

* 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: Federal 9E	Facility Type: Gas Well	
Surface Owner BLM	Mineral Owner BLM (NM-021119)	API No. 3004523904

LOCATION OF RELEASE

Unit Letter P	Section 9	Township 29N	Range 12W	Feet from the 790	North/South Line South	Feet from the 790	East/West Line East	County San Juan
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Latitude 36.736 Longitude 108.09799

NATURE OF RELEASE

Type of Release Produced Fluids	Volume of Release Unknown	Volume Recovered 233 cu. yds.
Source of Release Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery March 15, 2013
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour RCVD. III 31 '13	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. 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 Closure Activities		
Describe Area Affected and Cleanup Action Taken.* Historical hydrocarbon impacted soil was found during the BGT closure for the subject well. The excavation was 30'x 30' x 7' and 233 yds of soil was transported to IEI landfarm and 233 yds of clean soil was transported from Aztec Machine and placed in the excavation site. 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: Crystal Tafoya	Approved by Environmental Specialist: 	
Title: Field Environmental Specialist	Approval Date: 8/16/2013	Expiration Date:
E-mail Address: crystal.tafoya@conocophillips.com	Conditions of Approval: BGT Closure permit required following BGT Closure.	Attached <input type="checkbox"/>
Date: 7/30/2013	Phone: (505) 326-9837	

* Attach Additional Sheets If Necessary

NSK13228 38281



Animas Environmental Services, LLC

www.animasenvironmental.com

July 26, 2013

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

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

Durango, Colorado
970-403-3084

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

**RE: Below Grade Tank Closure, Release Assessment, and Final Excavation Report
Federal #9E
San Juan County, New Mexico**

Dear Ms. Tafoya:

On March 15 and 20, and June 3, 2013, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling, an initial release assessment, and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) Federal #9E, located in San Juan County, New Mexico. A historical release was discovered during BGT closure sampling at the location, and an initial release assessment was completed on March 20, 2013. The final excavation was completed by contractors while AES was on location on June 3, 2013.

1.0 Site Information

1.1 Location

Site Name – Federal #9E

Legal Description – SE¼ SE¼, Section 9, T29N, R12W, San Juan County, New Mexico

Well Latitude/Longitude – N36.73618 and W108.09796, respectively

BGT/Release Latitude/Longitude – N36.73611 and W108.09765, respectively

Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, March 2013

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 June 1999 for the Federal

#9E reported depth to water as greater than 100 feet below ground surface (bgs); however, a C-144 dated June 2007 for the Ropco Federal FC 9 #2T located approximately 320 feet north-northwest of the location reported depth to water as between 50 and 99 feet bgs. The New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells were 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 99 feet bgs. An ephemeral wash which drains to San Juan River is located approximately 90 feet east of the location. Based on this information, the location was assessed a ranking score of 30 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Assessments

AES was initially contacted by Jess Henson, CoP representative, on March 15, 2013, for BGT closure sampling at the location, and on the same day, Heather Woods and Corwin Lameman of AES mobilized to the location. AES personnel collected six soil samples from below the BGT liner. Four samples were collected from the perimeter of the BGT footprint, one sample was collected from the center of the BGT footprint, and one sample was composited from the four perimeter samples and one center sample. Two additional composite samples and one waste characterization sample were collected from an excavation initiated while AES was onsite. Sample locations are included on Figure 2.

On March 20, 2013, AES personnel returned to the location to complete the release assessment field work. The assessment included collection and field screening of 12 soil samples from 6 test holes (TH-1 through TH-6). Based on field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On June 3, 2013, AES personnel returned to the location to collect confirmation soil samples of the excavation. The field screening activities included collection of five confirmation soil samples (SC-2 through SC-6) of the walls and base of the excavation. The final excavation measured 24.5 feet by 22.5 feet by 7 feet in depth. The depth of the excavation was limited by a confining sandstone layer encountered at 7 feet bgs. Sample locations and final excavation extents are presented on Figure 4.

2.0 Soil Sampling

On March 15, 2013, during BGT closure sampling, AES personnel conducted field screening and collected five soil samples (S-1 through S-5) and one 5-point composite (SC-1) from below the BGT. Soil samples were collected from approximately 0.5 feet below the former BGT for field screening of volatile organic compounds (VOCs) and total petroleum hydrocarbon (TPH). Soil sample SC-1 was field screened for VOCs and chloride and was submitted for confirmation laboratory analysis. Based on field TPH results, CoP contractors began excavating while AES was onsite. Samples were collected from the north base and north wall of the initial excavation and were field screened for VOCs and TPH. Additionally, the sample labeled North Base was submitted for laboratory analysis. A sample from the excavation stockpile was also submitted to the analytical laboratory for waste characterization.

A total of 12 soil samples (TH-1 through TH-6) and 5 composite samples (SC-2 through SC-6) were collected during the release and excavation assessments. All soil samples were field screened for VOCs, and selected samples were analyzed for TPH. One composite sample (SC-6) collected during the excavation was submitted for confirmation laboratory analysis.

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*.

2.1.3 Chlorides

Soil samples were field screened for chlorides using Chloride Drop Count Titration with silver nitrate. Sampling and analysis methods followed procedures provided by Hach Company.

2.2 Laboratory Analyses

The soil samples (SC-1, North Base, and SC-6) collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed

on ice, and logged onto sample chain of custody records. The 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 USEPA Method 8260B/8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015B/8015D.

The soil sample (SC-1) collected on March 15, 2013, was also analyzed for:

- Chlorides per USEPA Method 300.0.

2.3 Soil Field and Laboratory Analytical Results

On March 15, 2013, BGT closure field screening readings for VOCs via OVM were 0.0 ppm in each sample (S-1 through S-5 and SC-1); however, field TPH concentrations ranged from 145 mg/kg in S-2 to 2,690 mg/kg in S-3. The field chloride concentration in SC-1 was reported at 60 mg/kg.

Initial excavation field screening on March 15, 2013, showed VOCs via OVM of 0.0 ppm (North Wall) and 1,428 ppm (North Base). Field TPH concentrations were 30.2 mg/kg (North Wall) and 644 mg/kg (North Base).

On March 20, 2013, assessment field screening readings for VOCs via OVM ranged from 0.6 ppm in TH-1 up to 4,562 ppm in TH-2. Field TPH concentrations ranged from less than 20.0 mg/kg in TH-1 to 3,620 mg/kg in TH-2.

On June 3, 2013, final excavation field screening results for VOCs via OVM ranged from 0.8 ppm in SC-3 up to 792 ppm in SC-6. Field TPH concentrations ranged from 44.0 mg/kg in SC-3 to 1,870 mg/kg in SC-6. Field screening VOC and TPH results are summarized in Table 1 and on Figures 2 through 4. The AES field screening reports are attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results
Federal #9E BGT Closure, Release Assessment, and Final Excavation Report
March and June 2013

<i>Sample ID</i>	<i>Date Sampled</i>	<i>Sample Depth (ft)</i>	<i>VOCs OVM Reading (ppm)</i>	<i>Field TPH (mg/kg)</i>	<i>Chloride (mg/kg)</i>
NMOCD Action Level*			100	100	250
S-1	3/15/13	4	0.0	1,270	NA
S-2	3/15/13	4	0.0	145	NA
S-3	3/15/13	4	0.0	2,690	NA
S-4	3/15/13	4	0.0	1,910	NA
S-5	3/15/13	4	0.0	331	NA
SC-1	3/15/13	4	0.0	NA	60
North Base	3/15/13	7	1,428	644	NA
North Wall	3/15/13	4 to 7	0.0	30.2	NA
TH-1	3/20/13	1.5	0.6	NA	NA
		7	1.2	<20.0	NA
TH-2	3/20/13	5.5	3.3	26.9	NA
		7	4,562	3,620	NA
TH-3	3/20/13	4.5	4.7	26.9	NA
		8	5.5	30.5	NA
TH-4	3/20/13	4.5	5.6	25.6	NA
		8	6.8	51.4	NA
TH-5	3/20/13	4.5	3.9	31.8	NA
		8	4.0	33.0	NA
TH-6	3/20/13	4.5	11.9	41.6	NA
		9	5.4	45.2	NA
SC-2	6/3/13	1 to 7	0.9	57.8	NA
SC-3	6/3/13	1 to 7	0.8	44.0	NA
SC-4	6/3/13	1 to 7	1.3	81.2	NA
SC-5	6/3/13	1 to 7	1.0	52.3	NA
SC-6	6/3/13	7	792	1,870	NA

NA – not analyzed

*Action levels determined by NMAC 19.15.17.13E and the NMOCD ranking score per NMOCD Guidelines for Leaks, Spills, and Releases (August 1993)

Laboratory analytical results for SC-1 collected on March 15, 2013, reported benzene and total BTEX concentrations below laboratory detection limits of 0.050 mg/kg and 0.25 mg/kg, respectively. The TPH as GRO/DRO concentration was reported at 300 mg/kg. The chloride concentration was below the laboratory detection limit of 30 mg/kg. The north base sample reported benzene and total BTEX concentrations as less than 0.050 mg/kg and 6.1 mg/kg, respectively. The TPH concentration as GRO/DRO was reported at 1,160 mg/kg.

Laboratory analytical results for SC-6 collected on June 3, 2013, from the base of the final excavation, had a benzene concentration reported below the laboratory detection limit of 0.12 mg/kg. The total BTEX concentration was 4.3 mg/kg. The TPH concentration as GRO/DRO was 840 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figures 2 and 4. Laboratory analytical reports are attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chlorides
Federal #9E BGT Closure, Release Assessment, and Final Excavation Report
March and June 2013

<i>Sample ID</i>	<i>Date</i>	<i>Depth (ft)</i>	<i>Benzene (mg/kg)</i>	<i>Total BTEX (mg/kg)</i>	<i>TPH- GRO (mg/kg)</i>	<i>TPH- DRO (mg/kg)</i>	<i>Chlorides (mg/kg)</i>
NMOCD Action Level*			0.2/10	50	100	250	
SC-1	3/15/13	4	<0.050	<0.25	<5.0	300	<30
North Base	3/15/13	7	<0.050	6.1	180	980	NA
SC-6	6/3/13	7	<0.12	4.3	130	710	NA

*Action levels determined by NMAC 19.15.17.13E and the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in each sample, with the highest concentration reported in S-3 with 2,690 mg/kg. Laboratory analytical results for TPH (as GRO/DRO) in SC-1 were also reported above the NMOCD action level of 100 mg/kg with 300 mg/kg DRO. However, benzene and total BTEX concentrations in SC-1 were below the NMOCD action levels of 0.2 mg/kg and 50 mg/kg, respectively. Chloride concentrations were reported below the NMOCD action level of 250 mg/kg. Based on field and laboratory analytical results, a release was confirmed at the location.

On March 20, 2013, AES conducted an assessment associated with a historical release discovered during BGT closure confirmation sampling. 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 30. Field screening results for VOCs via OVM were above the NMOCD action level of 100 ppm in TH-2 (4,562 ppm). Field TPH concentrations above the NMOCD action level of 100 mg/kg were also reported in TH-2 (3,620 mg/kg).

On June 3, 2013, final clearance of the excavation area was completed. Field screening results of the excavation showed that concentrations of VOCs and TPH were below NMOCD action levels for each of the final four walls of the excavation (SC-2 through SC-5). However, the base of the excavation (SC-6) exceeded NMOCD action levels for VOCs with 792 ppm and TPH with 1,870 mg/kg. Laboratory analytical results for SC-6 (base) showed benzene and total BTEX concentrations below applicable NMOCD action levels. However, TPH concentrations as GRO/DRO exceeded the NMOCD action level of 100 mg/kg with 840 mg/kg. Note that further excavation of the base was not possible due to a competent layer of sandstone encountered at 7 feet bgs.

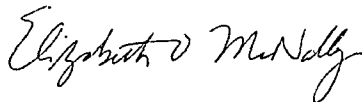
CoP consulted with Brandon Powell of NMOCD, and on June 5, 2013, was granted approval to backfill the excavation. No further work is recommended for the Federal #9E.

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

Sincerely,



Landrea Cupps
Environmental Scientist

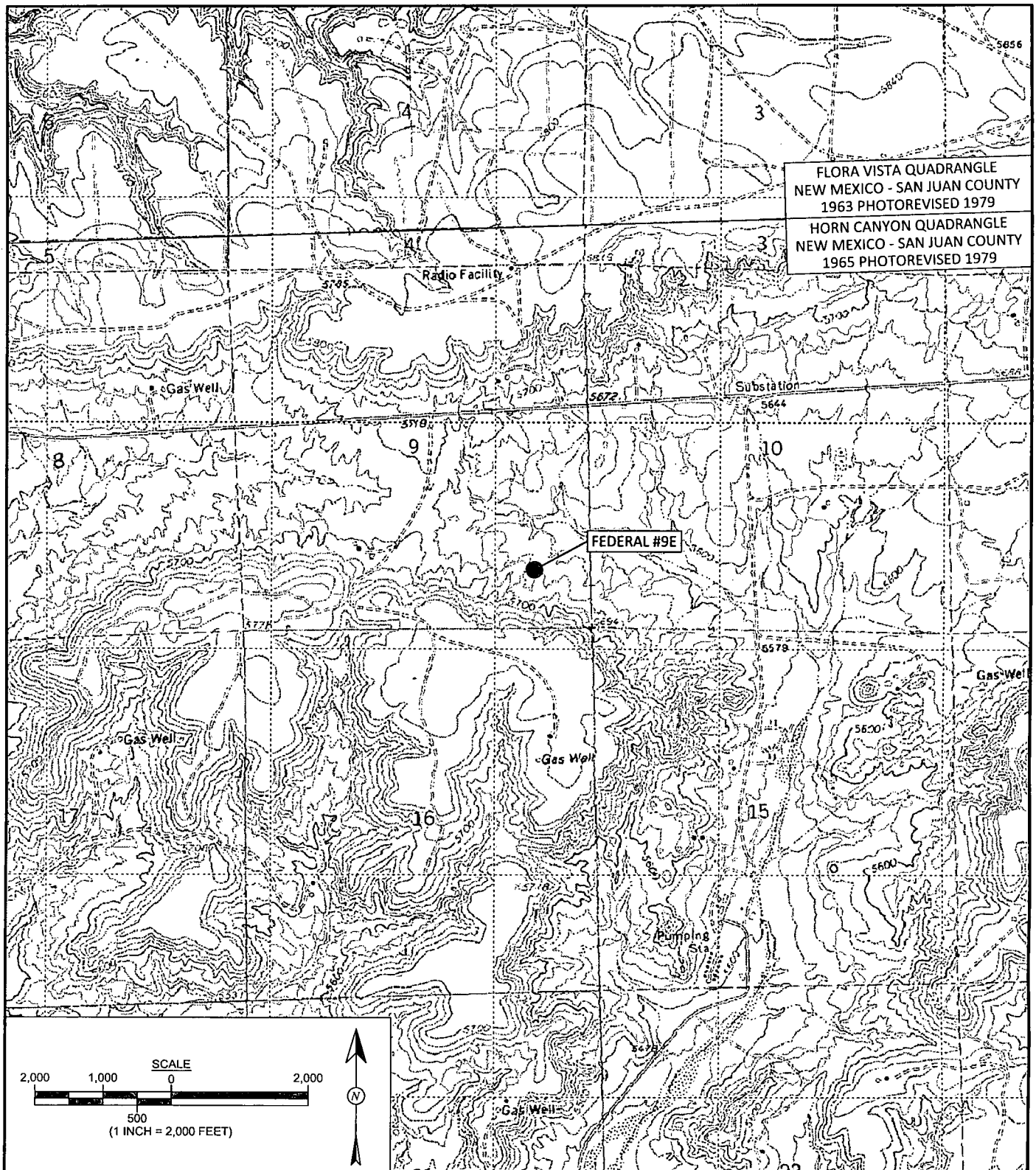


Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, March 2013
- Figure 3. Initial Assessment Sample Locations and Results, March 2013
- Figure 4. Final Excavation Sample Locations and Results, June 2013
- AES Field Screening Reports (031513, 032013, and 060313)
- Hall Analytical Reports (1303647, 1303648, and 1306072)

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Assessment and Excavation Report 072613.docx



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: March 20, 2013
REVISIONS BY: C. Lameman	DATE REVISED: March 20, 2013
CHECKED BY: D. Watson	DATE CHECKED: March 20, 2013
APPROVED BY: E. McNally	DATE APPROVED: March 20, 2013

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

ConocoPhillips
FEDERAL #9E
SE $\frac{1}{4}$ SE $\frac{1}{4}$, SECTION 9, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO
N36.73618, W108.09796

LEGEND

SAMPLE LOCATIONS

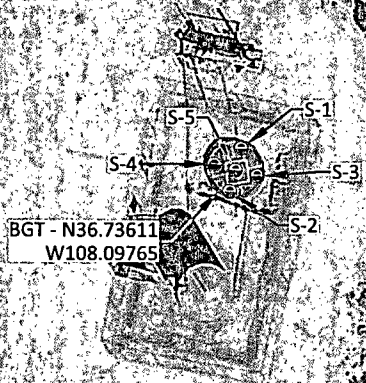
Field Screening Results				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	3/15/13	0.0	1,270	NA
S-2	3/15/13	0.0	145	NA
S-3	3/15/13	0.0	2,690	NA
S-4	3/15/13	0.0	1,910	NA
S-5	3/15/13	0.0	331	NA
SC-1	3/15/13	0.0	NA	60
North Wall	3/15/13	0.0	30.2	NA
North Base	3/15/13	1,428	644	NA

SC-1 IS A 5-POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5. NA - NOT ANALYZED

Laboratory Analytical Results						
Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		0.2	50	100		250
SC-1	3/15/13	<0.050	<0.25	<5.0	300	<30
North Base	3/15/13	<0.050	6.1	180	980	NA
SAMPLE WAS ANALYZED PER EPA METHOD 8260B, 8015B AND 300.0.						

SAMPLE WAS ANALYZED PER EPA METHOD 8260B, 8015B AND 300.0.

FEDERAL #9E WELL MONUMENT



SCALE

40

20

0

40

10

(1 INCH = 40 FEET)

AERIAL SOURCE: © 2012 PICTOMETRY INTERNATIONAL CORP. ONLINE, AERIAL DATE: MARCH 17, 2011

AES

Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	March 20, 2013
REVISIONS BY:	DATE REVISED:
C. Lameman	March 20, 2013
CHECKED BY:	DATE CHECKED:
D. Watson	March 20, 2013
APPROVED BY:	DATE APPROVED:
E. McNally	March 20, 2013

FIGURE 2

AERIAL SITE MAP

BELOW GRADE TANK CLOSURE

MARCH 2013

ConocoPhillips

FEDERAL #9E

SE¼ SE¼, SECTION 9, T29N, R12W

SAN JUAN COUNTY, NEW MEXICO

N36.73618, W108.09796

FEDERAL #9E WELL MONUMENT

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
TH-1	3/20/13	1.5	0.6	NA
		7	1.2	<20.0
TH-2	3/20/13	5.5	3.3	26.9
		7	4,562	>3,500
TH-3	3/20/13	4.5	4.7	26.9
		8	5.5	30.5
TH-4	3/20/13	4.5	5.6	25.6
		8	6.8	51.4
TH-5	3/20/13	4.5	3.9	31.8
		8	4.0	33.0
TH-6	3/20/13	4.5	11.9	41.6
		9	5.4	45.2
NA - NOT ANALYZED				

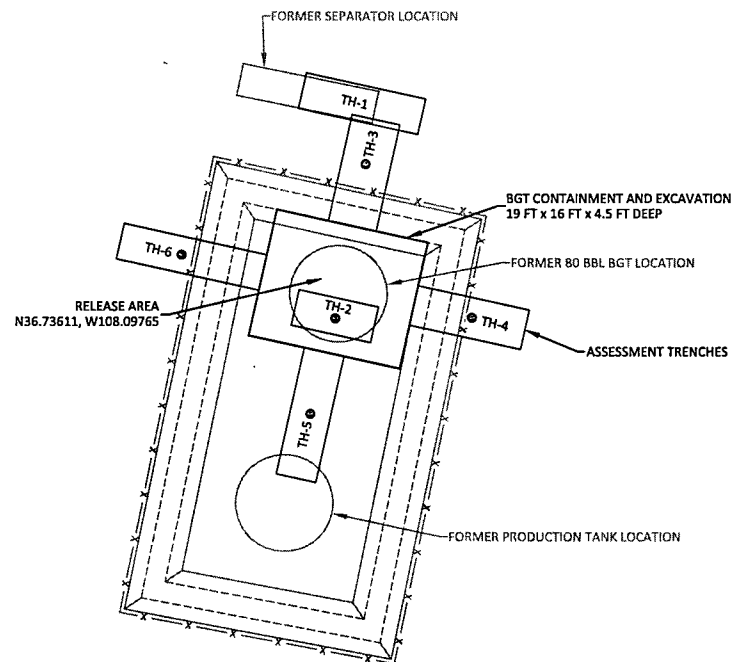


FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS MARCH 2013
 ConocoPhillips
 FEDERAL #9E
 SE¼ SE¼, SECTION 9, T29N, R12W
 SAN JUAN COUNTY, NEW MEXICO
 N36.73618, W108.09796

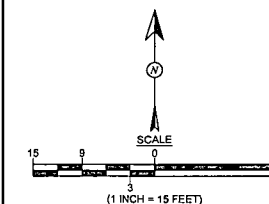


Animas Environmental Services, LLC

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REVISIONS BY: C. Lameman	DATE REVISED: March 20, 2013
CHECKED BY: D. Watson	DATE CHECKED: March 20, 2013
APPROVED BY: E. McNally	DATE APPROVED: March 20, 2013

LEGEND

- SAMPLE LOCATIONS
- FORMER SECONDARY CONTAINMENT BERM



FEDERAL #9E WELL MONUMENT

SERVICE ROAD

FORMER SEPARATOR LOCATION

EXCAVATION AREA
24.5 FT x 22.5 FT x 7 FT TO SANDSTONE

RELEASE AREA
N36.73611, W108.09765

FORMER 80 BBL BGT LOCATION

FORMER PRODUCTION TANK LOCATION

METER HOUSE

Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	100
SC-2	6/3/13	1 to 7	0.9	57.8
SC-3	6/3/13	1 to 7	0.8	44.0
SC-4	6/3/13	1 to 7	1.3	81.2
SC-5	6/3/13	1 to 7	1.0	52.3
SC-6	6/3/13	7	792	1,870

ALL SAMPLES WERE COMPOSITE SAMPLES.

Laboratory Analytical Results						
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)
NMOCD ACTION LEVEL			10	50	100	
SC-6	6/3/13	7	<0.12	4.3	130	710

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

FIGURE 4

**FINAL EXCAVATION
SAMPLE LOCATIONS AND RESULTS
JUNE 2013**
ConocoPhillips
FEDERAL #9E
SE¼ SE¼, SECTION 9, T29N, R12W
SAN JUAN COUNTY, NEW MEXICO
N36.73618, W108.09796

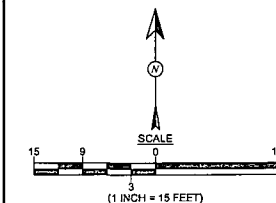


Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: June 4, 2013
REVISIONS BY: C. Lameman	DATE REVISED: June 4, 2013
CHECKED BY: D. Watson	DATE CHECKED: June 4, 2013
APPROVED BY: E. McNally	DATE APPROVED: June 4, 2013

LEGEND

- SAMPLE LOCATIONS
- ===== FORMER 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
970-403-3084

Client: ConocoPhillips

Project Location: Federal #9E

Date: 3/15/2013

Matrix: Soil

Sample ID	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	3/15/2013	11:12	North	0.0	NA	11:56	1,270	20.0	1	HMW
S-2	3/15/2013	11:14	South	0.0	NA	11:59	145	20.0	1	HMW
S-3	3/15/2013	11:17	East	0.0	NA	12:01	2,690	20.0	1	HMW
S-4	3/15/2013	11:19	West	0.0	NA	12:04	1,910	20.0	1	HMW
S-5	3/15/2013	11:22	Center	0.0	NA	12:06	331	20.0	1	HMW
SC-1	3/15/2013	11:28	Composite	0.0	60	Not Analyzed for TPH.				
North Base	3/15/2013	13:32	North Base	1,428	NA	13:48	644	20.0	1	HMW
North Wall	3/15/2013	13:34	North Wall	0.0	NA	13:51	30.2	20.0	1	HMW

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.

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:

Heather M. Woods

AES Field Screening Report



Animas Environmental Services, LLC

www.animasenvironmental.com

Client: ConocoPhillips

Project Location: Federal #9E

Date: 3/20/2013

Matrix: Soil

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

Durango, Colorado
970-403-3084

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 @ 1.5'	3/20/2013	7:45	0.6	Not Analyzed for TPH				
TH-1 @ 7'	3/20/2013	7:50	1.2	8:17	11.6	20.0	1	HMW
TH-2 @ 5.5'	3/20/2013	7:58	3.3	10:04	26.9	20.0	1	HMW
TH-2 @ 7'	3/20/2013	8:07	4,562	8:25	3,620	40.0	1	HMW
TH-3 @ 4.5'	3/20/2013	8:20	4.7	10:07	26.9	20.0	1	HMW
TH-3 @ 8'	3/20/2013	8:25	5.5	8:45	30.5	20.0	1	HMW
TH-4 @ 4.5'	3/20/2013	8:40	5.6	9:04	25.6	20.0	1	HMW
TH-4 @ 8'	3/20/2013	8:45	6.8	9:12	51.4	20.0	1	HMW
TH-5 @ 4.5'	3/20/2013	8:55	3.9	10:10	31.8	20.0	1	HMW
TH-5 @ 8'	3/20/2013	9:02	4.0	9:20	33.0	20.0	1	HMW
TH-6 @ 4.5'	3/20/2013	9:30	11.9	10:12	41.6	20.0	1	HMW
TH-6 @ 9'	3/20/2013	9:36	5.4	9:57	45.2	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
970-403-3084

Client: ConocoPhillips

Project Location: Federal #9E

Date: 6/3/2013

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-2	6/3/2013	13:30	North Wall	0.9	14:00	57.8	20.0	1	SL
SC-3	6/3/2013	13:22	South Wall	0.8	14:03	44.0	20.0	1	SL
SC-4	6/3/2013	13:25	East Wall	1.3	14:07	81.2	20.0	1	SL
SC-5	6/3/2013	13:23	West Wall	1.0	14:10	52.3	20.0	1	SL
SC-6	6/3/2013	13:27	Base	792	14:13	1,870	40.0	1	SL

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*

March 25, 2013

Debbie Watson

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

RE: CoP Federal #9E

OrderNo.: 1303647

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/16/2013 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", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: NORTH BASE

Project: CoP Federal #9E

Collection Date: 3/15/2013 1:32:00 PM

Lab ID: 1303647-001

Matrix: SOIL

Received Date: 3/16/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	980	10		mg/Kg	1	3/18/2013 9:57:22 AM
Surr: DNOP	137	72.4-120	S	%REC	1	3/18/2013 9:57:22 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	3/18/2013 11:18:22 AM
Toluene	ND	0.050		mg/Kg	1	3/18/2013 11:18:22 AM
Ethylbenzene	0.57	0.050		mg/Kg	1	3/18/2013 11:18:22 AM
Xylenes, Total	5.5	0.10		mg/Kg	1	3/18/2013 11:18:22 AM
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%REC	1	3/18/2013 11:18:22 AM
Surr: 4-Bromofluorobenzene	147	70-130	S	%REC	1	3/18/2013 11:18:22 AM
Surr: Dibromofluoromethane	96.4	70-130		%REC	1	3/18/2013 11:18:22 AM
Surr: Toluene-d8	99.4	70-130		%REC	1	3/18/2013 11:18:22 AM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	180	5.0		mg/Kg	1	3/18/2013 11:18:22 AM
Surr: BFB	147	70-130	S	%REC	1	3/18/2013 11:18:22 AM

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: STOCKPILE

Project: CoP Federal #9E

Collection Date: 3/15/2013 1:36:00 PM

Lab ID: 1303647-002

Matrix: SOIL

Received Date: 3/16/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: TMG
Mercury	ND	0.033		mg/kg	1	3/19/2013 10:06:18 AM
EPA METHOD 6010B: SOIL METALS						Analyst: JLF
Arsenic	ND	5.0		mg/Kg	2	3/20/2013 7:39:21 AM
Barium	11	0.20		mg/Kg	2	3/20/2013 7:39:21 AM
Cadmium	ND	0.20		mg/Kg	2	3/20/2013 7:39:21 AM
Chromium	2.8	0.60		mg/Kg	2	3/20/2013 7:39:21 AM
Lead	7.7	0.50		mg/Kg	2	3/20/2013 7:39:21 AM
Selenium	ND	5.0		mg/Kg	2	3/20/2013 7:39:21 AM
Silver	ND	0.50		mg/Kg	2	3/20/2013 7:39:21 AM

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#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: MB-6531	SampType: MBLK	TestCode: EPA Method 8015B: Diesel Range Organics								
Client ID: PBS	Batch ID: 6531	RunNo: 9236								
Prep Date: 3/18/2013	Analysis Date: 3/18/2013	SeqNo: 262767 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	11		10.00		110	72.4	120			

Sample ID: LCS-6531	SampType: LCS	TestCode: EPA Method 8015B: Diesel Range Organics								
Client ID: LCSS	Batch ID: 6531	RunNo: 9236								
Prep Date: 3/18/2013	Analysis Date: 3/18/2013	SeqNo: 262769 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	47.4	122			
Surr: DNOP	5.4		5.000		107	72.4	120			

Sample ID: MB-6507	SampType: MBLK	TestCode: EPA Method 8015B: Diesel Range Organics								
Client ID: PBS	Batch ID: 6507	RunNo: 9236								
Prep Date: 3/15/2013	Analysis Date: 3/18/2013	SeqNo: 263399 Units: %REC								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	72.4	120			

Sample ID: LCS-6507	SampType: LCS	TestCode: EPA Method 8015B: Diesel Range Organics								
Client ID: LCSS	Batch ID: 6507	RunNo: 9236								
Prep Date: 3/15/2013	Analysis Date: 3/18/2013	SeqNo: 263753 Units: %REC								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		112	72.4	120			

Sample ID: 1303598-005AMS	SampType: MS	TestCode: EPA Method 8015B: Diesel Range Organics								
Client ID: BatchQC	Batch ID: 6507	RunNo: 9236								
Prep Date: 3/15/2013	Analysis Date: 3/18/2013	SeqNo: 263769 Units: %REC								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		4.902		112	72.4	120			

Sample ID: 1303598-005AMSD	SampType: MSD	TestCode: EPA Method 8015B: Diesel Range Organics								
Client ID: BatchQC	Batch ID: 6507	RunNo: 9236								
Prep Date: 3/15/2013	Analysis Date: 3/18/2013	SeqNo: 263771 Units: %REC								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.081		111	72.4	120	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: 5ml-rb	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263924			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: 1,2-Dichloroethane-d4	0.43		0.5000		85.9	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.6	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: LCSS	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263925			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	107	70	130			
Toluene	0.98	0.050	1.000	0	98.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.9	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.8	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID: 1303648-001a ms	SampType: MS	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263931			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.050	0.6173	0	105	67.5	124			
Toluene	0.66	0.050	0.6173	0	108	55.8	142			
Surr: 1,2-Dichloroethane-d4	0.28		0.3086		89.6	70	130			
Surr: 4-Bromofluorobenzene	0.28		0.3086		89.7	70	130			
Surr: Dibromofluoromethane	0.30		0.3086		96.9	70	130			
Surr: Toluene-d8	0.31		0.3086		102	70	130			

Sample ID: 1303648-001a msd	SampType: MSD	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263932			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.050	0.6173	0	101	67.5	124	4.00	20	
Toluene	0.64	0.050	0.6173	0	103	55.8	142	4.12	20	
Surr: 1,2-Dichloroethane-d4	0.28		0.3086		89.3	70	130	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: 1303648-001a msd		SampType: MSD		TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: BatchQC		Batch ID: R9251		RunNo: 9251						
Prep Date:		Analysis Date: 3/18/2013		SeqNo: 263932		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.27		0.3086		87.3	70	130	0	0	
Surr: Dibromofluoromethane	0.29		0.3086		93.9	70	130	0	0	
Surr: Toluene-d8	0.31		0.3086		101	70	130	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
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#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: MB-6536	SampType: MBLK	TestCode: EPA Method 7471: Mercury
Client ID: PBS	Batch ID: 6536	RunNo: 9314
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265641 Units: mg/kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Mercury	ND	0.033

Sample ID: LCS-6536	SampType: LCS	TestCode: EPA Method 7471: Mercury
Client ID: LCSS	Batch ID: 6536	RunNo: 9314
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265642 Units: mg/kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Mercury	0.16	0.033 0.1667 0.003127 93.8 80 120

Sample ID: 1303602-001AMS	SampType: MS	TestCode: EPA Method 7471: Mercury
Client ID: BatchQC	Batch ID: 6536	RunNo: 9314
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265644 Units: mg/kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Mercury	0.15	0.033 0.1660 0.01373 80.2 75 125

Sample ID: 1303602-001AMSD	SampType: MSD	TestCode: EPA Method 7471: Mercury
Client ID: BatchQC	Batch ID: 6536	RunNo: 9314
Prep Date: 3/18/2013	Analysis Date: 3/19/2013	SeqNo: 265645 Units: mg/kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Mercury	0.14	0.033 0.1653 0.01373 78.6 75 125 2.20 20

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#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: MB-6535	SampType: MBLK	TestCode: EPA Method 6010B: Soil Metals								
Client ID: PBS	Batch ID: 6535	RunNo: 9300								
Prep Date: 3/18/2013	Analysis Date: 3/20/2013	SeqNo: 265117 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Barium	ND	0.10								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Lead	ND	0.25								
Selenium	ND	2.5								
Silver	ND	0.25								

Sample ID: LCS-6535	SampType: LCS	TestCode: EPA Method 6010B: Soil Metals								
Client ID: LCSS	Batch ID: 6535	RunNo: 9300								
Prep Date: 3/18/2013	Analysis Date: 3/20/2013	SeqNo: 265118 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	29	2.5	25.00	0	117	80	120			
Barium	26	0.10	25.00	0	105	80	120			
Cadmium	28	0.10	25.00	0	112	80	120			
Chromium	26	0.30	25.00	0	106	80	120			
Lead	27	0.25	25.00	0	108	80	120			
Selenium	35	2.5	25.00	0	140	80	120			S
Silver	5.3	0.25	5.000	0	107	80	120			

Sample ID: 1303647-002AMS	SampType: MS	TestCode: EPA Method 6010B: Soil Metals								
Client ID: STOCKPILE	Batch ID: 6535	RunNo: 9300								
Prep Date: 3/18/2013	Analysis Date: 3/20/2013	SeqNo: 265125 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	31	5.0	24.14	4.977	106	75	125			
Barium	25	0.20	24.14	10.77	57.9	75	125			S
Cadmium	23	0.20	24.14	0	93.7	75	125			
Chromium	27	0.60	24.14	2.758	101	75	125			
Lead	26	0.50	24.14	7.659	77.5	75	125			
Selenium	23	5.0	24.14	0	97.0	75	125			
Silver	4.4	0.50	4.827	0	90.4	75	125			

Sample ID: 1303647-002AMSD	SampType: MSD	TestCode: EPA Method 6010B: Soil Metals								
Client ID: STOCKPILE	Batch ID: 6535	RunNo: 9300								
Prep Date: 3/18/2013	Analysis Date: 3/20/2013	SeqNo: 265126 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	31	5.0	24.74	4.977	107	75	125	2.21	20	
Barium	20	0.20	24.74	10.77	38.7	75	125	19.5	20	S

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#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: 1303647-002AMSD	SampType: MSD		TestCode: EPA Method 6010B: Soil Metals							
Client ID: STOCKPILE	Batch ID: 6535		RunNo: 9300							
Prep Date: 3/18/2013	Analysis Date: 3/20/2013		SeqNo: 265126		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Cadmium	23	0.20	24.74	0	92.2	75	125	0.874	20	
Chromium	27	0.60	24.74	2.758	97.8	75	125	0.925	20	
Lead	29	0.50	24.74	7.659	84.8	75	125	8.23	20	
Selenium	24	5.0	24.74	0	96.0	75	125	1.38	20	
Silver	4.5	0.50	4.947	0	90.7	75	125	2.83	20	

Sample ID: MB-6535		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals						
Client ID: PBS		Batch ID: 6535		RunNo: 9328						
Prep Date: 3/18/2013		Analysis Date: 3/21/2013		SeqNo: 265923		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	ND	2.5								

Sample ID: LCS-6535		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals						
Client ID: LCSS		Batch ID: 6535		RunNo: 9328						
Prep Date: 3/18/2013		Analysis Date: 3/21/2013		SeqNo: 265925		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	30	2.5	25.00	0	120	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303647

25-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID: 5ml-rb	SampType: MBLK	TestCode: EPA Method 8015B Mod: Gasoline Range								
Client ID: PBS	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263851 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	540		500.0		108	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015B Mod: Gasoline Range								
Client ID: LCSS	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263858 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	103	74.6	137			
Surr: BFB	480		500.0		95.1	70	130			

Sample ID: 1303648-001A MS	SampType: MS	TestCode: EPA Method 8015B Mod: Gasoline Range								
Client ID: BatchQC	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263867 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	15.43	2.062	92.4	50.3	148			
Surr: BFB	240		308.6		79.0	70	130			

Sample ID: 1303648-001A MSD	SampType: MSD	TestCode: EPA Method 8015B Mod: Gasoline Range								
Client ID: BatchQC	Batch ID: R9251	RunNo: 9251								
Prep Date:	Analysis Date: 3/18/2013	SeqNo: 263869 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.43	2.062	85.2	50.3	148	7.13	20	
Surr: BFB	270		308.6		87.2	70	130	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	Animas Environmental	Work Order Number:	1303647
Received by/date:	AF 03/16/13		
Logged By:	Anne Thorne	3/16/2013 10:30:00 AM	Anne Thorne
Completed By:	Anne Thorne	3/18/2013	Anne Thorne
Reviewed By:	AF 03/18/13		

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 $>0^{\circ}\text{C}$ 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:
Client: <u>Antmas Environmental</u>	<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush <u>Same Day and ASAP</u>
<u>Services</u>	Project Name: <u>CoP Federal #9E</u>	
Mailing Address: <u>624 E Comanche St.</u>	Project #: <u></u>	
<u>Farminington NM 87401</u>	Project Manager: <u>D. Watson</u>	
Phone #: <u>505-564-2281</u>	Sampler: <u>FW / CL</u>	
email or Fax#: <u></u>	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
QA/QC Package:	Sample Temperature: <u>27.7°C</u>	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		
Accreditation		
<input type="checkbox"/> NELAP <input type="checkbox"/> Other <u></u>		
<input type="checkbox"/> EDD (Type) <u></u>		

☐ Standard ☒ Rush *Same Day and ASAP*

CoP Federal #9E

Project Manager:

Once ☒ Yes ☐ No

Sample Temperature

Preservative Type	Concentration (%)	Storage Time (Days)	Microbial Growth (log CFU/g)	pH Change	Taste Score	Color Change
Sodium Benzoate	0.1	7	8.5	-0.1	4.2	Light Yellow
Sodium Benzoate	0.2	14	9.2	-0.2	4.5	Light Orange
Sodium Benzoate	0.3	21	9.8	-0.3	4.8	Orange
Sodium Benzoate	0.4	28	10.5	-0.4	5.1	Dark Orange
Sodium Benzoate	0.5	35	11.2	-0.5	5.4	Brownish
Sodium Benzoate	0.6	42	11.8	-0.6	5.7	Dark Brown
Sodium Benzoate	0.7	49	12.5	-0.7	6.0	Blackish
Sodium Benzoate	0.8	56	13.2	-0.8	6.3	Dark Grey
Sodium Benzoate	0.9	63	13.8	-0.9	6.6	Black
Sodium Benzoate	1.0	70	14.5	-1.0	6.9	Dark Green
Sodium Benzoate	1.1	77	15.2	-1.1	7.2	Greenish
Sodium Benzoate	1.2	84	15.8	-1.2	7.5	Yellow-Green
Sodium Benzoate	1.3	91	16.5	-1.3	7.8	Light Green
Sodium Benzoate	1.4	98	17.2	-1.4	8.1	Green
Sodium Benzoate	1.5	105	17.8	-1.5	8.4	Dark Green
Sodium Benzoate	1.6	112	18.5	-1.6	8.7	Blackish Green
Sodium Benzoate	1.7	119	19.2	-1.7	9.0	Dark Black
Sodium Benzoate	1.8	126	19.8	-1.8	9.3	Greyish
Sodium Benzoate	1.9	133	20.5	-1.9	9.6	Dark Grey
Sodium Benzoate	2.0	140	21.2	-2.0	9.9	Black
Sodium Benzoate	2.1	147	21.8	-2.1	10.2	Dark Green
Sodium Benzoate	2.2	154	22.5	-2.2	10.5	Greenish
Sodium Benzoate	2.3	161	23.2	-2.3	10.8	Yellow-Green
Sodium Benzoate	2.4	168	23.8	-2.4	11.1	Light Green
Sodium Benzoate	2.5	175	24.5	-2.5	11.4	Green
Sodium Benzoate	2.6	182	25.2	-2.6	11.7	Dark Green
Sodium Benzoate	2.7	189	25.8	-2.7	12.0	Blackish Green
Sodium Benzoate	2.8	196	26.5	-2.8	12.3	Dark Black
Sodium Benzoate	2.9	203	27.2	-2.9	12.6	Greyish
Sodium Benzoate	3.0	210	27.8	-3.0	12.9	Dark Grey
Sodium Benzoate	3.1	217	28.5	-3.1	13.2	Black
Sodium Benzoate	3.2	224	29.2	-3.2	13.5	Dark Green
Sodium Benzoate	3.3	231	29.8	-3.3	13.8	Greenish
Sodium Benzoate	3.4	238	30.5	-3.4	14.1	Yellow-Green
Sodium Benzoate	3.5	245	31.2	-3.5	14.4	Light Green
Sodium Benzoate	3.6	252	31.8	-3.6	14.7	Green
Sodium Benzoate	3.7	259	32.5	-3.7	15.0	Dark Green
Sodium Benzoate	3.8	266	33.2	-3.8	15.3	Blackish Green
Sodium Benzoate	3.9	273	33.8	-3.9	15.6	Dark Black
Sodium Benzoate	4.0	280	34.5	-4.0	15.9	Greyish
Sodium Benzoate	4.1	287	35.2	-4.1	16.2	Dark Grey
Sodium Benzoate	4.2	294	35.8	-4.2	16.5	Black
Sodium Benzoate	4.3	301	36.5	-4.3	16.8	Dark Green
Sodium Benzoate	4.4	308	37.2	-4.4	17.1	Greenish
Sodium Benzoate	4.5	315	37.8	-4.5	17.4	Yellow-Green
Sodium Benzoate	4.6	322	38.5	-4.6	17.7	Light Green
Sodium Benzoate	4.7	329	39.2	-4.7	18.0	Green
Sodium Benzoate	4.8	336	39.8	-4.8	18.3	Dark Green
Sodium Benzoate	4.9	343	40.5	-4.9	18.6	Blackish Green
Sodium Benzoate	5.0	350	41.2	-5.0	18.9	Dark Black
Sodium Benzoate	5.1	357	41.8	-5.1	19.2	Greyish
Sodium Benzoate	5.2	364	42.5	-5.2	19.5	Dark Grey
Sodium Benzoate	5.3	371	43.2	-5.3	19.8	Black
Sodium Benzoate	5.4	378	43.8	-5.4	20.1	Dark Green
Sodium Benzoate	5.5	385	44.5	-5.5	20.4	Greenish
Sodium Benzoate	5.6	392	45.2	-5.6	20.7	Yellow-Green
Sodium Benzoate						

HEALING

130314

BTEX + ~~PAHs~~ (8021)

BTEX + MTBE + TPH (Gas only)

TPH 8015B (GRO / DRO / ~~PH~~)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

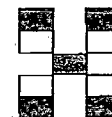
8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

•

Air Bubbles (Y or N)



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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*

March 20, 2013

Debbie Watson

Animas Environmental Services

624 East Comanche

Farmington, NM 87401

TEL: (505) 486-4071

FAX

RE: CoP Federal #9E

OrderNo.: 1303648

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/16/2013 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", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1303648

Date Reported: 3/20/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-1

Project: CoP Federal #9E

Collection Date: 3/15/2013 11:28:00 AM

Lab ID: 1303648-001

Matrix: SOIL

Received Date: 3/16/2013 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: MMD
Diesel Range Organics (DRO)	300	98		mg/Kg	10	3/18/2013 10:19:14 AM
Surr: DNOP	0	72.4-120	S	%REC	10	3/18/2013 10:19:14 AM
EPA METHOD 300.0: ANIONS						Analyst: JRR
Chloride	ND	30		mg/Kg	20	3/18/2013 11:20:32 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: RAA
Benzene	ND	0.050		mg/Kg	1	3/18/2013 11:46:38 AM
Toluene	ND	0.050		mg/Kg	1	3/18/2013 11:46:38 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/18/2013 11:46:38 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/18/2013 11:46:38 AM
Surr: 1,2-Dichloroethane-d4	85.5	70-130		%REC	1	3/18/2013 11:46:38 AM
Surr: 4-Bromofluorobenzene	81.8	70-130		%REC	1	3/18/2013 11:46:38 AM
Surr: Dibromofluoromethane	90.9	70-130		%REC	1	3/18/2013 11:46:38 AM
Surr: Toluene-d8	103	70-130		%REC	1	3/18/2013 11:46:38 AM
EPA METHOD 8015B MOD: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/18/2013 11:46:38 AM
Surr: BFB	81.8	70-130		%REC	1	3/18/2013 11:46:38 AM

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#: 1303648

20-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID	MB-6533	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	6533	RunNo:	9265					
Prep Date:	3/18/2013	Analysis Date:	3/18/2013	SeqNo:	264222	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-6533	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	6533	RunNo:	9265					
Prep Date:	3/18/2013	Analysis Date:	3/18/2013	SeqNo:	264223	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	90	110			

Sample ID	1303583-001AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	6533	RunNo:	9265					
Prep Date:	3/18/2013	Analysis Date:	3/18/2013	SeqNo:	264235	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0.9810	86.0	64.4	117			

Sample ID	1303583-001AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	BatchQC	Batch ID:	6533	RunNo:	9265					
Prep Date:	3/18/2013	Analysis Date:	3/18/2013	SeqNo:	264236	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0.9810	85.6	64.4	117	0.385	20	

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#: 1303648

20-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID	MB-6531	SampType:	MBLK	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	PBS	Batch ID:	6531	RunNo:	9236					
Prep Date:	3/18/2013	Analysis Date:	3/18/2013	SeqNo:	262767	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	11		10.00		110	72.4	120			

Sample ID	LCS-6531	SampType:	LCS	TestCode:	EPA Method 8015B: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	6531	RunNo:	9236					
Prep Date:	3/18/2013	Analysis Date:	3/18/2013	SeqNo:	262769	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	47.4	122			
Surr: DNOP	5.4		5.000		107	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
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#: 1303648

20-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263924	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: 1,2-Dichloroethane-d4	0.43		0.5000		85.9	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.6	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID	100ng lcs	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263925	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	107	70	130			
Toluene	0.98	0.050	1.000	0	98.0	80	120			
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.9	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.8	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID	1303648-001a ms	SampType:	MS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-1	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263931	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.65	0.050	0.6173	0	105	67.5	124			
Toluene	0.66	0.050	0.6173	0	108	55.8	142			
Surr: 1,2-Dichloroethane-d4	0.28		0.3086		89.6	70	130			
Surr: 4-Bromofluorobenzene	0.28		0.3086		89.7	70	130			
Surr: Dibromofluoromethane	0.30		0.3086		96.9	70	130			
Surr: Toluene-d8	0.31		0.3086		102	70	130			

Sample ID	1303648-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-1	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263932	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.050	0.6173	0	101	67.5	124	4.00	20	
Toluene	0.64	0.050	0.6173	0	103	55.8	142	4.12	20	
Surr: 1,2-Dichloroethane-d4	0.28		0.3086		89.3	70	130	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303648

20-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID	1303648-001a msd	SampType:	MSD	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SC-1	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263932	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.27		0.3086		87.3	70	130	0	0	
Surr: Dibromofluoromethane	0.29		0.3086		93.9	70	130	0	0	
Surr: Toluene-d8	0.31		0.3086		101	70	130	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303648

20-Mar-13

Client: Animas Environmental Services

Project: CoP Federal #9E

Sample ID	5ml-rb	SampType:	MBLK	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263851	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	540		500.0		108	70	130			

Sample ID	2.5ug gro lcs	SampType:	LCS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263858	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	103	74.6	137			
Surr: BFB	480		500.0		95.1	70	130			

Sample ID	1303648-001A MS	SampType:	MS	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	SC-1	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263867	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	15.43	2.062	92.4	50.3	148			
Surr: BFB	240		308.6		79.0	70	130			

Sample ID	1303648-001A MSD	SampType:	MSD	TestCode:	EPA Method 8015B Mod: Gasoline Range					
Client ID:	SC-1	Batch ID:	R9251	RunNo:	9251					
Prep Date:		Analysis Date:	3/18/2013	SeqNo:	263869	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	5.0	15.43	2.062	85.2	50.3	148	7.13	20	
Surr: BFB	270		308.6		87.2	70	130	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 |
| RL Reporting Detection Limit | S Spike Recovery outside accepted recovery limits |



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 1303648
Received by/date: *AF 03/16/13*
Logged By: Anne Thorne 3/16/2013 10:30:00 AM *Ann Thorne*
Completed By: Anne Thorne 3/18/2013 *Ann Thorne*
Reviewed By: *AT 03/18/13*

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 $>0^{\circ}\text{C}$ 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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			





18. Additional remarks:

19. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:	
Client: <u>Animas Environmental Services</u>		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> <u>Rush Same Day</u>	
Mailing Address: <u>1624 E Comanche St</u> <u>Farmington NM 87401</u>		Project Name: <u>COP Federal #9E</u>	
Phone #: <u>505-564-2281</u>		Project #:	
email or Fax#:		Project Manager:	
QA/QC Package:		<u>D. Watson</u>	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: <u>HW / CL</u>	
Accreditation		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____		Sample Temperature: <u>3/</u>	
<input type="checkbox"/> EDD (Type) _____			

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
-15-13	1717			3/15/13	1717
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/15/13	1740			3/16/13	10:30

☐ Standard ☒ Rush Same Day

Project Name: CSD Federal #9E

Project #:

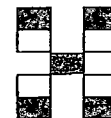
Project Manager:
D. Watson

Sampler: HW / CL

On Ice: ☒ Yes ☐ No

Sample Temperature: 37/

Container Type and #	Preservative Type	HEAL No.
Medial Kit 4b2 jar	Medial —	1303648 -001



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

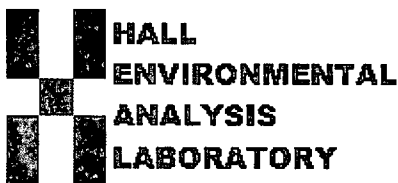
4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

	X	BTEX + MTBE + TPH (8021)
		BTEX + MTBE + TPH (Gas only)
	X	TPH 8015B (GRO / DRO / MRO)
		TPH (Method 418.1)
		EDB (Method 504.1)
		PAH's (8310 or 8270 SIMS)
		RCRA 8 Metals
		Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
		8081 Pesticides / 8082 PCB's
		8260B (VOA)
		8270 (Semi-VOA)
	X	Chlorides (300.0)
		Air Bubbles (Y or N)

Remarks: Bill to CmcocPhillips
WD: 10335500 Supervisor: Carlos Rey
Activity: C200 ~~was~~ ordered by: Jess Henson
User ID: BENALE



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

June 06, 2013

Debbie Watson

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

RE: CoP Federal #9E

OrderNo.: 1306072

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/4/2013 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. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

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 1306072

Date Reported: 6/6/2013

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: ~~SC-5~~ SC-6 lrc

Project: CoP Federal #9E

Collection Date: 6/3/2013 1:27:00 PM

Lab ID: 1306072-001

Matrix: MEOH (SOIL)

Received Date: 6/4/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: GSA
Diesel Range Organics (DRO)	710	10		mg/Kg	1	6/4/2013 12:16:06 PM	7743
Surr: DNOP	100	63-147		%REC	1	6/4/2013 12:16:06 PM	7743
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	130	25		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Surr: BFB	339	80-120	S	%REC	5	6/4/2013 11:41:01 AM	R11057
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.12		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Toluene	ND	0.25		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Ethylbenzene	0.33	0.25		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Xylenes, Total	4.0	0.50		mg/Kg	5	6/4/2013 11:41:01 AM	R11057
Surr: 4-Bromofluorobenzene	116	80-120		%REC	5	6/4/2013 11:41:01 AM	R11057

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID	MB-7743	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	7743	RunNo:	11054					
Prep Date:	6/4/2013	Analysis Date:	6/4/2013	SeqNo:	312839	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	9.9		10.00		99.1	63	147			

Sample ID	LCS-7743	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	7743	RunNo:	11054					
Prep Date:	6/4/2013	Analysis Date:	6/4/2013	SeqNo:	312840	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.9	77.1	128			
Surr: DNOP	5.0		5.000		99.3	63	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID	MB-7716	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	R11057	RunNo:	11057					
Prep Date:	6/3/2013	Analysis Date:	6/4/2013	SeqNo:	313364	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	940		1000		94.3	80	120			

Sample ID	LCS-7716	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	R11057	RunNo:	11057					
Prep Date:	6/3/2013	Analysis Date:	6/4/2013	SeqNo:	313365	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	107	62.6	136			
Surr: BFB	1000		1000		104	80	120			

Sample ID	MB-7716	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	7716	RunNo:	11057					
Prep Date:	6/3/2013	Analysis Date:	6/4/2013	SeqNo:	313385	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.3	80	120			

Sample ID	LCS-7716	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	7716	RunNo:	11057					
Prep Date:	6/3/2013	Analysis Date:	6/4/2013	SeqNo:	313386	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	80	120			

Sample ID	1305C16-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC	Batch ID:	7716	RunNo:	11057					
Prep Date:	6/3/2013	Analysis Date:	6/4/2013	SeqNo:	313389	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		958.8		105	80	120			

Sample ID	1305C16-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	BatchQC	Batch ID:	7716	RunNo:	11057					
Prep Date:	6/3/2013	Analysis Date:	6/4/2013	SeqNo:	313390	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		960.6		107	80	120	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 |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID	MB-7716		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	R11057		RunNo:	11057			
Prep Date:	6/3/2013		Analysis Date:	6/4/2013		SeqNo:	313400		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	1.0		1.000		99.9	80	120			

Sample ID	LCS-7716		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	R11057		RunNo:	11057			
Prep Date:	6/3/2013		Analysis Date:	6/4/2013		SeqNo:	313401		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	MB-7716		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	7716		RunNo:	11057			
Prep Date:	6/3/2013		Analysis Date:	6/4/2013		SeqNo:	313419		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID	LCS-7716		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	7716		RunNo:	11057			
Prep Date:	6/3/2013		Analysis Date:	6/4/2013		SeqNo:	313420		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	1305C20-001AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	BatchQC		Batch ID:	7716		RunNo:	11057			
Prep Date:	6/3/2013		Analysis Date:	6/4/2013		SeqNo:	313427		Units: %REC	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306072

06-Jun-13

Client: Animas Environmental

Project: CoP Federal #9E

Sample ID	1305C20-001AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles				
Client ID:	BatchQC		Batch ID:	7716		RunNo:	11057				
Prep Date:	6/3/2013		Analysis Date:	6/4/2013		SeqNo:	313428		Units: %REC		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120	0	0		

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1306072

RcptNo: 1

Received by/date:

AG

06/04/13

Logged By: Michelle Garcia

6/4/2013 10:00:00 AM

Michelle Garcia

Completed By: Michelle Garcia

6/4/2013 10:07:14 AM

Michelle Garcia

Reviewed By:

AG

06/04/13

Chain of Custody

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

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (If applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

[illegible]

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.