District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 E. 30th St., Farmington, NM 87402**	Telephone No. **505-326-9786**
Facility Name **San Juan 28-7 Unit 71**	Facility Type **Natural Gas Well**

Surface Owner **Federal**	Mineral Owner **Federal**	API No. **30039072440000**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	**34**	**28N**	**07W**	**1840'**	**South**	**1150'**	**East**	**Rio Arriba**

Latitude 36.615612 Longitude -107.56526

NATURE OF RELEASE

Type of Release **Unknown**	Volume of Release **Unknown**	Volume Recovered **100 yds**
Source of Release **Below Grade Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **05-30-2013**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **N/A**	
By Whom?	Date and Hour	RCVD AUG 8 '13 OIL CONS. DIV. DIST. 3
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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 impacted soil was found during the BGT closure for the subject well. The excavation was 21' x 16' x 8' in depth and 100 yds of contaminated soil was transported to IEI land farm and 100 yds of clean soil was backfilled in the excavation site. Analytical results were below the regulatory standards – no further action required. The soil sampling report is attached for review.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: **Lisa M. Hunter**	Approved by Environmental Specialist:
Title: **Field Environmental Specialist**	Approval Date: 8/19/2013 Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval: Attached ☐
Date: **08-05-13** Phone: **505-326-9786**	

* Attach Additional Sheets If Necessary

nJK1323157135

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

July 24, 2013

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

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

RE: Below Grade Tank Closure and Final Excavation Report
San Juan 28-7 #71
Rio Arriba County, New Mexico

Dear Ms. Hunter:

On May 30, 2013, Animas Environmental Services, LLC (AES) completed below grade tank (BGT) closure sampling and environmental clearance of the final excavation limits at the ConocoPhillips (CoP) San Juan 28-7 #71, located in Rio Arriba County, New Mexico. A historical release was discovered during BGT closure sampling at the location, and the final excavation was completed by contractors while AES was on location on May 30, 2013.

1.0 Site Information

1.1 Location

Site Name – San Juan 28-7 #71
Legal Description – NW¼ SW¼, Section 34, T28N, R7W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.61562 and W107.56590, respectively
BGT Latitude/Longitude – N36.61533 and W107.56601, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 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 February 2000 for the San Juan 28-7 #71 reported the depth to groundwater as greater than 100 feet below

ground surface (bgs). The New Mexico Office of the State Engineer (NMOSE) database was reviewed for nearby water wells, and no registered water wells were reported to be located within 1,000 feet of the location. Additionally, Google Earth and the New Mexico Tech Petroleum Recovery Research Center online mapping tool (http://ford.nmt.edu/react/project.html) were accessed to aid in the identification of downgradient surface water.

Once on site, AES personnel further assessed the ranking using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs based on an elevation differential of greater than 100 feet between the location and Carrizo Canyon. An unnamed wash which discharges to Carrizo Canyon is located approximately 55 feet south of the location. Based on this information, the location was assessed a ranking score of 20.

1.3 Assessments

AES was initially contacted by Doyle Clark, CoP representative, on May 29, 2013, and on May 30, 2013, Deborah Watson and Jesse Christopherson 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 (SC-1) was composited from the four perimeter samples and one center sample. Sample locations are shown on Figure 2.

Based on the field screening results from the BGT assessment, AES recommended an area of excavation and provided excavation guidance while onsite on May 30, 2013. AES personnel collected a total of five confirmation soil samples (SC-2 through SC-6) from the walls and base of the excavation. The final excavation measured approximately 21 feet by 16 feet by 8 feet in depth. Sample locations and final excavation extents are presented on Figure 3.

2.0 Soil Sampling

On May 30, 2013, 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. In addition, AES personnel collected five 5-point

composite (SC-2 through SC-6) soil samples from the sidewalls and base of the final excavation for confirmation field screening of VOCs and TPH.

2.1 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 sample 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 soil sample SC-1 collected for laboratory analysis was placed into a new, clean, laboratory-supplied container, which was then labeled, placed on ice, and logged onto a sample chain of custody record. The sample was maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil sample SC-1 was laboratory analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

BGT closure field screening readings for VOCs via OVM ranged from 0.1 ppm in S-1 up to 340 ppm in S-5. Field TPH concentrations ranged from 86.5 mg/kg in S-3 to 1,120 mg/kg in S-5. The field chloride concentration in SC-1 was 60 mg/kg.

Final excavation field screening results for VOCs via OVM concentrations ranged from 0.0 ppm in SC-5 to 2.3 ppm in SC-6. Field TPH concentrations ranged from 44.2 mg/kg in

SC-3 up to 87.8 mg/kg in SC-4. Field screening results are summarized in Table 1 and presented on Figure 2. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs, TPH, and Chloride Results
San Juan 28-7 #71 BGT Closure and Final Excavation, May 2013

Sample ID	*Date Sampled*	*Depth below BGT (ft)*	*VOCs OVM Reading (ppm)*	*Field TPH (mg/kg)*	*Field Chlorides (mg/kg)*
NMOCD Action Level* (NMAC 19.15.17.13E)			***100***	***100***	***250***
S-1	5/30/13	0.5	0.1	87.2	NA
S-2	5/30/13	0.5	0.2	**135**	NA
S-3	5/30/13	0.5	0.2	86.5	NA
S-4	5/30/13	0.5	0.2	**312**	NA
S-5	5/30/13	0.5	340	**1,120**	NA
SC-1	5/30/13	0.5	28.6	NA	60
SC-2	5/30/13	1 to 8	0.1	70.0	NA
SC-3	5/30/13	1 to 8	0.3	44.2	NA
SC-4	5/30/13	1 to 8	0.4	87.8	NA
SC-5	5/30/13	1 to 8	0.0	64.7	NA
SC-6	5/30/13	8	2.3	71.1	NA

NA - not analyzed
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Leaks, Spills, and Releases* (August 1993) and *NMAC 19.15.17.13E.*

Laboratory analytical results reported benzene and total BTEX concentrations in SC-1 as less than 0.046 mg/kg and less than 0.23 mg/kg, respectively. The laboratory chloride concentration was reported at 35 mg/kg. Laboratory analytical results are summarized in Table 2 and included on Figure 2. Laboratory analytical reports are attached.

Table 2. Soil Laboratory Analytical Results
San Juan 28-7 #71 BGT Closure and Final Excavation, May 2013

Sample ID	*Date Sampled*	*Depth (ft)*	*Benzene (mg/kg)*	*Total BTEX (mg/kg)*	*TPH-GRO (mg/kg)*	*TPH-DRO (mg/kg)*	*Chlorides (mg/kg)*
NMOCD Action Level (NMAC 19.15.17.13E)			***0.2***	***50***	***100***		***250***
SC-1	5/30/13	0.5	<0.046	<0.23	NA	NA	35

NA - not analyzed

3.0 Conclusions and Recommendations

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations exceeded the NMOCD action level of 100 mg/kg in three samples, S-2 (135 mg/kg), S-4 (312 mg/kg), and S-5 (1,120 mg/kg). 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 in SC-1 were below the NMOCD action level of 250 mg/kg.

Based on field screening results during the BGT closure assessment, a release was confirmed at the San Juan 28-7 #71, and AES provided excavation guidance while onsite. 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 20. Field screening results for VOCs via OVM were below the NMOCD action level of 100 ppm in each confirmation sample, with the highest concentration of 2.3 ppm reported in SC-6. Field TPH concentrations were also reported below the NMOCD action level of 100 mg/kg in each sample collected from the base and walls of the final excavation, with the highest concentration reported in SC-4 (87.8 mg/kg).

Based on excavation of petroleum hydrocarbon impacted soils, field screening, and laboratory analytical results for benzene, total BTEX, TPH, and chlorides, no further work is recommended at the San Juan 28-7 #71. 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 R. Cupps

Landrea Cupps
Environmental Scientist

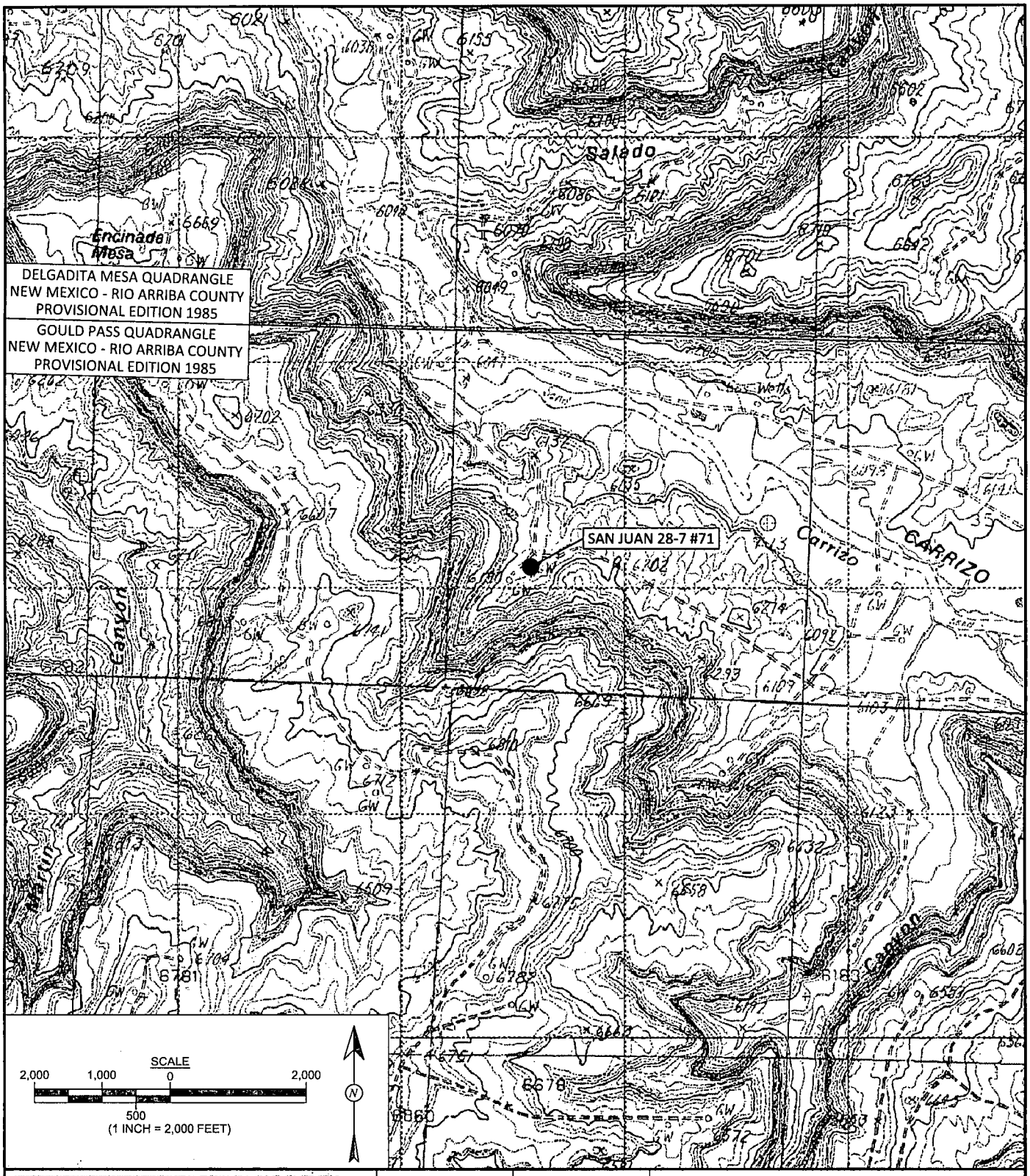
Elizabeth D McNally

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, May 2013
Figure 3. Final Excavation Sample Locations and Results, May 2013
AES Field Screening Report 053013
Hall Analytical Report 1306008

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 28-7 #71\CoP San Juan 28-7 #71 BGT Closure and Final Excavation Report 072413.docx



DRAWN BY: C. Lameman	**DATE DRAWN:** June 4, 2013	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** June 4, 2013	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: D. Watson	**DATE CHECKED:** June 4, 2013	ConocoPhillips SAN JUAN 28-7 #71 NW¼ SW¼, SECTION 34, T28N, R7W RIO ARRIBA COUNTY, NEW MEXICO N36.61562, W107.56590
APPROVED BY: E. McNally	**DATE APPROVED:** June 4, 2013	

AES
Animas Environmental Services, LLC

LEGEND

⊖ SAMPLE LOCATIONS

Field Screening Results

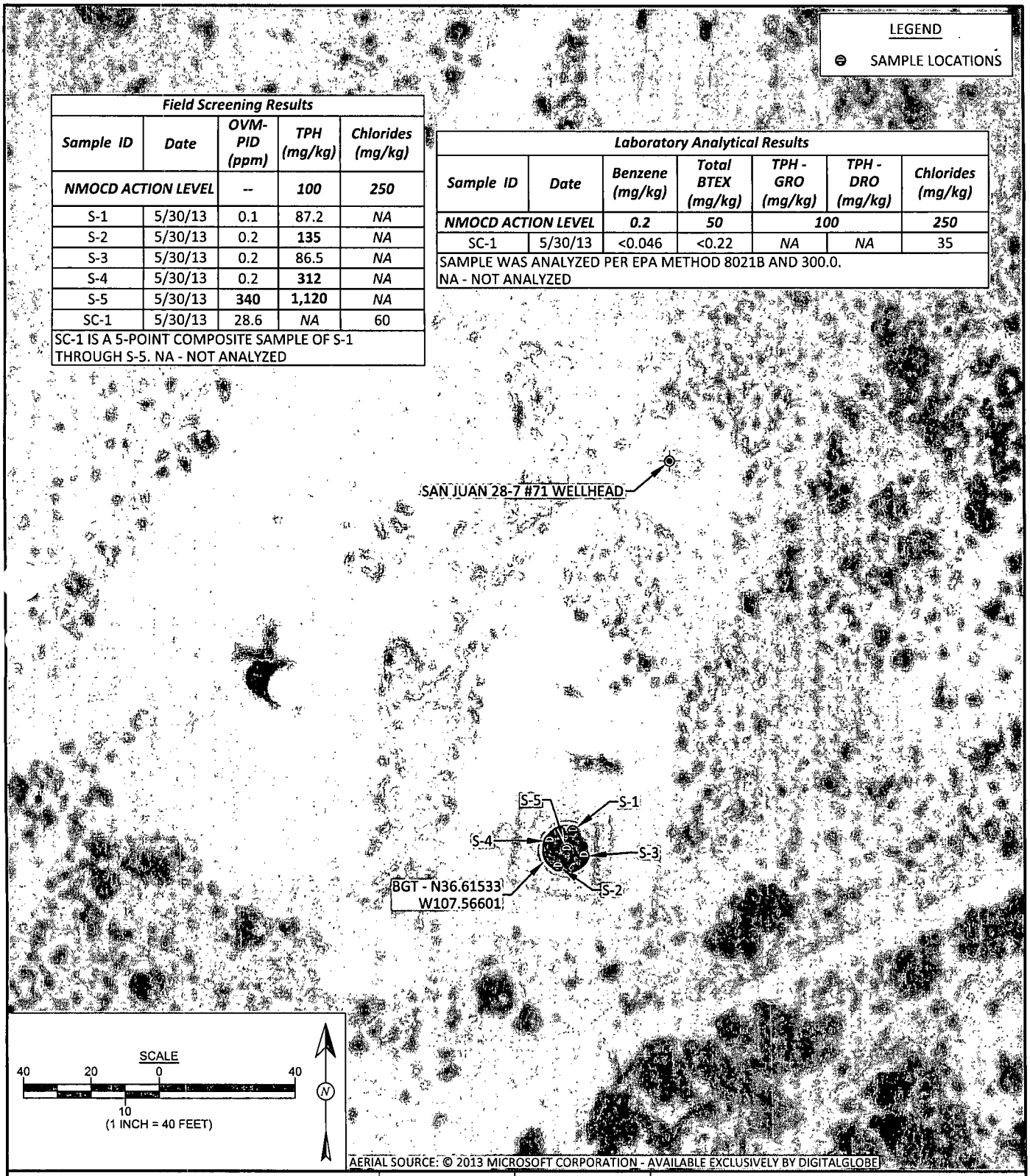
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		--	100	250
S-1	5/30/13	0.1	87.2	NA
S-2	5/30/13	0.2	**135**	NA
S-3	5/30/13	0.2	86.5	NA
S-4	5/30/13	0.2	**312**	NA
S-5	5/30/13	**340**	**1,120**	NA
SC-1	5/30/13	28.6	NA	60

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	5/30/13	<0.046	<0.22	NA	NA	35

SAMPLE WAS ANALYZED PER EPA METHOD 8021B AND 300.0.
NA - NOT ANALYZED



AERIAL SOURCE: © 2013 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE

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

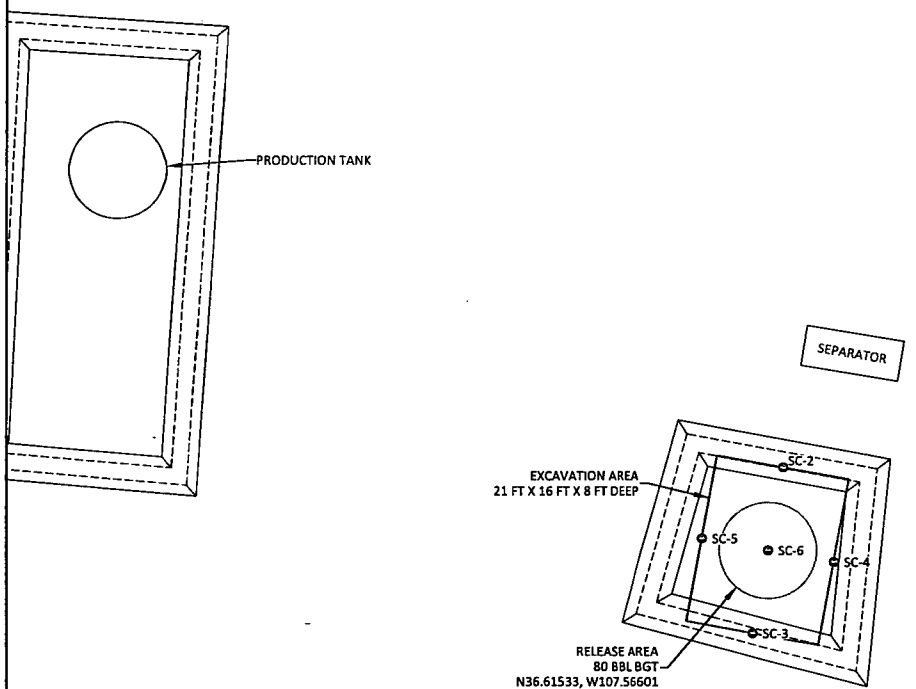
FIGURE 2

AERIAL SITE MAP
BELOW GRADE TANK CLOSURE
MAY 2013
ConocoPhillips
SAN JUAN 28-7 #71
NW¼ SW¼, SECTION 34, T28N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.61562, W107.56590

FIGURE 3

FINAL EXCAVATION SAMPLE LOCATIONS AND RESULTS MAY 2013

ConocoPhillips
SAN JUAN 28-7 #71
NW¼ SW¼, SECTION 34, T28N, R7W
RIO ARRIBA COUNTY, NEW MEXICO
N36.61562, W107.56590



Field Screening Results				
Sample ID	*Date*	*Depth (ft)*	*OVM-PID (ppm)*	*TPH (mg/kg)*
NMOCD ACTION LEVEL			*100*	*100*
SC-2	5/30/13	1 to 8	0.1	70.0
SC-3	5/30/13	1 to 8	0.3	44.2
SC-4	5/30/13	1 to 8	0.4	87.8
SC-5	5/30/13	1 to 8	0.0	64.7
SC-6	5/30/13	8	2.3	71.1
ALL SAMPLES WERE COMPOSITE SAMPLES.				

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
- SECONDARY CONTAINMENT BERM

N

SCALE
15 9 0 15
3
(1 INCH = 15 FEET)

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: San Juan 28-7 #71

Date: 5/30/2013

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	5/30/2013	10:20	BGT North	0.1	NA	11:08	87.2	20.0	1	DAW
S-2	5/30/2013	10:22	BGT South	0.2	NA	11:15	135	20.0	1	DAW
S-3	5/30/2013	10:23	BGT East	0.2	NA	11:21	86.5	20.0	1	DAW
S-4	5/30/2013	10:24	BGT West	0.2	NA	11:23	312	20.0	1	DAW
S-5	5/30/2013	10:25	BGT Center	340	NA	11:26	1,120	20.0	1	DAW
SC-1	5/30/2013	10:35	BGT Composite	28.6	60	*Not Analyzed for TPH.*				
SC-2	5/30/2013	13:30	North Wall	0.1	NA	13:56	70.0	20.0	1	DAW
SC-3	5/30/2013	13:50	South Wall	0.3	NA	15:05	44.2	20.0	1	DAW
SC-4	5/30/2013	13:18	East Wall	0.4	NA	14:06	87.8	20.0	1	DAW
SC-5	5/30/2013	13:13	West Wall	0.0	NA	14:10	64.7	20.0	1	DAW
SC-6	5/30/2013	13:07	Excavation Base	2.3	NA	14:14	71.1	20.0	1	DAW

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

Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Deborah Watson

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

Report Finalized: 05/30/13

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

June 07, 2013

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

RE: COP San Juan 28-7 #71 OrderNo.: 1306008

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/1/2013 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 qualifers 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1306008**
Date Reported: **6/7/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: COP San Juan 28-7 #71
Lab ID: 1306008-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 5/30/2013 10:35:00 AM
Received Date: 6/1/2013 11:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.046		mg/Kg	1	6/5/2013 12:05:03 AM	7716
Toluene	ND	0.046		mg/Kg	1	6/5/2013 12:05:03 AM	7716
Ethylbenzene	ND	0.046		mg/Kg	1	6/5/2013 12:05:03 AM	7716
Xylenes, Total	ND	0.092		mg/Kg	1	6/5/2013 12:05:03 AM	7716
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	6/5/2013 12:05:03 AM	7716
EPA METHOD 300.0: ANIONS						Analyst: **JRR**	
Chloride	35	15		mg/Kg	10	6/5/2013 7:38:13 PM	7759

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#: **1306008**

07-Jun-13

Client: Animas Environmental

Project: COP San Juan 28-7 #71

Sample ID	**MB-7759**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **7759**			RunNo: **11115**					
Prep Date:	**6/5/2013**	Analysis Date: **6/5/2013**			SeqNo: **314517**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-7759**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **7759**			RunNo: **11115**					
Prep Date:	**6/5/2013**	Analysis Date: **6/5/2013**			SeqNo: **314518**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Sample ID	**1305C03-001BMS**	SampType: **MS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID: **7759**			RunNo: **11115**					
Prep Date:	**6/5/2013**	Analysis Date: **6/5/2013**			SeqNo: **314520**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	7.5	15.00	2.229	81.9	58.8	109			

Sample ID	**1305C03-001BMSD**	SampType: **MSD**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**BatchQC**	Batch ID: **7759**			RunNo: **11115**					
Prep Date:	**6/5/2013**	Analysis Date: **6/5/2013**			SeqNo: **314521**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	7.5	15.00	2.229	81.3	58.8	109	0.591	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
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#: **1306008**

07-Jun-13

Client: Animas Environmental

Project: COP San Juan 28-7 #71

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: **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: **7716**	RunNo: **11057**
Prep Date: **6/3/2013**	Analysis Date: **6/4/2013**	SeqNo: **313420** 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 **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: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.047	0.9443	0.01037	107	67.2	113			
Toluene	1.0	0.047	0.9443	0.01610	108	62.1	116			
Ethylbenzene	1.0	0.047	0.9443	0	108	67.9	127			
Xylenes, Total	3.1	0.094	2.833	0.01470	108	60.6	134			
Surr: 4-Bromofluorobenzene	1.0		0.9443		106	80	120			

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: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.047	0.9443	0.01037	110	67.2	113	3.18	14.3	
Toluene	1.1	0.047	0.9443	0.01610	111	62.1	116	2.64	15.9	
Ethylbenzene	1.1	0.047	0.9443	0	113	67.9	127	4.47	14.4	
Xylenes, Total	3.2	0.094	2.833	0.01470	112	60.6	134	4.00	12.6	
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

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: 1306008 | RcptNo: 1

Received by/date: AF 06/01/13

Logged By: **Anne Thorne** 6/1/2013 11:00:00 AM Anne Thorne

Completed By: **Anne Thorne** 6/3/2013 Anne Thorne

Reviewed By: 06/03/13

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° 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: ☐ 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	4.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services LLC

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505 564 2281

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: CoP San Juan 28-7 #71

Project #:

Project Manager: D. Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 4

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1305068
5-30-13	1035	Soil	SC-1	4oz	—	-001

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	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)	300.0 Chlorides				Air Bubbles (Y or N)
X											X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5/31/13	1052	Deborah Watson	Christie Wade	5/31/13	1052
5/31/13	1135	Christ Walton		6/1/13	11:00

Remarks: Bill to ConocoPhillips
WO: 10349277
ach code TT10
User: Brenda
Area: 23
Supervisor: Mick Ferrari
ordered by: Doyle Clark

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.

Hunter, Lisa

From:	Hunter, Lisa
Sent:	Thursday, May 30, 2013 5:01 PM
To:	GRP:San Juan Project; doyleclark928@gmail.com; doyle.clark@gmail.com; Ferrari, Mitchell R
Subject:	Approval to backfill BGT San Juan 28-7 Unit 71

HSE approves the back fill of the San Juan 28-7 Unit 71 BGT excavation based on field results.

Onsite Supervisor: Doyle Clark

If you have any questions/concerns please feel free to contact me.

Thanks!

Lisa Hunter
Field Environmental Specialist
ConocoPhillips Company
5525 Hwy 64 - 500 Bldg., 214-04
P O Box 4289
Lisa.Hunter@ConocoPhillips.com
Office: 505.326.9786
Cell: 505.258.1607

Hunter, Lisa

From: Deborah Watson <dywatson@animasenvironmental.com>
Sent: Tuesday, June 04, 2013 12:28 PM
To: Hunter, Lisa
Subject: [EXTERNAL]Field results San Juan 28-7 #71

Lisa,

Sorry for the delay:

Field results for the BGT closure at the San Juan 28-7 #71 are as follows:

Sample ID	OVM (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
S-1	0.1	87.2	------
S-2	0.2	135	-------
S-3	0.2	86.5	-------
S-4	0.2	312.3	-------
S-5	340	1120	-------
SC-1	28.6	-------	60

Final Excavation results are as follows:

Sample ID	Sample Location	OVM (ppm)	TPH (mg/kg)
SC-2	North	0.1	70.0
SC-3	South	0.3	44.2
SC-4	East	0.4	87.8
SC-5	West	0.0	64.7
SC-6	Base	2.3	71.1

Site rank is 20. Wash less than 50 ft from location.

Sample SC-1 was submitted for chlorides—no rush.

Thank you,

Debbie

Deborah Watson

Project Manager
Animas Environmental Services, LLC
624 E. Comanche
Farmington, NM 87401
office: (505) 258-4278
cell: (505) 486-4071
main office: (505) 564-2281
fax: (505) 324-2022
dywatson@animasenvironmental.com

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