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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: **Burlington Resources, a Wholly owned Subsidiary of ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th Street, Farmington, NM**	Telephone No. **505-326-9786**
Facility Name **San Juan 27-4 Unit 38N**	Facility Type **Gas Well**

Surface Owner **Forest**	Mineral Owner **Federal**	API No. **3003927633**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	**6**	**27N**	**4W**	**40'**	**South**	**2350'**	**West**	**Rio Arriba**

Latitude 36.59488 **Longitude** -107.29214

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **Produced Water 13.41 BBLs**	Volume Recovered **15 Gal**
Source of Release **Production Tank**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **03-14-2013; 11:30 AM**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

RCVD MAY 10 '13
OIL CONS. DIV.
DIST. 3

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Production tank developed a small leak due to corrosion causing the release of 13.41 BBLs of Produced Water. 15 gallons were recovered. Spill as contained within Berm.

Describe Area Affected and Cleanup Action Taken.*
ConocoPhillips will replace the tank and assess the soils to determine further action, if needed. **03/31/13 Soils assessed and laboratory analytical results were below NMOCD action levels. No further remediation required. 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 Approved by Environmental Specialist:	
Printed Name: **Lisa Hunter**		
Title: **Field Environmental Specialist**	Approval Date: 11/8/2013	Expiration Date:
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval:	Attached ☐
Date: **May 9, 2013** Phone: **505-326-9786**		

* Attach Additional Sheets If Necessary

nJR1331251612

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

April 10, 2013

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

RE: Initial Release Assessment Report
San Juan 27-4 #38N
Rio Arriba County, New Mexico

Dear Ms. Hunter:

On March 21, 2012, Animas Environmental Services, LLC (AES) completed an initial release assessment at the ConocoPhillips (CoP) San Juan 27-4 #38N, located in Rio Arriba County, New Mexico. The reported release consisted of approximately 13.4 barrels (bbls) of produced water from a production tank at the location, of which 15 gallons were recovered.

1.0 Site Information

1.1 Location

Location - SE¼ SW¼, Section 6, T27N, R4W, Rio Arriba County, New Mexico
Well Head Latitude/Longitude - N36.59494 and W107.29279, respectively
Release Location Latitude/Longitude – N36.59517 and W107.29298, respectively
Land Jurisdiction – U.S. Forest Service
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 Cathodic Protection Report dated February 1997 for the San Juan 27-4 #24 and #38 located approximately 2,000 to 2,200 feet to the northeast at a similar elevation to the release location 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. An unnamed wash is located approximately 440 feet east of the location and drains to Tecolote Canyon. Based on this information, the location was assessed a ranking score of 10 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 Assessments

AES was initially contacted by Lisa Hunter of CoP on March 19, 2013, and on March 21, 2013, Heather Woods and Corwin Lameman of AES completed the release assessment field work. The assessment included collection and field screening of four soil samples from two soil borings (SB-1 and SB-2). Additionally, a 5-point composite sample (SC-1) was collected from the release area for laboratory analysis. Sample locations are presented on Figure 3.

2.0 Soil Sampling

A total of four soil samples (SB-1 and SB-2) were collected during the assessment. All soil samples were field screened for volatile organic compounds (VOCs) and select samples were analyzed for total petroleum hydrocarbons (TPH). A composite sample (SC-1) collected from the release area during the initial assessment was submitted for laboratory analysis.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 Total Petroleum Hydrocarbons

Field TPH samples were analyzed per USEPA Method 418.1 using a Buck Scientific Model HC-404 Total Hydrocarbon Analyzer Infrared Spectrometer (Buck). A 3-point calibration was completed prior to conducting soil analyses. Field analytical protocol followed AES's *Standard Operating Procedure: Field Analysis Total Petroleum Hydrocarbons per EPA Method 418.1.*

2.2 Laboratory Analyses

The soil sample (SC-1) collected for laboratory analysis was placed into new, clean, laboratory-supplied containers, which were 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. The soil sample was laboratory analyzed for:

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

2.3 Field Screening and Laboratory Analytical Results

Assessment field screening readings for VOCs via OVM ranged from 3.5 ppm in SB-1 up to 10.8 ppm in SB-2. Field TPH concentrations were recorded as 28.2 mg/kg in SB-1 and 25.7 mg/kg in SB-2. Results are included below in Table 1 and on Figure 3. The AES Field Screening Report is attached.

Table 1. Soil Field Screening VOCs and TPH Results
San Juan 27-4 #38N Initial Release Assessment
March 2013

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*Field TPH (mg/kg)*
*NMOCD Action Level**			*100*	*1,000*
SB-1	3/21/13	Surface	4.1	28.2
		2	3.5	NA
SB-2	3/21/13	Surface	10.8	25.7
		2	3.9	NA

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

Laboratory analyses for SC-1 showed benzene and BTEX concentrations below the laboratory detection level of 0.047 mg/kg and 0.23 mg/kg, respectively. TPH concentrations were also below laboratory detection limits of 14.6 mg/kg and the chloride concentration was 15 mg/kg. Results are presented in Table 2 and on Figure 3. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH, and Chloride
San Juan 27-4 #38N Initial Release Assessment
March 2013

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Chloride (mg/kg)
NMOCD Action Level*			10	50	1,000		----
SC-1	3/21/13	0 to 0.5	<0.047	<0.23	<4.7	<9.9	15

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

3.0 Conclusions and Recommendations

On March 31, 2013, AES conducted a release assessment associated with a 13.41 barrel produced water release from the production tank at the San Juan 27-4 #38N. Field screening results reported concentrations below the NMOCD action levels of 100 ppm VOCs and 1,000 mg/kg TPH in all samples (SB-1 and SB-2). Laboratory analytical results also reported concentrations below the NMOCD action levels of 10 mg/kg benzene, 50 mg/kg BTEX, and 1,000 mg/kg TPH (as GRO/DRO). The chloride concentration was 15 mg/kg in SC-1.

Based on field screening and laboratory analytical results, VOCs, benzene, total BTEX, and TPH concentrations were below applicable NMOCD action levels. No additional work is recommended for the San Juan 27-4 #38N produced water release.

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

Sincerely,

Heather M. Woods

Heather M. Woods
Staff Geologist

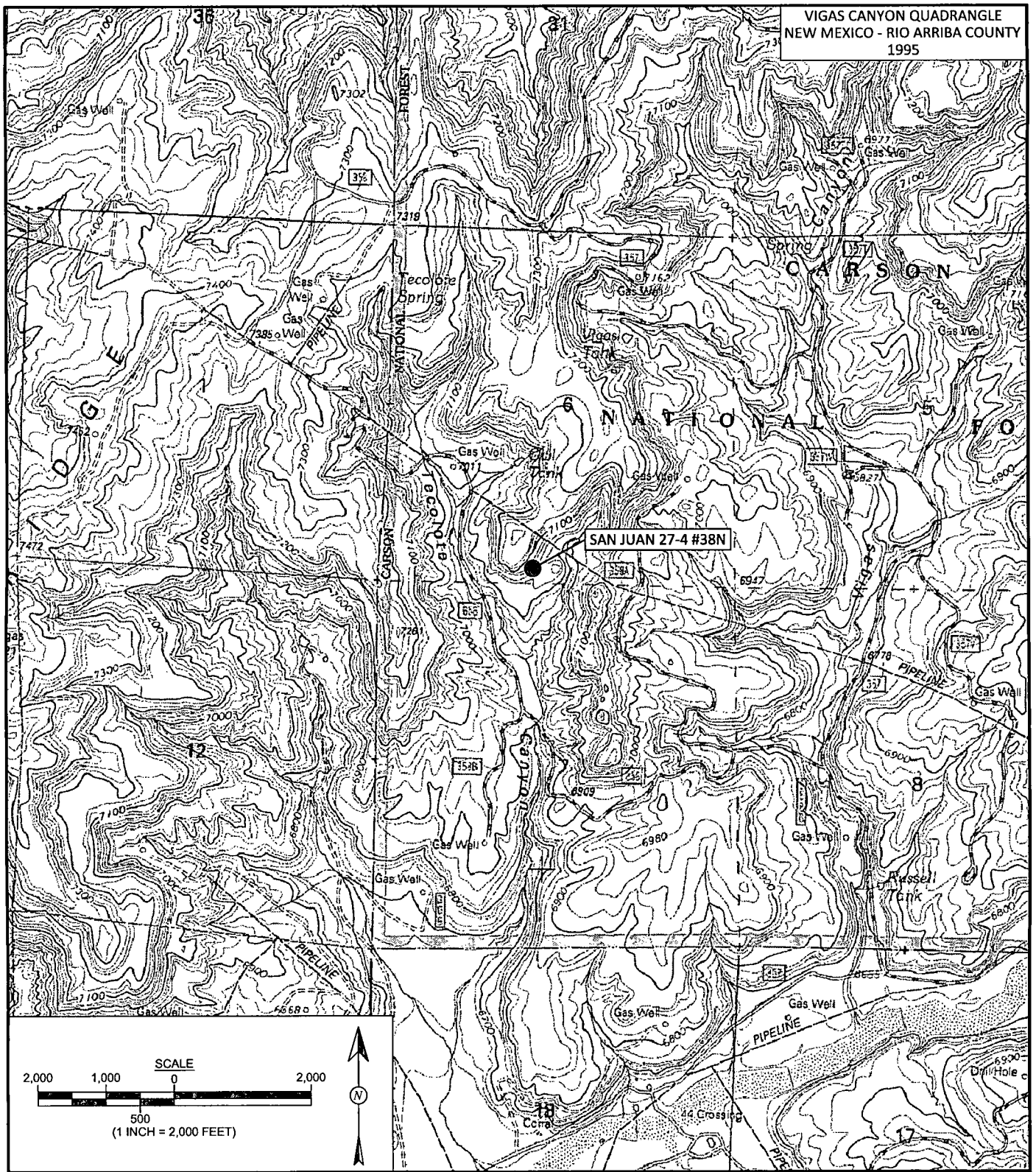
Elizabeth McNally

Elizabeth McNally, PE

Attachments:

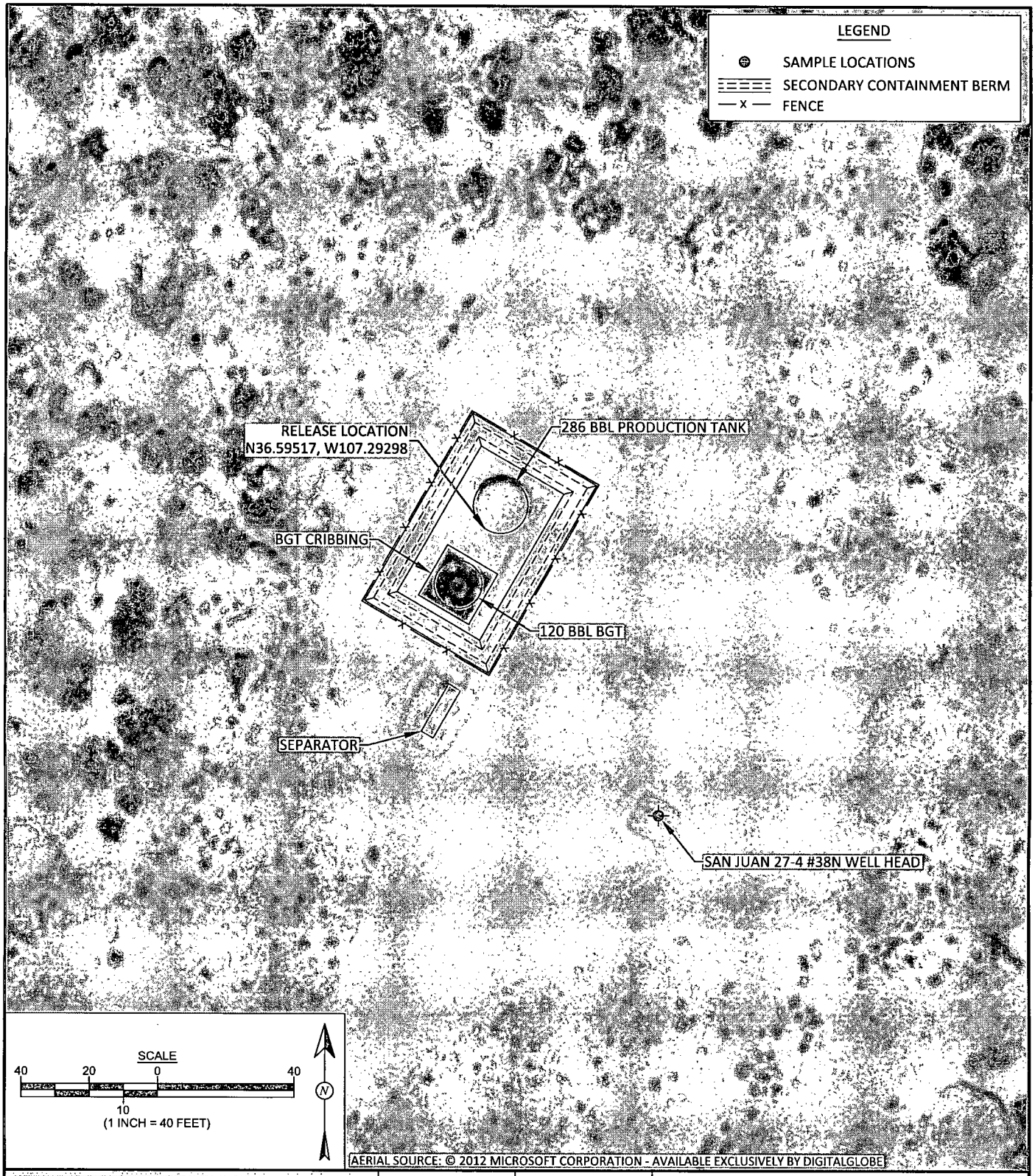
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, March 2013
Figure 3. Initial Assessment Soil Sample Locations and Results, March 2013
AES Field Screening Report 032113
Hall Laboratory Analytical Report 1303948

R:\Animas 2000\Dropbox\2013 Projects\ConocoPhillips\SJ 27-4 #38N\SJ 27-4 #38N Release Assessment Report 041013.docx



DRAWN BY: C. Lameman	**DATE DRAWN:** April 2, 2013	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** April 2, 2013	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: D. Watson	**DATE CHECKED:** April 2, 2013	ConocoPhillips SAN JUAN 27-4 #38N SE¼ SW¼, SECTION 6, T27N, R4W RIO ARRIBA COUNTY, NEW MEXICO N36.59494, W107.29279
APPROVED BY: E. McNally	**DATE APPROVED:** April 2, 2013	

Animas Environmental Services, LLC



Animas Environmental Services, LLC

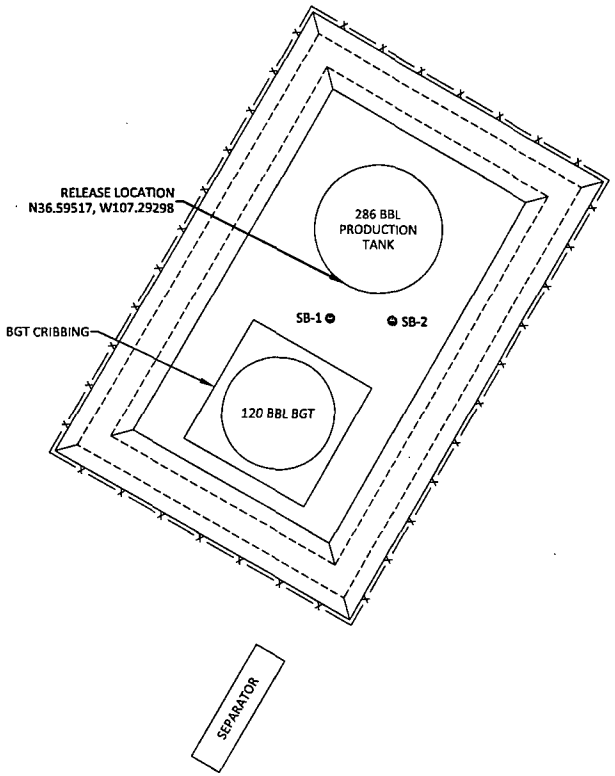
DRAWN BY: C. Lameman	**DATE DRAWN:** April 2, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** April 2, 2013
CHECKED BY: D. Watson	**DATE CHECKED:** April 2, 2013
APPROVED BY: E. McNally	**DATE APPROVED:** April 2, 2013

FIGURE 2

AERIAL SITE MAP
MARCH 2013
ConocoPhillips
SAN JUAN 27-4 #38N
SE¼ SW¼, SECTION 6, T27N, R4W
RIO ARRIBA COUNTY, NEW MEXICO
N36.59494, W107.29279

FIGURE 3

INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
MARCH 2013
ConocoPhillips
SAN JUAN 27-4 #38N
SE¼ SW¼, SECTION 6, T27N, R4W
RIO ARRIBA COUNTY, NEW MEXICO
N36.59494, W107.29279



Field Screening Results				
Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)
NMOCD ACTION LEVEL			100	1,000
SB-1	3/21/13	Surface	4.1	28.2
		2	3.5	NA
SB-2	3/21/13	Surface	10.8	25.7
		2	3.9	NA
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		10	50	1,000		--
SC-1	3/21/13	<0.047	<0.234	<4.7	<9.9	15
SC-1 IS A 5-POINT COMPOSITE COLLECTED AT THE SURFACE IN THE AREA OF THE RELEASE. SAMPLE WAS ANALYZED PER EPA METHOD 8021B, 8015B, AND 300.0.						

SAN JUAN 27-4 #38N WELL HEAD

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: April 2, 2013
REVISIONS BY: C. Lameman	DATE REVISED: April 2, 2013
CHECKED BY: D. Watson	DATE CHECKED: April 2, 2013
APPROVED BY: E. McNally	DATE APPROVED: April 2, 2013

LEGEND

- SAMPLE LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

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 27-4 #38N

Date: 3/21/2013

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Time of Sample Analysis	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ Surface	3/21/2013	15:28	4.1	15:56	28.2	20.0	1	HMW
SB-1 @ 2'	3/21/2013	15:30	3.5	*Not Analyzed for TPH*				
SB-2 @ Surface	3/21/2013	15:43	10.8	15:59	25.7	20.0	1	HMW
SB-2 @ 2'	3/21/2013		3.9	*Not Analyzed for TPH*				

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

Report Finalized: 03/21/13

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

April 01, 2013

Debbie Watson

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

RE: CoP San Juan 27-4 #38N OrderNo.: 1303948

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/23/2013 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1303948**
Date Reported: **4/1/2013**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Project: CoP San Juan 27-4 #38N
Lab ID: 1303948-001 **Matrix:** SOIL

Client Sample ID: SC-1
Collection Date: 3/21/2013 4:03:00 PM
Received Date: 3/23/2013 10:26:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **MMD**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/28/2013 11:02:44 AM
Surr: DNOP	106	72.4-120		%REC	1	3/28/2013 11:02:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/27/2013 4:06:41 PM
Surr: BFB	94.2	84-116		%REC	1	3/27/2013 4:06:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.047		mg/Kg	1	3/27/2013 4:06:41 PM
Toluene	ND	0.047		mg/Kg	1	3/27/2013 4:06:41 PM
Ethylbenzene	ND	0.047		mg/Kg	1	3/27/2013 4:06:41 PM
Xylenes, Total	ND	0.093		mg/Kg	1	3/27/2013 4:06:41 PM
Surr: 4-Bromofluorobenzene	99.5	80-120		%REC	1	3/27/2013 4:06:41 PM
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	15	7.5		mg/Kg	5	3/27/2013 10:41:45 AM

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#: **1303948**

01-Apr-13

Client: Animas Environmental Services

Project: CoP San Juan 27-4 #38N

Sample ID	**MB-6687**	SampType:	**MBLK**			TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**6687**			RunNo:	**9467**				
Prep Date:	**3/27/2013**	Analysis Date:	**3/27/2013**			SeqNo:	**270247**	Units:	**mg/Kg**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								

Sample ID	**LCS-6687**	SampType:	**LCS**			TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**6687**			RunNo:	**9467**				
Prep Date:	**3/27/2013**	Analysis Date:	**3/27/2013**			SeqNo:	**270248**	Units:	**mg/Kg**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	1.5	15.00	0	104	90	110			

Sample ID	**1303998-001AMS**	SampType:	**MS**			TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**6687**			RunNo:	**9467**				
Prep Date:	**3/27/2013**	Analysis Date:	**3/27/2013**			SeqNo:	**270252**	Units:	**mg/Kg**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		16	15	15.00	0	110	64.4	117			

Sample ID	**1303998-001AMSD**	SampType:	**MSD**			TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**BatchQC**	Batch ID:	**6687**			RunNo:	**9467**				
Prep Date:	**3/27/2013**	Analysis Date:	**3/27/2013**			SeqNo:	**270253**	Units:	**mg/Kg**		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15	15	15.00	0	103	64.4	117	6.37	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#: **1303948**

01-Apr-13

Client: Animas Environmental Services

Project: CoP San Juan 27-4 #38N

Sample ID **MB-6659**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **6659**	RunNo: **9417**
Prep Date: **3/26/2013**	Analysis Date: **3/26/2013**	SeqNo: **268861** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		103	72.4	120			

Sample ID **LCS-6659**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **6659**	RunNo: **9417**
Prep Date: **3/26/2013**	Analysis Date: **3/26/2013**	SeqNo: **268862** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	47.4	122			
Surr: DNOP	5.5		5.000		109	72.4	120			

Sample ID **1303982-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **6659**	RunNo: **9477**
Prep Date: **3/26/2013**	Analysis Date: **3/28/2013**	SeqNo: **270691** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	9.7	48.73	63.36	142	12.6	148			
Surr: DNOP	5.4		4.873		111	72.4	120			

Sample ID **1303982-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **6659**	RunNo: **9477**
Prep Date: **3/26/2013**	Analysis Date: **3/28/2013**	SeqNo: **270692** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	120	10	51.39	63.36	111	12.6	148	7.59	22.5	
Surr: DNOP	5.8		5.139		113	72.4	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- 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#: **1303948**

01-Apr-13

Client: Animas Environmental Services

Project: CoP San Juan 27-4 #38N

Sample ID **MB-6664**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **6664**	RunNo: **9453**
Prep Date: **3/26/2013**	Analysis Date: **3/27/2013**	SeqNo: **270328** 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	900		1000		90.1	84	116			

Sample ID **LCS-6664**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **6664**	RunNo: **9453**
Prep Date: **3/26/2013**	Analysis Date: **3/27/2013**	SeqNo: **270340** 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	106	62.6	136			
Surr: BFB	970		1000		97.3	84	116			

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#: **1303948**

01-Apr-13

Client: Animas Environmental Services

Project: CoP San Juan 27-4 #38N

Sample ID **MB-6664**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **6664**	RunNo: **9453**
Prep Date: **3/26/2013**	Analysis Date: **3/27/2013**	SeqNo: **270399** 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		100	80	120			

Sample ID **LCS-6664**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **6664**	RunNo: **9453**
Prep Date: **3/26/2013**	Analysis Date: **3/27/2013**	SeqNo: **270406** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.0	80	120			
Toluene	0.98	0.050	1.000	0	98.4	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.9	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- 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
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: 1303948 RcptNo: 1

Received by/date: AT 03/23/13

Logged By: Michelle Garcia 3/23/2013 10:26:00 AM

Completed By: Michelle Garcia 3/25/2013 8:39:00 AM

Reviewed By: 03/25/13

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	1.6	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Animas Environmental Services	Turn-Around Time: ☒ Standard ☐ Rush
Mailing Address: 624 E. Comanche Farmington, NM 87401	Project Name: CoP San Juan 27-4 #38N
Phone #: 505-564-2281	Project #:
email or Fax#:	Project Manager: D. Watson
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)	Sampler: H. Woods / C. Lameman
Accreditation ☐ NELAP ☐ Other	On Ice: ☒ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 1.6

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1303941	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) 300.0 cl	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
3/21/13	1603	Soil	SC-1	2-4oz	—	-001	X		X					X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/22/13	1654	Heather M. Woods	Christine Walker	3/22/13	1654
3/2/13	1725	Christine Walker		03/23/13	1024

Remarks: Bill to ConocoPhillips
WO:
Supervisor: Freddy Proctor Requested by: Lisa Hunter
Area: 25
User: MKSPENC

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.