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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Ashley Maxwell**
Address **3401 E. 30th St., Farmington, NM 87402**	Telephone No. **505-324-5169**
Facility Name: Huerfanito Unit 26R	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3004530865 Lease No. SF-078081

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	33	27N	09W	930'	South	1295'	East	San Juan

Latitude 36.52698 Longitude -107.7886

NATURE OF RELEASE

Type of Release – ~~Unknown~~ Produced fluids	Volume of Release – Unknown	Volume Recovered
Source of Release – Below Grade Tank	Date and Hour of Occurrence – Unknown	Date and Hour of Discovery 5/11/2012
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	RCVD AUG 6 '12 OIL CONS. DIV.
By Whom?	Date and Hour	DIST. 3
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* Below Grade Tank Closure Activities

Describe Area Affected and Cleanup Action Taken.*

The below grade tank field sample results were above regulatory standard by USEPA method 418.1 for TPH @ 37,400 ppm, confirming a release. The regulatory standard for closure at this site was determined to be 5,000 ppm. Additionally, the sample was then transported to the lab and 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.

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 Approved by Environmental Specialist:
Printed Name: **Ashley Maxwell**	
Title: **Field Environmental Specialist**	Approval Date: 9/5/2014 Expiration Date:
E-mail Address: **ashley.p.wethington@conocophillips.com**	Conditions of Approval: Site Ranking determined to be 1D due to being <1000ft to blue line water courses as visible on USGS Topo map. Closure approved under Risk Based closure. BGT Closure Permit needs to be filed on C-144 Attached ☐
Date: August 2, 2012 Phone: **505-324-5169**	nJK1424854353

* Attach Additional Sheets If Necessary

Animas Environmental Services, LLC
www.animasenvironmental.com

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

Durango, Colorado
970-403-3274

June 26, 2012

Ashley Maxwell
ConocoPhillips
San Juan Business Unit
Office 216-2
5525 Hwy 64
Farmington, New Mexico 87401

RE: Huerfanito Unit 26R Below Grade Tank Closure and Release Report
San Juan County, New Mexico

Dear Ms. Maxwell:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure and release confirmation at ConocoPhillips (CoP) Huerfanito Unit 26R, located in San Juan County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

1.0 Site Information

1.1 Location

Site Name – Huerfanito Unit 26R
Legal Description - SW¼ SE¼, Section 33, T27N, R9W, San Juan County, New Mexico
Well Latitude/Longitude – N36.52707 and W107.78932, respectively
BGT Latitude/Longitude - N36.52732 and W107.78926, respectively
Land Jurisdiction - Bureau of Land Management (BLM)
Figure 1 - Topographic Site Location Map
Figure 2 – Aerial Site Map, May 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer (NMOSE) databases were reviewed, and no prior ranking information was located. Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells are located within 1,000 feet of the location. Once on site, AES personnel assessed the ranking using known information of the area, 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 below ground surface (bgs), and the location is not within a well-head protection area. A livestock pond is located approximately 3,300 feet to the west (cross-gradient), and an unnamed wash leading to Reed Canyon is located more than 1,000 feet to the south-southwest. The site location has been assigned a ranking score of 0 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 BGT Closure Assessment

AES was initially contacted by Bruce Yazzie, CoP representative, on May 10, 2012, and on the next day, Tami Ross and Zachary Trujillo of AES mobilized to the location.

AES personnel collected six soil samples (S-1 through S-6) from the below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, and one sample was collected from the center of the BGT footprint. One soil sample (S-6) was collected from the southwest portion of the BGT footprint in an area of visible staining. A 5-point composite sample (SC-1) of the BGT footprint (S-1 through S-5) was collected for confirmation laboratory analysis.

2.0 Soil Sampling

On May 11, 2012, AES personnel conducted field screening and collected six soil samples (S-1 through S-6) from below the BGT. Soil samples were collected from approximately 0.5 to 1 foot below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 and S-6 were submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

2.1 Soil Field Screening

2.1.1 Volatile Organic Compounds

A portion of each sample was utilized for field screening of VOC vapors 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

Soil samples were also analyzed in the field for TPH 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 Soil Laboratory Analyses

Soil sample S-6 and composite soil sample SC-1 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. The soil samples were laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021;
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B.
- Chloride per USEPA Method 300.0.

2.3 Soil Field and Laboratory Analytical Results

Field screening for VOCs via OVM showed readings of non-detect for all of the samples (S-1 through S-6). Field TPH concentrations ranged from 48.4 mg/kg in S-2 up to 37,400 mg/kg in S-6. Field screening VOC and TPH results are summarized in Table 1 and on Figure 2. The AES field screening report is attached.

Table 1. Soil Field Screening OVM and TPH Results
Huerfanito Unit 26R BGT Closure, May 2012

Sample ID	*Date Sampled*	*Depth below BGT (ft)*	*VOCs OVM Reading (ppm)*	*Field TPH (mg/kg)*	*Field Chlorides (mg/kg)*
NMOCD Action Level (NMAC 19.15.17.13E)			*--*	***100***	***250***
S-1	05/11/12	0.5	0.0	**106**	NA
S-2	05/11/12	1.0	0.0	48.4	NA
S-3	05/11/12	1.0	0.0	**949**	NA
S-4	05/11/12	1.0	0.0	51.0	NA
S-5	05/11/12	1.0	0.0	**37,400**	NA

NA – Not Analyzed

Laboratory analytical results showed that benzene and total BTEX concentrations were below the laboratory detection limit in samples SC-1 and S-6. TPH concentrations were reported at less than 5.0 mg/kg GRO and at 10 mg/kg DRO in sample SC-1, and the chloride concentration was 11 mg/kg. TPH concentrations in sample S-6 were reported at less than 50 mg/kg GRO and at 1,100 mg/kg DRO. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results
Huerfanito Unit 26R BGT Closure, May 2012

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13E)			**0.2/10***	**50**	**100/5,000***		**250**
SC-1	05/11/12	1.0	<0.050	<0.25	<5.0	10	11
S-6	05/11/12	0.5	<0.50	<2.5	<50	1,100	NA

*Action level determined by the NMOCD ranking score per NMAC 19.15.17.13E and *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)
NA – Not Analyzed

3.0 Conclusions

3.1 BGT Closure

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations for S-1, S-3, and S-6 were above the applicable NMOCD action level of 100 mg/kg with concentrations ranging from 106 mg/kg to 37,400 mg/kg. Based on field screening results on May 11, 2012, a release is confirmed at the Huerfanito Unit 26R BGT location.

3.2 Release Confirmation

NMOCD action levels for releases are specified NMOCD's *Guidelines for Leaks, Spills, and Releases* (August 1993). Soil laboratory analyses showed that benzene, BTEX, TPH and chloride concentrations were below the NMOCD action levels for releases in samples SC-1 and S-6. Release notification should follow the protocols outlined in NMAC 19.15.29 and 30. No further work is recommended.

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

Sincerely,

Heather M. Woods

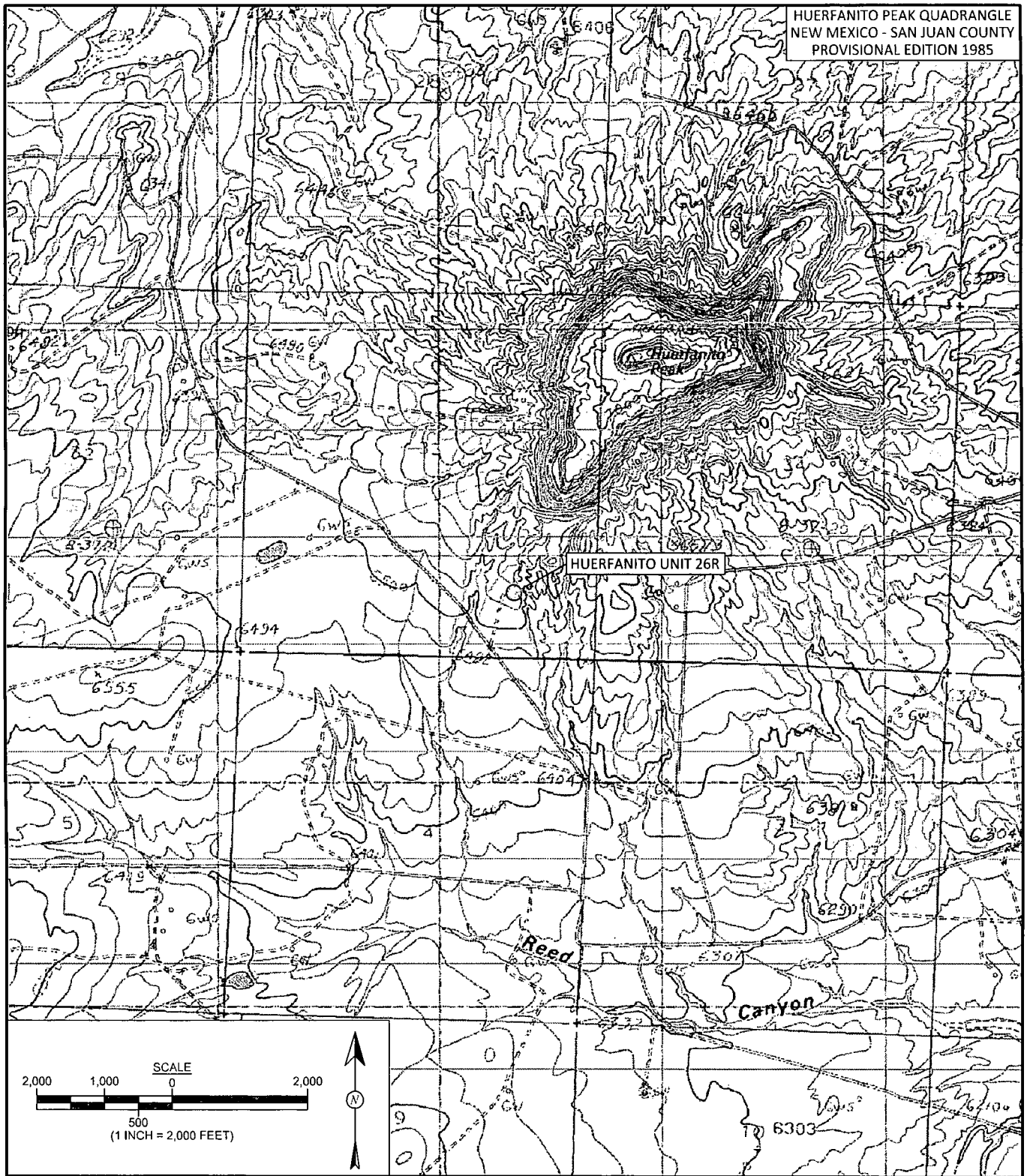
Heather Woods
Geologist

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2012
AES Field Screening Report 051112
Hall Analytical Report 1205557

S:\Animas 2000\2012 Projects\Conoco Phillips\Huerfanito Unit 26R\Huerfanito 26R BGT Closure & Release Report 062612.docx



Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** June 18, 2012
REVISIONS BY: N. Willis	**DATE REVISED:** June 18, 2012
CHECKED BY: H. Woods	**DATE CHECKED:** June 25, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** June 25, 2012

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
HUERFANITO UNIT 26R
SAN JUAN COUNTY, NEW MEXICO
SW¼, SE¼, SECTION 33, T27N, R9W
N36.52707, W107.78932

Field Screening Results

Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL		NE	5,000
S-1	5/11/12	0	**106**
S-2	5/11/12	0	48.4
S-3	5/11/12	0	**949**
S-4	5/11/12	0	51.0
S-5	5/11/12	0	56.4
S-6	5/11/12	0	**37,400**

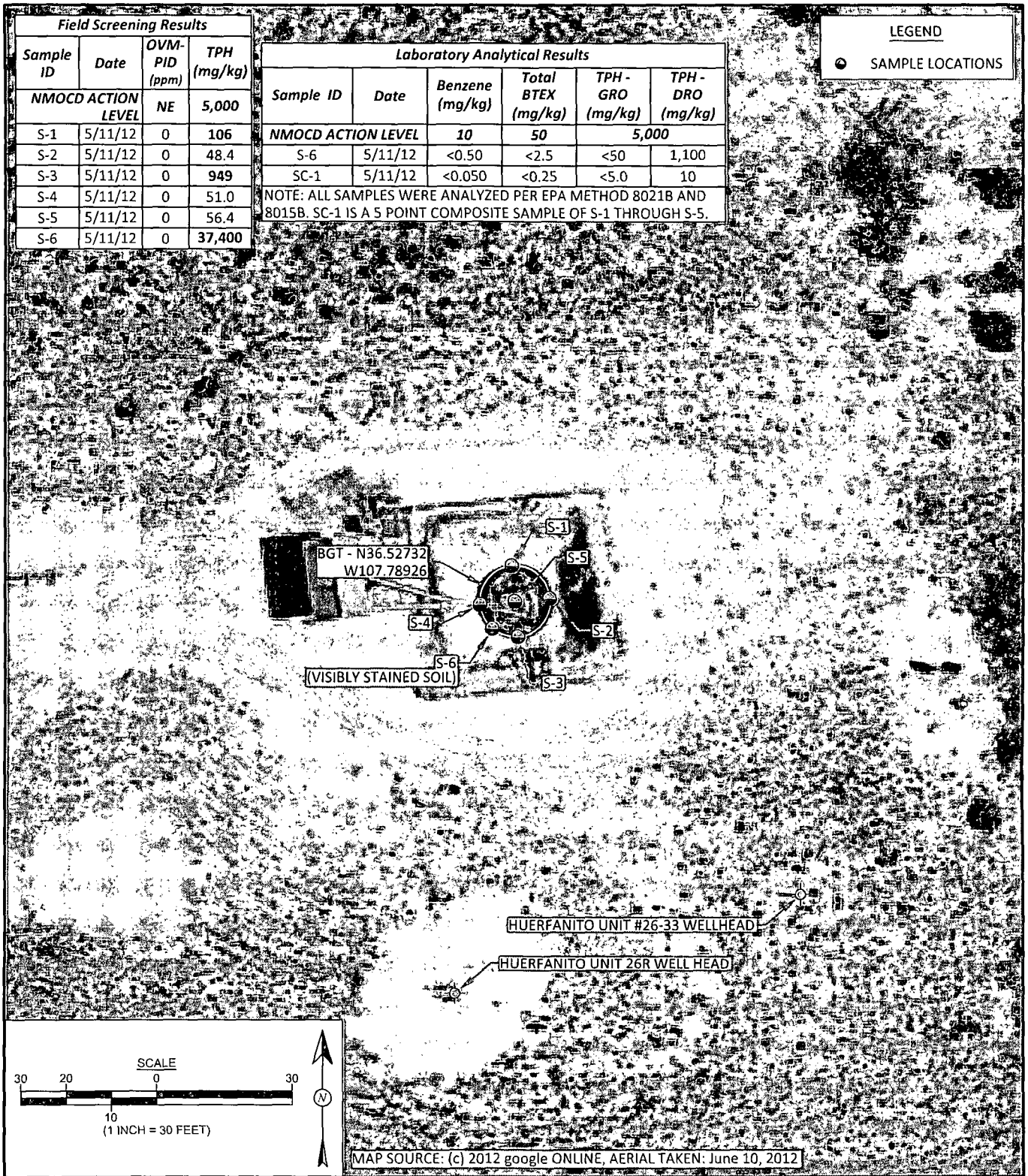
Laboratory Analytical Results

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL		10	50	5,000	
S-6	5/11/12	<0.50	<2.5	<50	1,100
SC-1	5/11/12	<0.050	<0.25	<5.0	10

NOTE: ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021B AND 8015B. SC-1 IS A 5 POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5.

LEGEND

SAMPLE LOCATIONS



Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** June 18, 2012
REVISIONS BY: N. Willis	**DATE REVISED:** June 18, 2012
CHECKED BY: H. Woods	**DATE CHECKED:** June 25, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** June 25, 2012

FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
MAY 2012
ConocoPhillips
HUERFANITO UNIT 26R
SAN JUAN COUNTY, NEW MEXICO
SW¼, SE¼, SECTION 33, T27N, R9W
N36.52707, W107.78932

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: Huerfanito Unit 26R

Date: 5/11/2012

Matrix: Soil

Sample ID *North* BGT	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	5/11/2012	11:18	North	0.0	NA	12:30	106.0	20.0	1	TR
S-2	5/11/2012	11:33	East	0.0	NA	12:34	48.4	20.0	1	TR
S-3	5/11/2012	11:44	South	0.0	NA	12:39	949	20.0	1	TR
S-4	5/11/2012	11:50	West	0.0	NA	12:44	51.0	20.0	1	TR
S-5	5/11/2012	11:55	Center	0.0	NA	12:48	56.4	20.0	1	TR
S-6	5/11/2012	11:45	Southwest	0.0	NA	12:53	37,400	2,000	100	TR

PQL Practical Quantitation Limit

ND Not Detected at the Reporting Limit

DF Dilution Factor

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

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Tami Ross

Report Finalized: 05/20/12

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

May 15, 2012

Tami Ross

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 793-2072
FAX

RE: COP Huerfanito Unit 26R OrderNo.: 1205557

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/12/2012 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.

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 **1205557**
Date Reported: **5/15/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: COP Huerfanito Unit 26R
Lab ID: 1205557-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 5/11/2012 11:58:00 AM
Received Date: 5/12/2012 11:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	10	10		mg/Kg	1	5/14/2012 9:23:22 AM
Surr: DNOP	109	77.4-131		%REC	1	5/14/2012 9:23:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/14/2012 1:55:58 PM
Surr: BFB	103	69.7-121		%REC	1	5/14/2012 1:55:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.050		mg/Kg	1	5/14/2012 1:55:58 PM
Toluene	ND	0.050		mg/Kg	1	5/14/2012 1:55:58 PM
Ethylbenzene	ND	0.050		mg/Kg	1	5/14/2012 1:55:58 PM
Xylenes, Total	ND	0.10		mg/Kg	1	5/14/2012 1:55:58 PM
Surr: 4-Bromofluorobenzene	89.5	80-120		%REC	1	5/14/2012 1:55:58 PM
EPA METHOD 300.0: ANIONS						Analyst: **BRM**
Chloride	11	7.5		mg/Kg	5	5/14/2012 6:38:48 AM

Qualifiers:

*/X	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
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: S-6
Project: COP Huerfanito Unit 26R
Collection Date: 5/11/2012 11:37:00 AM
Lab ID: 1205557-002 **Matrix:** SOIL **Received Date:** 5/12/2012 11:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	1,100	490		mg/Kg	50	5/14/2012 10:58:01 AM
Surr: DNOP	0	77.4-131	S	%REC	50	5/14/2012 10:58:01 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/14/2012 2:24:49 PM
Surr: BFB	104	69.7-121		%REC	10	5/14/2012 2:24:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.50		mg/Kg	10	5/14/2012 2:24:49 PM
Toluene	ND	0.50		mg/Kg	10	5/14/2012 2:24:49 PM
Ethylbenzene	ND	0.50		mg/Kg	10	5/14/2012 2:24:49 PM
Xylenes, Total	ND	1.0		mg/Kg	10	5/14/2012 2:24:49 PM
Surr: 4-Bromofluorobenzene	91.1	80-120		%REC	10	5/14/2012 2:24:49 PM

Qualifiers:

*/X	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
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#: **1205557**

15-May-12

Client: Animas Environmental Services

Project: COP Huerfanito Unit 26R

Sample ID	**MB-1915**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **1915**			RunNo: **2733**					
Prep Date:	**5/14/2012**	Analysis Date: **5/14/2012**			SeqNo: **75788**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-1915**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **1915**			RunNo: **2733**					
Prep Date:	**5/14/2012**	Analysis Date: **5/14/2012**			SeqNo: **75789**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.2	90	110			

Sample ID	**1205557-001AMS**	SampType: **MS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**SC-1**	Batch ID: **1915**			RunNo: **2733**					
Prep Date:	**5/14/2012**	Analysis Date: **5/14/2012**			SeqNo: **75791**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24	7.5	15.00	11.19	85.3	74.6	118			

Sample ID	**1205557-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**SC-1**	Batch ID: **1915**			RunNo: **2733**					
Prep Date:	**5/14/2012**	Analysis Date: **5/14/2012**			SeqNo: **75792**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24	7.5	15.00	11.19	85.2	74.6	118	0.0538	20	

Sample ID	**1205471-002AMS**	SampType: **MS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID: **1915**			RunNo: **2751**					
Prep Date:	**5/14/2012**	Analysis Date: **5/14/2012**			SeqNo: **76429**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	41	1.5	15.00	26.78	91.7	74.6	118			

Sample ID	**1205471-002AMSD**	SampType: **MSD**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID: **1915**			RunNo: **2751**					
Prep Date:	**5/14/2012**	Analysis Date: **5/14/2012**			SeqNo: **76430**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	42	1.5	15.00	26.78	103	74.6	118	4.20	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205557**

15-May-12

Client: Animas Environmental Services

Project: COP Huerfanito Unit 26R

Sample ID **MB-1919**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **1919**	RunNo: **2729**
Prep Date: **5/14/2012**	Analysis Date: **5/14/2012**	SeqNo: **75765** 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	9.6		10.00		96.2	77.4	131			

Sample ID **LCS-1919**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **1919**	RunNo: **2729**
Prep Date: **5/14/2012**	Analysis Date: **5/14/2012**	SeqNo: **75979** 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	82.5	62.7	139			
Surr: DNOP	4.4		5.000		87.7	77.4	131			

Sample ID **MB-1913**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **1913**	RunNo: **2729**
Prep Date: **5/13/2012**	Analysis Date: **5/14/2012**	SeqNo: **76201** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.3	82.1	121			

Sample ID **LCS-1913**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **1913**	RunNo: **2729**
Prep Date: **5/13/2012**	Analysis Date: **5/14/2012**	SeqNo: **76202** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		89.0	82.1	121			

Sample ID **1205505-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **1913**	RunNo: **2729**
Prep Date: **5/13/2012**	Analysis Date: **5/14/2012**	SeqNo: **76208** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.139		105	82.1	121			

Sample ID **1205505-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **1913**	RunNo: **2729**
Prep Date: **5/13/2012**	Analysis Date: **5/14/2012**	SeqNo: **76283** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		4.960		103	82.1	121	0	0	

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205557**

15-May-12

Client: Animas Environmental Services

Project: COP Huerfanito Unit 26R

Sample ID **5ML-RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **PBS**	Batch ID: **R2746**	RunNo: **2746**							
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77019**	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	1,000		1,000		102	69.7	121			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **R2746**	RunNo: **2746**							
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77020**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	98.5	133			
Surr: BFB	1,100		1,000		110	69.7	121			

Sample ID **1205556-001A MS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **BatchQC**	Batch ID: **R2746**	RunNo: **2746**							
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77022**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	190	25	102.1	87.34	104	85.4	147			
Surr: BFB	16,000		4,085		391	69.7	121			S

Sample ID **1205556-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **BatchQC**	Batch ID: **R2746**	RunNo: **2746**							
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77023**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	190	25	102.1	87.34	101	85.4	147	1.96	19.2	
Surr: BFB	16,000		4,085		393	69.7	121	0	0	S

Sample ID **MB-1908**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **PBS**	Batch ID: **1908**	RunNo: **2746**							
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **77029**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1,000		1,000		101	69.7	121			

Sample ID **LCS-1908**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **1908**	RunNo: **2746**							
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **77030**	Units: **%REC**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1,100		1,000		110	69.7	121			

Qualifiers:

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- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205557**

15-May-12

Client: Animas Environmental Services

Project: COP Huerfanito Unit 26R

Sample ID **5ML-RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R2746**	RunNo: **2746**
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77040** 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	0.91		1.000		90.6	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R2746**	RunNo: **2746**
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77041** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.050	1.000	0	84.8	83.3	107			
Toluene	0.87	0.050	1.000	0	86.8	74.3	115			
Ethylbenzene	0.83	0.050	1.000	0	82.9	80.9	122			
Xylenes, Total	2.5	0.10	3.000	0	83.6	85.2	123			S
Surr: 4-Bromofluorobenzene	0.94		1.000		94.4	80	120			

Sample ID **1205557-001A MS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-1**	Batch ID: **R2746**	RunNo: **2746**
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.61	0.050	0.7086	0	86.6	67.2	113			
Toluene	0.64	0.050	0.7086	0	90.3	62.1	116			
Ethylbenzene	0.62	0.050	0.7086	0	88.1	67.9	127			
Xylenes, Total	1.9	0.10	2.126	0	88.3	60.6	134			
Surr: 4-Bromofluorobenzene	0.68		0.7086		95.3	80	120			

Sample ID **1205557-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **SC-1**	Batch ID: **R2746**	RunNo: **2746**
Prep Date:	Analysis Date: **5/14/2012**	SeqNo: **77043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.57	0.050	0.7086	0	81.0	67.2	113	6.76	14.3	
Toluene	0.60	0.050	0.7086	0	84.1	62.1	116	7.12	15.9	
Ethylbenzene	0.58	0.050	0.7086	0	82.3	67.9	127	6.76	14.4	
Xylenes, Total	1.8	0.10	2.126	0	83.2	60.6	134	5.99	12.6	
Surr: 4-Bromofluorobenzene	0.67		0.7086		94.8	80	120	0	0	

Qualifiers:

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- E Value above quantitation range
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- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1205557**

15-May-12

Client: Animas Environmental Services

Project: COP Huerfanito Unit 26R

Sample ID **MB-1908**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **1908**	RunNo: **2746**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **77051** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		88.1	80	120			

Sample ID **LCS-1908**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **1908**	RunNo: **2746**
Prep Date: **5/11/2012**	Analysis Date: **5/14/2012**	SeqNo: **77052** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		95.8	80	120			

Qualifiers:

*/X	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1205557

Received by/date: AT 05/12/12

Logged By: **Anne Thorne** 5/12/2012 11:20:00 AM Ann Thorne

Completed By: **Anne Thorne** 5/13/2012 Ann Thorne

Reviewed By: AT 05/13/12

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	3.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental

Mailing Address: 624 E Comanche
Farmington NM 87401

Phone #: 505 564-2281

email or Fax#: tross@animasenvironmental.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush same day

Project Name:
CoP Huerfanito Unit 26R

Project #:

Project Manager:
Tami Ross

Sampler: Tami Ross

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.2°C

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. 1205571	BTEX + ~~MTBE + 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)	Chlorides 300.0
5/11/12	1158	soil	SC-1	MeOH Kit 2 4oz	MeOH	-001	X		X									X
5/11/12	1137	soil	S-6	MeOH Kit 1 4oz	MeOH	-002	X		X									

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/11/12	1543	Tami Ross	Christine Walters	5/11/12	1543
5/11/12	1610	Christine Walters		5/14/12	11:20

Remarks:
BILL TO COND CO PHILLIPS
WO: 10332109
activity code: C200
Supervisor: Harry Deo
User ID: KAITLW
ordered by: Bruce Yazzie
Area: 21

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.