level*</i>			<i>10</i>	<i>50</i>	<i>100</i>	
SB-5	1/7/13	Surface	<0.047	<0.236	<4.7	14
SB-9	1/7/13	Surface	<0.049	<0.244	<4.9	100
SC-1	2/6/13	1 to 18	<0.050	0.37	NA	NA
SC-5	2/6/13	18	<0.050	<0.25	<5.0	16

NA – not analyzed

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

3.0 Conclusions and Recommendations

On January 7, 2013, AES conducted an initial assessment associated with a release from the production tank at the Huerfano #52 located in San Juan County, New Mexico. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993), and the release location was assigned a ranking score of 20.

Field screening during the initial assessment showed concentrations above the NMOCD action levels of 100 ppm VOCs and/or 100 mg/kg TPH in SB-1 through SB-7 and in SB-9. The highest VOC concentration was 1,926 ppm in SB-4, and the highest field TPH concentrations exceeded 2,500 mg/kg in SB-1, SB-2, and SB-6. Laboratory analytical results showed that benzene and total BTEX concentrations were below laboratory detection limits in SB-5 and SB-9. However, the TPH concentration (as DRO) was at the applicable NMOCD threshold in SB-9 with 100 mg/kg. Based on field screening and laboratory results, excavation was recommended for the location.

On February 6, 2013, a final assessment of the excavation area was completed. Field screening results of the excavation extents showed that VOC and TPH concentrations were below applicable NMOCD action levels in SC-2 through SC-4, but VOC concentrations were above applicable NMOCD action levels in SC-1 (263 ppm) and SC-5 (135 ppm), and TPH concentrations were above applicable NMOCD action levels in SC-5 (170 mg/kg). However, laboratory analytical results for benzene and total BTEX were below applicable NMOCD action levels in SC-1 and SC-5, and TPH concentrations were also below applicable NMOCD action levels in SC-5.

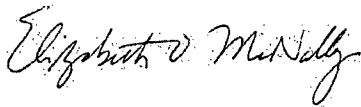
Based on the final field screening and laboratory analytical results of the excavation of petroleum contaminated soils at Huerfano #52, VOC, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels. No further work is recommended.

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

Sincerely,



Landrea Cupps
Environmental Scientist



Elizabeth McNally, PE

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, January 2013
- Figure 3. Initial Assessment Sample Locations and Results, January 2013
- Figure 4. Final Excavation Sample Locations and Results, February 2013
- AES Field Screening Reports (010713 and 020613)
- Hall Analytical Reports (1301177 and 1302236)

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\Huerfano #52\Huerfano #52 Release and Final Excavation Report 031813.docx

HUERFANO TRADING POST QUADRANGLE
NEW MEXICO - SAN JUAN COUNTY
1967 PHOTOINSPECTED 1978

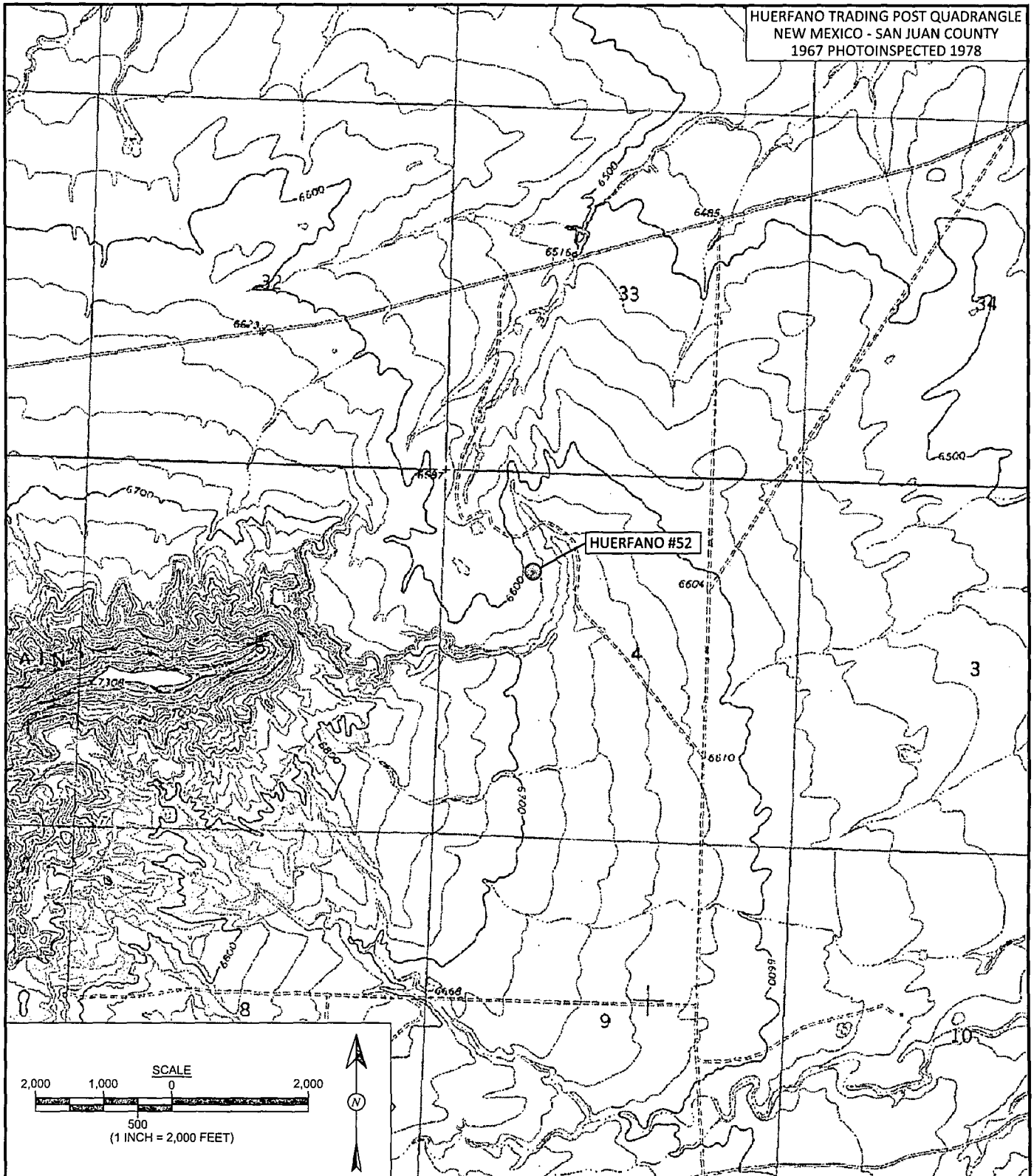


FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
HUERFANO #52
SAN JUAN COUNTY, NEW MEXICO
SW¼ NW¼, SECTION 4, T25N, R9W
N36.43330, W107.79807



Animas Environmental Services, LLC

DRAWN BY:

C. Lameman

DATE DRAWN:

January 8, 2013

REVISIONS BY:

C. Lameman

DATE REVISED:

January 8, 2013

CHECKED BY:

D. Watson

DATE CHECKED:

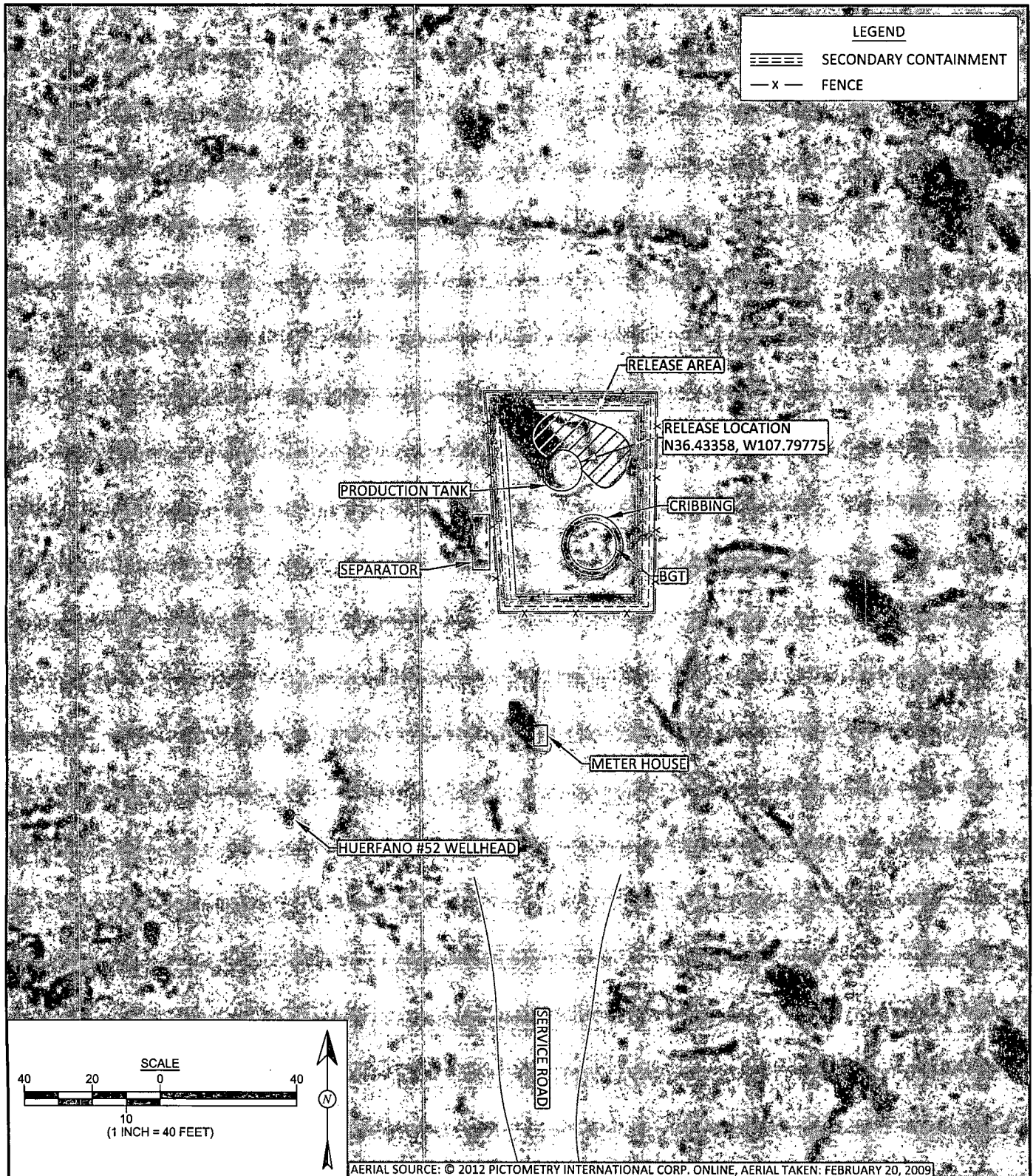
January 8, 2013

APPROVED BY:

E. McNally

DATE APPROVED:

January 8, 2013



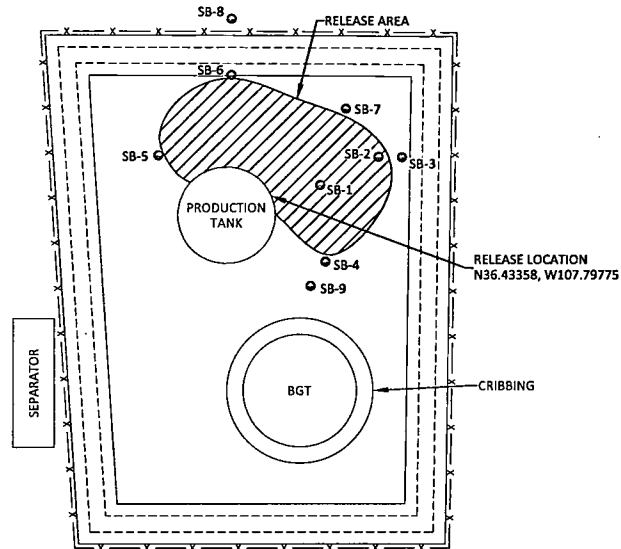
Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: January 8, 2013
REVISIONS BY: C. Lameman	DATE REVISED: January 8, 2013
CHECKED BY: D. Watson	DATE CHECKED: January 8, 2013
APPROVED BY: E. McNally	DATE APPROVED: January 8, 2013

FIGURE 2

**AERIAL SITE MAP
JANUARY 2013**
ConocoPhillips
HUERFANO #52
SAN JUAN COUNTY, NEW MEXICO
SW¼ NW¼, SECTION 4, T25N, R9W
N36.43330, W107.79807

Field Screening Results					
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	
NMOCD ACTION LEVEL			100	100	
SB-1	1/7/13	Surface	1,494	>2,500	
SB-2	1/7/13	Surface	1,658	>2,500	
SB-3	1/7/13	Surface	57.0	107	
SB-4	1/7/13	Surface	1,926	2,410	
SB-5	1/7/13	Surface	135	116	
SB-6	1/7/13	Surface	1,234	>2,500	
SB-7	1/7/13	Surface	116	94.6	
SB-8	1/7/13	Surface	15.8	<20.0	
SB-9	1/7/13	Surface	134	158	



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	
SB-5	1/7/13	Surface	<0.047	<0.236	<4.7	14
SB-9	1/7/13	Surface	<0.049	<0.244	<4.9	100

ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B.

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
JANUARY 2013
 ConocoPhillips
 HUERFANO #52
 SAN JUAN COUNTY, NEW MEXICO
 SW¼ NW¼, SECTION 4, T25N, R9W
 N36.43330, W107.79807

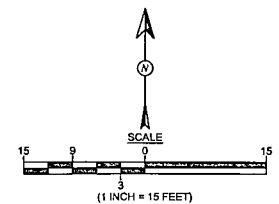


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: January 8, 2013
REVISIONS BY: C. Lameman	DATE REVISED: January 8, 2013
CHECKED BY: D. Watson	DATE CHECKED: January 8, 2013
APPROVED BY: E. McNally	DATE APPROVED: January 8, 2013

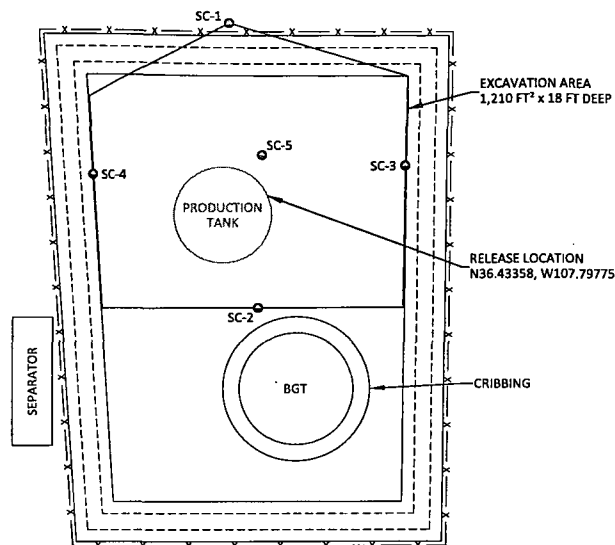
LEGEND

- SAMPLE LOCATION
- ===== SECONDARY CONTAINMENT
- x — FENCE



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-1	2/6/13	1 to 18	263	85.1
SC-2	2/6/13	1 to 18	58.6	<20.0
SC-3	2/6/13	1 to 18	44.0	<20.0
SC-4	2/6/13	1 to 18	11.5	38.0
SC-5	2/6/13	18	135	170

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-1	2/6/13	1 to 18	<0.050	0.37	NA	NA
SC-5	2/6/13	18	<0.050	<0.25	<5.0	16
SAMPLES ARE 5-POINT COMPOSITE SAMPLES. ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B. NA - NOT ANALYZED						



HUERFANO #52 WELLHEAD

FIGURE 4

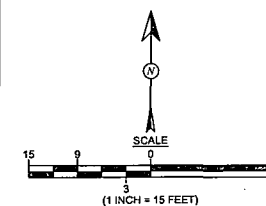
FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS
FEBRUARY 2013
 ConocoPhillips
 HUERFANO #52
 SAN JUAN COUNTY, NEW MEXICO
 SW¼ NW¼, SECTION 4, T25N, R9W
 N36.43330, W107.79807



DRAWN BY: C. Lameman	DATE DRAWN: January 8, 2013
REVISIONS BY: C. Lameman	DATE REVISED: February 7, 2013
CHECKED BY: D. Watson	DATE CHECKED: February 7, 2013
APPROVED BY: E. McNally	DATE APPROVED: February 7, 2013

LEGEND

- SAMPLE LOCATION
- ===== SECONDARY CONTAINMENT
- x — FENCE



AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: Huerfano #52

Date: 1/7/2013

Matrix: Soil

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

Durango, Colorado
970-403-3084

Sample ID	Collection Date	Time of Sample Collection	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ 0'	1/7/2013	11:30	1,494	12:22	>2,500	20.0	1	HMW
SB-2 @ 0'	1/7/2013	11:52	1,658	12:25	>2,500	20.0	1	HMW
SB-3 @ 0'	1/7/2013	12:32	57.0	13:13	107	20.0	1	HMW
SB-4 @ 0'	1/7/2013	12:30	1,926	13:16	2,410	20.0	1	HMW
SB-5 @ 0'	1/7/2013	12:37	135	13:19	116	20.0	1	HMW
SB-6 @ 0'	1/7/2013	12:49	1,234	13:21	>2,500	20.0	1	HMW
SB-7 @ 0'	1/7/2013	12:51	116	13:23	94.6	20.0	1	HMW
SB-8 @ 0'	1/7/2013	12:55	15.8	13:25	<20.0	20.0	1	HMW
SB-9 @ 0'	1/7/2013	13:30	134	13:59	158	20.0	1	HMW

PQL Practical Quantitation Limit

Total Petroleum Hydrocarbons - USEPA 418.1

ND Not Detected at the Reporting Limit

NA Not Analyzed

Analyst:

DF Dilution Factor

Heather M. Woods

*Field TPH concentrations recorded may be below PQL.

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: Huerfano #52

Date: 2/6/2013

Matrix: Soil

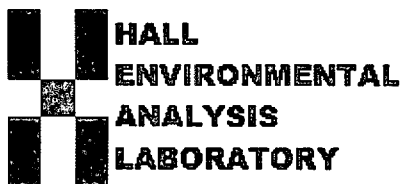
Sample ID	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SC-1	2/6/2013	10:20	North	263	10:41	85.1	20.0	1	DAW
SC-2	2/6/2013	9:10	South	58.6	9:51	<20.0	20.0	1	DAW
SC-3	2/6/2013	9:15	East	44.0	9:48	<20.0	20.0	1	DAW
SC-4	2/6/2013	10:18	West	11.5	10:38	38.0	20.0	1	DAW
SC-5	2/6/2013	9:05	Base	135	9:55	170	20.0	1	DAW

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

**Field TPH concentrations recorded may be below PQL.*

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:



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

January 11, 2013

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

RE: CoP Huerfano #52

OrderNo.: 1301177

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/8/2013 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1301177

Date Reported: 1/11/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SB-5 @Surface**Project:** CoP Huerfano #52**Collection Date:** 1/7/2013 12:37:00 PM**Lab ID:** 1301177-001**Matrix:** SOIL**Received Date:** 1/8/2013 9:57:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	14	9.8		mg/Kg	1	1/9/2013 8:36:04 PM
Surr: DNOP	103	72.4-120		%REC	1	1/9/2013 8:36:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/9/2013 12:58:28 PM
Surr: BFB	103	84-116		%REC	1	1/9/2013 12:58:28 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	1/9/2013 12:58:28 PM
Toluene	ND	0.047		mg/Kg	1	1/9/2013 12:58:28 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2013 12:58:28 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/9/2013 12:58:28 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	1/9/2013 12:58:28 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- 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
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1301177

Date Reported: 1/11/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SB-9 @Surface**Project:** CoP Huerfano #52**Collection Date:** 1/7/2013 1:30:00 PM**Lab ID:** 1301177-002**Matrix:** SOIL**Received Date:** 1/8/2013 9:57:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	100	10		mg/Kg	1	1/10/2013 10:59:02 AM
Surr: DNOP	102	72.4-120		%REC	1	1/10/2013 10:59:02 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2013 1:27:18 PM
Surr: BFB	98.3	84-116		%REC	1	1/9/2013 1:27:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	1/9/2013 1:27:18 PM
Toluene	ND	0.049		mg/Kg	1	1/9/2013 1:27:18 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2013 1:27:18 PM
Xylenes, Total	ND	0.097		mg/Kg	1	1/9/2013 1:27:18 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	1/9/2013 1:27:18 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- 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
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301177

11-Jan-13

Client: Animas Environmental Services

Project: CoP Huerfano #52

Sample ID	MB-5569	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	5569	RunNo:	7939					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	229797	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		104	72.4	120			

Sample ID	LCS-5569	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	5569	RunNo:	7939					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	229799	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	81.7	47.4	122			
Surr: DNOP	5.1		5.000		102	72.4	120			

Sample ID	1301131-003AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	5569	RunNo:	7939					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	229824	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.8	49.21	0	89.7	12.6	148			
Surr: DNOP	5.1		4.921		103	72.4	120			

Sample ID	1301131-003AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	5569	RunNo:	7939					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	229863	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	51.23	0	91.7	12.6	148	6.14	22.5	
Surr: DNOP	5.2		5.123		101	72.4	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1301177

11-Jan-13

Client: Animas Environmental Services

Project: CoP Huerfano #52

Sample ID	MB-5573	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	5573	RunNo:	7956					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	230168	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	980		1000		98.2	84	116			

Sample ID	LCS-5573	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	5573	RunNo:	7956					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	230169	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.1	74	117			
Surr: BFB	970		1000		97.1	84	116			

Sample ID	1301164-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	5573	RunNo:	7956					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	230171	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.76	0	117	70	130			
Surr: BFB	1000		950.6		109	84	116			

Sample ID	1301164-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	5573	RunNo:	7956					
Prep Date:	1/8/2013	Analysis Date:	1/9/2013	SeqNo:	230172	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.7	23.72	0	119	70	130	1.78	22.1	
Surr: BFB	1000		948.8		108	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#: 1301177

11-Jan-13

Client: Animas Environmental Services

Project: CoP Huerfano #52

Sample ID	MB-5573		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	5573		RunNo:	7956			
Prep Date:	1/8/2013		Analysis Date:	1/9/2013		SeqNo:	230204		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		114	80	120			

Sample ID	LCS-5573		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	5573		RunNo:	7956			
Prep Date:	1/8/2013		Analysis Date:	1/9/2013		SeqNo:	230205		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	105	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	80	120			

Sample ID	1301176-002AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	BatchQC		Batch ID:	5573		RunNo:	7956			
Prep Date:	1/8/2013		Analysis Date:	1/9/2013		SeqNo:	230207		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.046	0.9242	0	114	67.2	113			S
Toluene	1.1	0.046	0.9242	0	114	62.1	116			
Ethylbenzene	1.1	0.046	0.9242	0	117	67.9	127			
Xylenes, Total	3.2	0.092	2.773	0	117	60.6	134			
Surr: 4-Bromofluorobenzene	1.1		0.9242		116	80	120			

Sample ID	1301176-002AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	BatchQC		Batch ID:	5573		RunNo:	7956			
Prep Date:	1/8/2013		Analysis Date:	1/9/2013		SeqNo:	230208		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.046	0.9242	0	95.3	67.2	113	17.5	14.3	R
Toluene	0.88	0.046	0.9242	0	95.0	62.1	116	18.5	15.9	R
Ethylbenzene	0.91	0.046	0.9242	0	98.1	67.9	127	17.9	14.4	R
Xylenes, Total	2.7	0.092	2.773	0	96.4	60.6	134	18.9	12.6	R
Surr: 4-Bromofluorobenzene	1.1		0.9242		114	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

Sample Log-In Check List

Client Name: **Animas Environmental**

Work Order Number: **1301177**

Received by/date:

[Signature]

01/08/13

Logged By: **Ashley Gallegos**

1/8/2013 9:57:00 AM

[Signature]

Completed By: **Ashley Gallegos**

1/8/2013 11:23:55 AM

[Signature]

Reviewed By:

[Signature]

01/08/13

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 ☐ # of preserved bottles checked for pH: ☐
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ (<2 or >12 unless noted)
15. Is it clear what analyses were requested? Yes ☒ No ☐ Adjusted? ☐
16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☒ No ☐ 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	2.1	Good	Not Present			

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) _____

☒ Standard ☐ Rush

COP Huertano #52

Project #:

Project Manager:

D. Watson

Sampler: H. Wood S

On Ice: ☒ Yes ☐ No

Sample Temperature 2

[illegible]

Date:	Time:	Relinquished by:
7/13	1453	Heath M. Wood

Received by:	Date	Time
Christine Jackson	1/7/13	1653

Date:	Time:	Relinquished by:
7/13	1721	Christina Weathers

Received by: [Signature] Date 01/08/13 Time 07:55

Remarks: Bill to Conocophillips
Supervisor: Cary Green Ordered by: Ashley Maxwell
Area: 21 WO: 9387857
User ID: LINDA J

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

February 11, 2013

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: CoP Huerfano 52

OrderNo.: 1302236

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/7/2013 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1302236

Date Reported: 2/11/2013

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Animas Environmental Services**Client Sample ID:** SC-1**Project:** CoP Huerfano 52**Collection Date:** 2/6/2013 10:20:00 AM**Lab ID:** 1302236-001**Matrix:** MEOH (SOIL)**Received Date:** 2/7/2013 9:47:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	2/8/2013 12:47:53 PM
Toluene	0.068	0.050		mg/Kg	1	2/8/2013 12:47:53 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2013 12:47:53 PM
Xylenes, Total	0.30	0.10		mg/Kg	1	2/8/2013 12:47:53 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	2/8/2013 12:47:53 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- 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
- S Spike Recovery outside accepted recovery limits

Analytical Report

Lab Order 1302236

Date Reported: 2/11/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-5

Project: CoP Huerfano 52

Collection Date: 2/6/2013 9:05:00 AM

Lab ID: 1302236-002

Matrix: MEOH (SOIL)

Received Date: 2/7/2013 9:47:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	16	10		mg/Kg	1	2/7/2013 2:06:51 PM
Surr: DNOP	110	72.4-120		%REC	1	2/7/2013 2:06:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/8/2013 1:45:29 PM
Surr: BFB	121	84-116	S	%REC	1	2/8/2013 1:45:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	2/8/2013 1:45:29 PM
Toluene	ND	0.050		mg/Kg	1	2/8/2013 1:45:29 PM
Ethylbenzene	ND	0.050		mg/Kg	1	2/8/2013 1:45:29 PM
Xylenes, Total	ND	0.10		mg/Kg	1	2/8/2013 1:45:29 PM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	2/8/2013 1:45:29 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- 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
- S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302236

11-Feb-13

Client: Animas Environmental Services

Project: CoP Huerfano 52

Sample ID	MB-6007	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	6007	RunNo:	8506					
Prep Date:	2/6/2013	Analysis Date:	2/7/2013	SeqNo:	245062	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.9	72.4	120			

Sample ID	MB-6019	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	6019	RunNo:	8506					
Prep Date:	2/7/2013	Analysis Date:	2/7/2013	SeqNo:	245063	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.7		10.00		97.1	72.4	120			

Sample ID	LCS-6007	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	6007	RunNo:	8506					
Prep Date:	2/6/2013	Analysis Date:	2/7/2013	SeqNo:	245064	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.2	72.4	120			

Sample ID	LCS-6019	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	6019	RunNo:	8506					
Prep Date:	2/7/2013	Analysis Date:	2/7/2013	SeqNo:	245065	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.5	47.4	122			
Surr: DNOP	4.7		5.000		93.3	72.4	120			

Sample ID	LCSD-6007	SampType:	LCSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS02	Batch ID:	6007	RunNo:	8506					
Prep Date:	2/6/2013	Analysis Date:	2/7/2013	SeqNo:	245066	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		96.0	72.4	120	0	0	

Sample ID	1301989-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	6007	RunNo:	8506					
Prep Date:	2/6/2013	Analysis Date:	2/7/2013	SeqNo:	245071	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		4.845		116	72.4	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#: 1302236

11-Feb-13

Client: Animas Environmental Services

Project: CoP Huerfano 52

Sample ID	1301989-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	6007	RunNo:	8506					
Prep Date:	2/6/2013	Analysis Date:	2/7/2013	SeqNo:	245222	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		4.926		108	72.4	120	0	0	

Sample ID	1302243-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	6019	RunNo:	8537					
Prep Date:	2/7/2013	Analysis Date:	2/8/2013	SeqNo:	245775	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.97	0	96.3	12.6	148			
Surr: DNOP	5.0		5.097		98.5	72.4	120			

Sample ID	1302243-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	BatchQC	Batch ID:	6019	RunNo:	8537					
Prep Date:	2/7/2013	Analysis Date:	2/8/2013	SeqNo:	245776	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.7	48.50	0	110	12.6	148	8.76	22.5	
Surr: DNOP	5.5		4.850		113	72.4	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1302236

11-Feb-13

Client: Animas Environmental Services

Project: CoP Huerfano 52

Sample ID	MB-6013	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	R8541	RunNo:	8541					
Prep Date:	2/6/2013	Analysis Date:	2/8/2013	SeqNo:	246237	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	1100		1000		105	84	116			

Sample ID	LCS-6013	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	R8541	RunNo:	8541					
Prep Date:	2/6/2013	Analysis Date:	2/8/2013	SeqNo:	246242	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	110	74	117			
Surr: BFB	1100		1000		108	84	116			

Qualifiers:

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- 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#: 1302236

11-Feb-13

Client: Animas Environmental Services

Project: CoP Huerfano 52

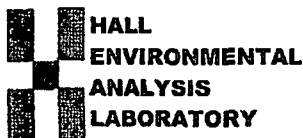
Sample ID	MB-6013	SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	PBS	Batch ID:	R8541		RunNo:	8541				
Prep Date:	2/6/2013	Analysis Date:	2/8/2013		SeqNo:	246298	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	LCS-6013	SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID: R8541			RunNo: 8541					
Prep Date:	2/6/2013	Analysis Date: 2/8/2013			SeqNo: 246299		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.050	1.000	0	91.9	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.7	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	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



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87106
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1302236

Received by/date:

AG

02/07/13

Logged By: Michelle Garcia

2/7/2013 9:47:00 AM

Michelle Garcia

Completed By: Michelle Garcia

2/7/2013 9:53:00 AM

Michelle Garcia

Reviewed By:

SO

02/07/2013

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 ☐ # of preserved bottles checked for pH:
(<2 or >12 unless noted)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted?
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 ☐ 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			

Turn-Around Time:

Client: ANIMAS ENVIRONMENTAL

☐ Standard ☒ Rush Same day

Project Name:

CoP Huernano 52

Project #:

Project Manager:

Sampler: D Watson

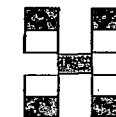
On Ice ☒ Yes ☐ No

Sample Temperature: 77°C

Container
Type and #Preservative
Type

HEALING

1302236



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	

Date:	Time:	Relinquished by:
2/6/13	1705	Kelvin Phatman

Received by:	Date	Time
<i>Minister Walter</i>	<i>2/6/13</i>	<i>1705</i>

Remarks:	Ball to Cenoco Phillips
----------	-------------------------

Received by: [Signature] Date 02/07/13 Time 09:47

NO: 9413478
Supervisor: Mike Smith
Ordered by: ~~GA~~ Eric Smith

Approved by
KGARCIA

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.