

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

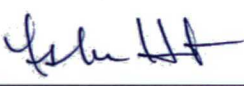

Name of Company <b>ConocoPhillips Company</b>	Contact <b>Lisa Hunter</b>	
Address <b>3401 East 30<sup>th</sup> St, Farmington, NM</b>	Telephone No. <b>(505) 258-1607</b>	
Facility Name: <b>Schlosser WN Federal 3E</b>	Facility Type: <b>Gas Well</b>	
Surface Owner <b>BLM</b>	Mineral Owner <b>BLM (SF-078673)</b>	API No. <b>3004524120</b>

**LOCATION OF RELEASE**

Unit Letter <b>O</b>	Section <b>27</b>	Township <b>28N</b>	Range <b>11W</b>	Feet from the <b>985</b>	North/South Line <b>South</b>	Feet from the <b>1530</b>	East/West Line <b>East</b>	County <b>San Juan</b>
Latitude <b>36.62885</b> Longitude <b>-107.98763</b>						<b>OIL CONS. DIV DIST. 3</b>		

**NATURE OF RELEASE**

**NOV 18 2016**

Type of Release <b>Hydrocarbon (Historic)</b>	Volume of Release <b>Unknown</b>	Volume Recovered <b>None</b>
Source of Release <b>Below Grade Tank (BGT) - North Tank</b>	Date and Hour of Occurrence <b>Unknown</b>	Date and Hour of Discovery <b>May 18, 2016</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? <b>N/A</b>	
By Whom? <b>N/A</b>	Date and Hour <b>N/A</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. <b>N/A</b>	
If a Watercourse was Impacted, Describe Fully.* <b>N/A</b>		
Describe Cause of Problem and Remedial Action Taken.* <b>Below-Grade Tank Closure activities with samples taken resulting in constituents exceeded standards outlined by 19.15.17.13 NMAC.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>The below grade tank (BGT) field sample results were below regulatory standard by USEPA method 418.1 for TPH and Organic Vapors. However, 418.1 TPH lab results were above said requirements, indicating a possible release. Method 8015 was not analyzed in the initial lab sample. BGT was resampled (06-07-16) and witnessed by OCD Cory Smith for method 8015 and lab results were below NMOCD below action levels for BGT requirements. No further action required. The final report is attached for review.</b>		
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: 		<b>OIL CONSERVATION DIVISION</b>
Printed Name: <b>Lisa Hunter</b>		Approved by Environmental Specialist: 
Title: <b>Field Environmental Specialist</b>	Approval Date: <b>12/27/2016</b>	Expiration Date:
E-mail Address: <b>Lisa.Hunter@cop.com</b>	Conditions of Approval: <b>NCS1613938856</b>	Attached <input type="checkbox"/>
Date: <b>November 16, 2016</b>	Phone: <b>(505) 326-9786</b>	

\* Attach Additional Sheets If Necessary

22



November 10, 2016

Lisa Hunter  
ConocoPhillips  
San Juan Business Unit  
(505) 326-9786

Via electronic mail to: [SJBUE-Team@ConocoPhillips.com](mailto:SJBUE-Team@ConocoPhillips.com)

**RE: North Below Grade Tank Closure Report  
Schlosser WN Federal 3E  
San Juan County, New Mexico**

Dear Ms. Hunter:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure at ConocoPhillips (COPC) Schlosser WN Federal 3E, located in San Juan County, New Mexico. Tank removal was completed on May 18, 2016, by COPC contractors while AES was on site.

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## **1.0 Site Information**

### **1.1 Location**

Site Name – Schlosser WN Federal 3E

Legal Description – SW¼ SE¼, Section 27, T28N, R11W, San Juan County, New Mexico

Well Latitude/Longitude – N36.62870 and W107.98748, respectively

BGT Latitude/Longitude – N36.62885 and W107.98763, respectively

Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map, May 2016

604 W. Piñon St.  
Farmington, NM 87401  
505-564-2281

1911 Main, Ste 206  
Durango, CO 81301  
970-403-3084

[www.animasenvironmental.com](http://www.animasenvironmental.com)



## **1.2 Depth to Groundwater Determination (NMAC 19.15.17.13 Table 1)**

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) and New Mexico Office of the State Engineer (NMOSE) databases were reviewed, and depth to groundwater information could not be located. Based on elevation, topographic interpretation and visual reconnaissance, depth to groundwater is interpreted to be 50 to 100 feet below ground surface (bgs). However, in accordance with the BGT closure plan application (Form C-144) filed May 11, 2016, the most stringent sample result criteria was applied to this BGT; this criteria normally applies to sites with a depth to groundwater of 0 to 50 feet.

## **1.3 BGT Closure Assessment**

AES was initially contacted by Lisa Hunter of COPC on May 17, 2016, and on May 18, 2016, Corwin Lameman of AES mobilized to the location. AES personnel collected one 5-point soil sample composited from four perimeter samples and one center sample of the North BGT footprint from below the BGT liner.

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## **2.0 Soil Sampling**

On May 18, 2016, AES personnel conducted field sampling and collected one 5-point composite (N BGT SC-1) from below the BGT. Soil was collected from approximately 0.5 feet below the former BGT. Soil sample N BGT SC-1 was field screened for volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chloride, and was submitted for confirmation laboratory analysis. In correspondence dated June 1, 2016, Cory Smith, NMOCD Representative, approved the collection of one additional sample via hand auger to be submitted for laboratory analysis of TPH. On June 7, 2016, AES personnel returned to collect a soil boring sample (SB-1) from approximately 0.5 feet below the former BGT (approximately 5.5 feet bgs). Soil sample locations are included on Figure 2.

### **2.1 Field Sampling**

#### **2.1.1 Volatile Organic Compounds**

A portion of N BGT SC-1 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 sample N BGT SC-1 was also analyzed in the field for TPH per U.S. Environmental Protection Agency (USEPA) Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was

completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1*.

### 2.1.3 Chlorides

Soil sample N BGT SC-1 was 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 composite (N BGT SC-1) and discrete (SB-1) soil samples 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 sample N BGT SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per USEPA Method 8021B;
- TPH per USEPA Method 418.1; and
- Chloride per USEPA Method 300.0.

Soil sample SB-1 was laboratory analyzed for:

- TPH as GRO/DRO/MRO per USEPA Method 8015.

## 2.3 Field and Laboratory Analytical Results

Field screening readings for VOCs via OVM were measured at 0.0 ppm in N BGT SC-1. Field TPH concentrations were reported at 65.0 mg/kg. The field chloride concentration was 60 mg/kg. Field sampling results are summarized in Table 1 and presented on Figure 2. The AES Field Sampling Report is attached.

Table 1. Soil Field VOCs, TPH, and Chloride Results  
Schlosser WN Federal 3E – North BGT Closure, May 2016

Sample ID	Date Sampled	Depth below BGT (ft)	VOCs OVM Reading (ppm)	Field TPH* (mg/kg)	Field Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13 Table 1)			--	100	600
N. BGT SC-1	5/18/16	0.5	0.0	65.0	60

\*Analyzed per USEPA Method 418.1.



Laboratory analytical results reported benzene and total BTEX concentrations in N BGT SC-1 as less than 0.015 mg/kg and 0.135 mg/kg, respectively. TPH concentrations were reported at 180 mg/kg. The laboratory chloride concentration was reported below the laboratory detection limit of 30 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. The laboratory analytical report is attached.

Table 2. Soil Laboratory Analytical Results  
Schlosser WN Federal 3E – North BGT Closure, May and June 2016

Sample ID	Date Sampled	Depth below BGT (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-MRO (mg/kg)	Total TPH per 418.1 (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13 Table 1)			10	50		100		100	600
N BGT SC-1	5/18/16	0.5	<0.015	<0.135		NA		180	<30
SB-1	6/7/16	0.5	NA	NA	<4.7	<9.7	<48	NA	NA

NA - Not Analyzed

### 3.0 Conclusions and Recommendations

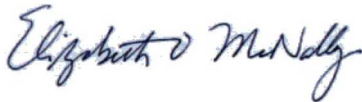
NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13 Table 1. Field TPH concentrations were below the NMOCD action level of 100 mg/kg, with a concentration reported at 65.0 mg/kg; however, laboratory analytical results for TPH per USEPA Method 418.1 in N BGT SC-1 were reported above the NMOCD action level at 180 mg/kg. Subsequent laboratory analytical results for TPH (as GRO/DRO/MRO) per USEPA Method 8015 in SB-1 were reported below detection limits and the applicable NMOCD action levels. Benzene and total BTEX concentrations were below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. Chloride concentrations in N BGT SC-1 were below the NMOCD action level of 600 mg/kg. Based on laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at Schlosser WN Federal 3E – North BGT.

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

Sincerely,



Emilee Skyles  
Geologist/Project Lead



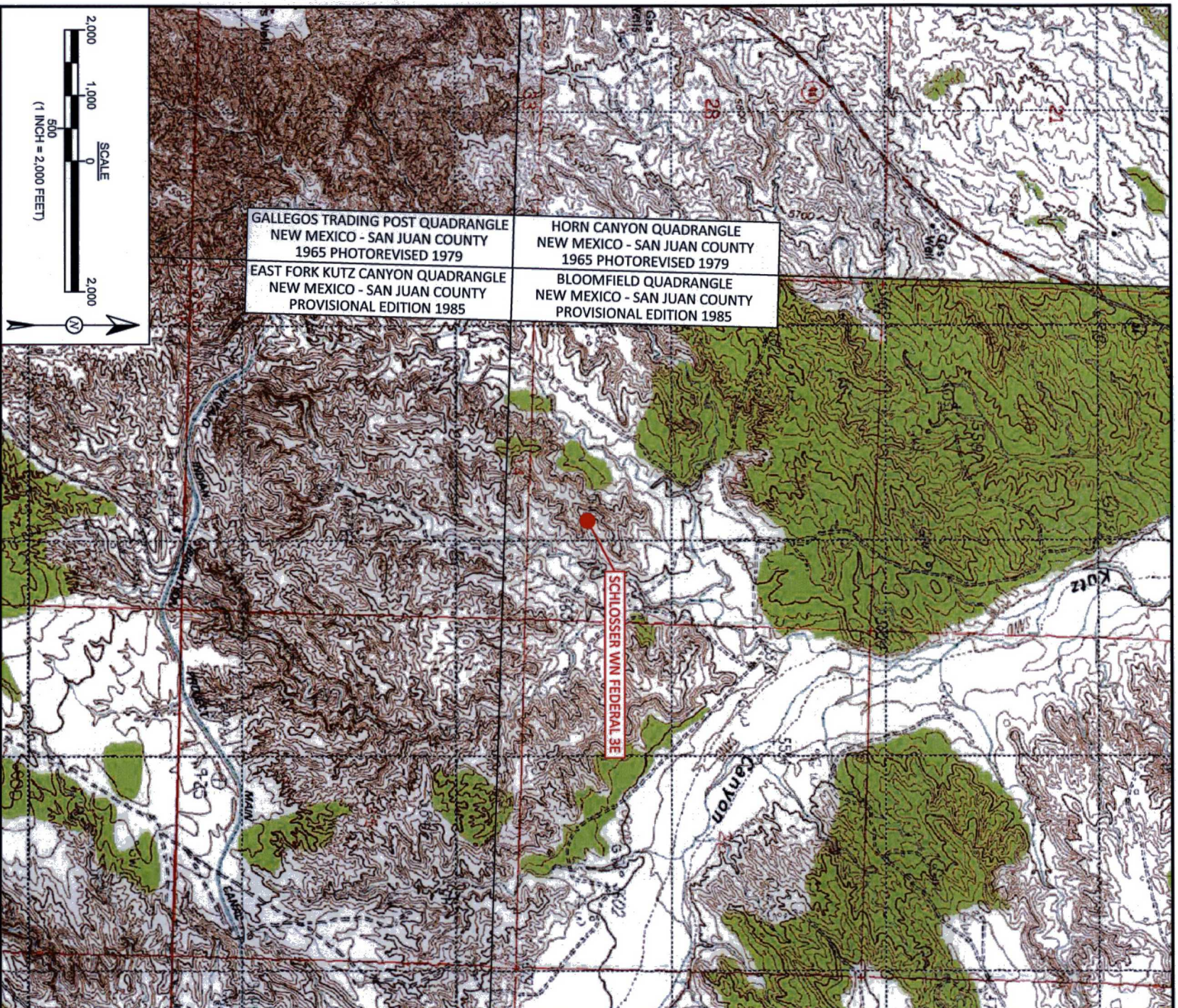
Elizabeth McNally, P.E.

Attachments:

- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Map, May 2016
- AES Field Sampling Report 051816
- Hall Analytical Report 1605888
- Hall Analytical Report 1606439

\\SVRMAIN2\Shared\Animas 2000\Dropbox (Animas Environmental)\0000 AES Server Client Projects  
Dropbox\2016 Client Projects\ConocoPhillips\Schlosser WN Federal 3E\Schlosser WN Federal 3E BGT  
Closure Report 111016 EM.docx





**animas environmental services**  
Farmington, NM • Durango, CO  
animasenvironmental.com

<b>DRAWN BY:</b>	S. Glasses	<b>DATE DRAWN:</b>	May 19, 2016
<b>REVISIONS BY:</b>	S. Glasses	<b>DATE REVISED:</b>	May 19, 2016
<b>CHECKED BY:</b>	E. Styles	<b>DATE CHECKED:</b>	November 10, 2016
<b>APPROVED BY:</b>	E. McNally	<b>DATE APPROVED:</b>	November 10, 2016

**TOPOGRAPHIC SITE LOCATION MAP**

ConocoPhillips  
SCHLOSSER WN FEDERAL 3E  
SW $\frac{1}{4}$  SE $\frac{1}{4}$ , SECTION 27, T28N, R11W  
SAN JUAN COUNTY, NEW MEXICO  
N36.62870, W107.98748



**LEGEND**

● SAMPLE LOCATIONS

**Field Sampling Results**

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
<b>NMOCD ACTION LEVEL</b>			--	100	250
N. BGT SC-1	5/18/16	0.5	0.0	64.9	60

N. BGT SC-1 IS A 5-POINT COMPOSITE SAMPLE.

**Laboratory Analytical Results**

Sample ID	Date	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - 418.1 (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	TPH - MRO (mg/kg)	Chlorides (mg/kg)
<b>NMOCD ACTION LEVEL</b>		10	50	100				600
N. BGT SC-1	5/18/16	<0.015	0.135	180	NA	NA	NA	<30
SB-1	6/7/16	NA	NA	NA	<4.7	<9.7	<48	NA

N. BGT SC-1 WAS ANALYZED PER USEPA METHOD 418.1, 8021B, AND 300.0.

SB-1 WAS ANALYZED PER USEPA METHOD 8015D. NA - NOT ANALYZED

N. BGT SC-1/SB-1

BGT - N36.62885  
W107.98763

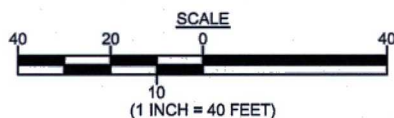
PRODUCTION TANK

SCHLOSSER WN FEDERAL 3E WELLHEAD

S. BGT SC-2

BGT - N36.62859  
W107.98774

SEPARATOR



AERIAL SOURCE: © 2015 GOOGLE EARTH PRO, AERIAL DATE: MAY 15, 2015



**animas  
environmental  
services**

Farmington, NM • Durango, CO  
animasenvironmental.com

**DRAWN BY:**

S. Glasses

**DATE DRAWN:**

May 19, 2016

**REVISIONS BY:**

S. Glasses

**DATE REVISED:**

August 15, 2016

**CHECKED BY:**

E. Skyles

**DATE CHECKED:**

August 15, 2016

**APPROVED BY:**

E. McNally

**DATE APPROVED:**

August 15, 2016

**FIGURE 2**

**AERIAL SITE MAP  
NORTH BELOW GRADE TANK CLOSURE  
MAY 2016**

ConocoPhillips  
SCHLOSSER WN FEDERAL 3E  
SW¼ SE¼, SECTION 27, T28N, R11W  
SAN JUAN COUNTY, NEW MEXICO  
N36.62870, W107.98748



# AES Field Sampling Report

Animas Environmental Services, LLC



Client: ConocoPhillips

Project Location: Schlosser WN Federal 3E

Date: 5/18/2016

Matrix: Soil

Sample ID	Collection Date	Collection Time	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
N BGT SC-1	5/18/2016	9:35	Composite	0.0	60	65.0	9:54	20.0	1	CL

DF Dilution Factor

NA Not Analyzed

PQL Practical Quantitation Limit

\*Field TPH concentrations recorded may be below PQL.

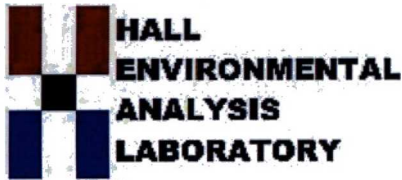
Field Chloride - Quantab Chloride Titrators or Drop Count

Titration with Silver Nitrate

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst:





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

May 25, 2016

Emilee Skyles  
Animas Environmental  
604 Pinon Street  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX

RE: COPC Schlosser WN Federal 3E

OrderNo.: 1605888

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/19/2016 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](http://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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

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 1605888

Date Reported: 5/25/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental

Client Sample ID: N BGT SC-1

Project: COPC Schlosser WN Federal 3E

Collection Date: 5/18/2016 9:35:00 AM

Lab ID: 1605888-001

Matrix: MEOH (SOIL)

Received Date: 5/19/2016 7:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 418.1: TPH</b>							Analyst: <b>TOM</b>
Petroleum Hydrocarbons, TR	180	19		mg/Kg	1	5/24/2016	25438
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	5/24/2016 12:10:10 PM	25479
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.015		mg/Kg	1	5/20/2016 12:03:18 PM	B34384
Toluene	ND	0.030		mg/Kg	1	5/20/2016 12:03:18 PM	B34384
Ethylbenzene	ND	0.030		mg/Kg	1	5/20/2016 12:03:18 PM	B34384
Xylenes, Total	ND	0.060		mg/Kg	1	5/20/2016 12:03:18 PM	B34384
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	5/20/2016 12:03:18 PM	B34384

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

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	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 Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1605888

25-May-16

**Client:** Animas Environmental  
**Project:** COPC Schlosser WN Federal 3E

Sample ID	MB-25479	SampType:	mbk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	25479	RunNo:	34455					
Prep Date:	5/24/2016	Analysis Date:	5/24/2016	SeqNo:	1062588	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-25479	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	25479	RunNo:	34455					
Prep Date:	5/24/2016	Analysis Date:	5/24/2016	SeqNo:	1062590	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | 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 Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1605888

25-May-16

**Client:** Animas Environmental  
**Project:** COPC Schlosser WN Federal 3E

Sample ID	MB-25438	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	25438	RunNo:	34441					
Prep Date:	5/23/2016	Analysis Date:	5/24/2016	SeqNo:	1061977	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-25438	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	25438	RunNo:	34441					
Prep Date:	5/23/2016	Analysis Date:	5/24/2016	SeqNo:	1061978	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	96	20	100.0	0	95.7	83.4	127			

Sample ID	LCSD-25438	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	25438	RunNo:	34441					
Prep Date:	5/23/2016	Analysis Date:	5/24/2016	SeqNo:	1061979	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	83.4	127	5.60	20	

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | 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 Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1605888

25-May-16

**Client:** Animas Environmental  
**Project:** COPC Schlosser WN Federal 3E

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	B34384	RunNo:	34384					
Prep Date:		Analysis Date:	5/20/2016	SeqNo:	1060614	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	B34384	RunNo:	34384					
Prep Date:		Analysis Date:	5/20/2016	SeqNo:	1060615	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.0	75.3	123			
Toluene	0.93	0.050	1.000	0	93.2	80	124			
Ethylbenzene	0.93	0.050	1.000	0	92.7	82.8	121			
Xylenes, Total	2.8	0.10	3.000	0	92.8	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	120			

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | 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 Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |





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: 1605888

RcptNo: 1

Received by/date:

LM 05/19/16

Logged By: Lindsay Mangin

5/19/2016 7:35:00 AM

Completed By: Lindsay Mangin

5/19/2016 9:02:49 AM

Reviewed By:

AG 05/19/16

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

17. Additional remarks:

### 18. Cooler Information

Cooler No.	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Yes			

**Chain-of-Custody Record** Turn-Around Time:

Client: Animas Environmental Services, LLC

**Mailing Address:** 604 W Pinon St.  
Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#: [eskyles@animasenvironmental.com](mailto:eskyles@animasenvironmental.com)

**QA/QC Package:**

☒ Standard ☐ Level 4 (Full Validation)

**Accreditation:**

☐ NELAP      ☐ Other \_\_\_\_\_☐ EDD (Type) \_\_\_\_\_**Turn-Around Time:**

☒ Standard ☐ Rush

Project Name:

COPC SCHLOSSER WN FEDERAL 3E

Project #:

**Project Manager:**

**E. Skyles**

**Sampler: C. Lameman**

On Ice: ☒ Yes ☐ No

Sample Temperature: 7.6

[illegible]

Date:	Time:	Relinquished by:
-------	-------	------------------

5/18/16	1754	Carlin
---------	------	--------

Date:	Time:	Relinquished by:
-------	-------	------------------

518 h. 1834 V. M. L. L. L. L.

Received by:

Mistuhade 5/18/6 1754

Received by	M	Date	Time
-------------	---	------	------

05/19/11 0735

Date	Time
------	------

5/18/16 1754

Date	Time
------	------

19/11/073

Remarks: Bill to Conoco Phillips
----------------------------------

WO # 10390486  
Supervisor: Dusty Mars  
USERID: KGARCIA  
Area: 2  
Ordered by: Lisa Hunter





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
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June 14, 2016

Emilee Skyles

Animas Environmental  
604 Pinon Street  
Farmington, NM 87401  
TEL: (505) 564-2281  
FAX

RE: COPC Schlosser WN Federal 3E

OrderNo.: 1606439

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/9/2016 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](http://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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1606439

Date Reported: 6/14/2016

**CLIENT:** Animas Environmental

**Client Sample ID:** SB-1

**Project:** COPC Schlosser WN Federal 3E

**Collection Date:** 6/7/2016 11:38:00 AM

**Lab ID:** 1606439-001

**Matrix:** SOIL

**Received Date:** 6/9/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/10/2016 6:54:51 PM	25735
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/10/2016 6:54:51 PM	25735
Surr: DNOP	107	70-130		%Rec	1	6/10/2016 6:54:51 PM	25735
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/10/2016 1:48:11 PM	25767
Surr: BFB	105	80-120		%Rec	1	6/10/2016 1:48:11 PM	25767

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	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 Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606439

14-Jun-16

**Client:** Animas Environmental  
**Project:** COPC Schlosser WN Federal 3E

Sample ID <b>MB-25735</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>25735</b>	RunNo: <b>34817</b>								
Prep Date: <b>6/8/2016</b>	Analysis Date: <b>6/10/2016</b>	SeqNo: <b>1075995</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	70	130			

Sample ID <b>LCS-25735</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>25735</b>	RunNo: <b>34817</b>								
Prep Date: <b>6/8/2016</b>	Analysis Date: <b>6/10/2016</b>	SeqNo: <b>1075996</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.7	62.6	124			
Surr: DNOP	5.0		5.000		100	70	130			

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | 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 Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1606439

14-Jun-16

Client: Animas Environmental  
Project: COPC Schlosser WN Federal 3E

Sample ID	MB-25767	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	25767	RunNo:	34832					
Prep Date:	6/9/2016	Analysis Date:	6/10/2016	SeqNo:	1075796	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		106	80	120			

Sample ID	LCS-25767	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	25767	RunNo:	34832					
Prep Date:	6/9/2016	Analysis Date:	6/10/2016	SeqNo:	1075824	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.7	80	120			
Surr: BFB	1100		1000		114	80	120			

Sample ID	1606439-001AMS	SampType:	MS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SB-1	Batch ID:	25767	RunNo:	34832					
Prep Date:	6/9/2016	Analysis Date:	6/10/2016	SeqNo:	1075888	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.7	23.72	0	108	59.3	143			
Surr: BFB	1100		948.8		118	80	120			

Sample ID	1606439-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	SB-1	Batch ID:	25767	RunNo:	34832					
Prep Date:	6/9/2016	Analysis Date:	6/10/2016	SeqNo:	1075901	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	24.83	0	106	59.3	143	2.92	20	
Surr: BFB	1200		993.0		118	80	120	0	0	

### Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | 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 Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |





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TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1606439

RcptNo: 1

Received by/date:

Logged By:

Ashley Gallegos

6/9/2016 8:00:00 AM

Completed By:

Ashley Gallegos

6/9/2016 9:06:59 AM

Reviewed By:

### 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  $6.0^{\circ}\text{C}$

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?

Yes ☒

No ☐

(Note discrepancies on chain of custody)

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?

Yes ☒

No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via:

☐

eMail

☐

Phone

☐

Fax

☐

In Person

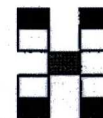
Regarding:

Client Instructions:

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

[illegible]

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Date: 6/8/10	Time: 1801	Relinquished by: 	Received by: 	Date 6/8/10	Time 1801
Date: 6/8/10	Time: 1844	Relinquished by: 	Received by: 	Date 6/8/10	Time 1800

Remarks: Bill to Conoco Phillips  
WO # 10390486  
Supervisor: Dusty Mars  
USERID: KGARCIA  
Area: 2  
Ordered by: Lisa Hunter

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 noted on the analytical report.