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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company**	Contact **Ashley Maxwell**
Address **3401 E. 30th St., Farmington, NM 87402**	Telephone No. **505-324-5169**
Facility Name: San Juan 29-7 Unit #82A	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner: Federal	API No. 3003921622 Lease No. SF-078919

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	04	29N	07W	890'	South	1630'	East	Rio Arriba

Latitude 36.74989 Longitude -107.57227

NATURE OF RELEASE

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

If a Watercourse was Impacted, Describe Fully.*

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

Describe Area Affected and Cleanup Action Taken.*

The below grade tank field sample results were above regulatory standard by USEPA method 418.1 for TPH @ 2,570 ppm, confirming a release. The regulatory standard for closure at this site was determined to be 5,000 ppm. Additionally, the sample was then transported to the lab and analytical results for TPH, BTEX and Chlorides were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: **Ashley Maxwell**	Approved by Environmental Specialist: Jonathan D. Kelly
Title: **Field Environmental Specialist**	Approval Date: 9/5/2014 Expiration Date:
E-mail Address: **ashley.p.wethington@conocophillips.com**	Conditions of Approval: BGT Closure Permit needs to be filed on C-144 Attached ☐
Date: August 2, 2012 Phone: **505-324-5169**	

* Attach Additional Sheets If Necessary

nJK1424854911

Animas Environmental Services, LLC
www.animasenvironmental.com

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

Durango, Colorado
970-403-3274

June 27, 2012

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

RE: San Juan 29-7 #82A Below Grade Tank Closure and Release Report
Rio Arriba County, New Mexico

Dear Ms. Maxwell:

Animas Environmental Services, LLC (AES) is pleased to provide the final report associated with the below grade tank (BGT) closure and release confirmation at ConocoPhillips (CoP) San Juan 29-7 #82A, located in Rio Arriba County, New Mexico. Tank removal had been completed by CoP contractors prior to AES' arrival at the location.

1.0 Site Information

1.1 Location

Site Name – San Juan 29-7 #82A
Legal Description - SW¼ SE¼, Section 4, T29N, R7W, Rio Arriba County, New Mexico
Well Latitude/Longitude – N36.74998 and W107.57274, respectively
BGT Latitude/Longitude - N36.75008 and W107.57266, respectively
Land Jurisdiction - Bureau of Land Management (BLM)
Figure 1 - Topographic Site Location Map
Figure 2 - General Site Map, June 2012

1.2 NMOCD Ranking

Prior to site work, the New Mexico Oil Conservation Division (NMOCD) database was reviewed, and a Cathodic Report dated May 13, 1991, indicated groundwater to be 190 feet below ground surface (bgs). Additionally, the New Mexico Office of the State Engineer (NMOSE) database was reviewed, and no registered water wells are located within 1,000 feet of the location. Once on site, AES personnel assessed the ranking using known information of the area, topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded

that depth to groundwater at the site was greater than 100 feet bgs, and the location is not within a well-head protection area. Distance to the nearest surface water, a small pond, is located approximately 1,200 feet to the west. The wash in Gobernador Canyon is located about 2,000 feet to the southwest. The site location has been assigned a ranking score of 0 per the NMOCD *Guidelines for Leaks, Spills, and Releases* (1993).

1.3 BGT Closure Assessment

AES was initially contacted by Spur Mackey, CoP representative, on June 5, 2012, and on June 7, 2012, Deborah Watson and Heather Woods of AES mobilized to the location.

AES personnel collected five soil samples (S-1 through S-5) from the below the BGT. Four samples were collected from the perimeter of the BGT footprint, and one sample was collected from the center of the BGT footprint. A 5-point composite sample (SC-1) of the BGT footprint was collected for confirmation laboratory analysis.

2.0 Soil Sampling

On June 7, 2012, 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 volatile organic compounds (VOCs), total petroleum hydrocarbon (TPH), and chlorides. Soil sample SC-1 was submitted for confirmation laboratory analysis. Soil sample locations are included on Figure 2.

2.1 Soil Field Screening

2.1.1 Volatile Organic Compounds

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

2.1.2 Total Petroleum Hydrocarbons

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

2.1.3 Chlorides

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

2.2 Soil 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. The soil sample was laboratory analyzed for:

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

2.3 Soil Field and Laboratory Analytical Results

Field screening for VOCs via OVM showed readings ranging from 2,855 ppm in S-2 to greater than 5,000 ppm in S-5. Field TPH concentrations ranged from 187 mg/kg in S-3 up to 2,570 mg/kg in S-5. Field chloride concentrations were between 40 and 60 mg/kg. Field screening VOC and TPH results are summarized in Table 1 and on Figure 2. The AES field screening report is attached.

Table 1. Soil Field Screening OVM, TPH and Chloride Results
SJ 29-7 #82A BGT Closure, June 2012

Sample ID	*Date Sampled*	*Depth below BGT (ft)*	*VOCs OVM Reading (ppm)*	*Field TPH (mg/kg)*	*Chloride (mg/kg)*
NMOCD Action Level (NMAC 19.15.17.13E)			*--*	***100***	***250***
S-1	06/07/12	0.5	4,619	**275**	40
S-2	06/07/12	0.5	2,855	**838**	60
S-3	06/07/12	0.5	3,285	**187**	60
S-4	06/07/12	0.5	3,116	**1,470**	60
S-5	06/07/12	0.5	>5,000	**2,570**	60

Laboratory analytical results for SC-1 showed that the benzene and total BTEX concentrations were below the laboratory detection limits of 0.50 mg/kg and 2.5 mg/kg,

respectively. TPH concentrations were reported at 88 mg/kg GRO and 490 mg/kg DRO, and the chloride concentration was below the laboratory detection limit of 30 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, SJ 29-7 #82A BGT Closure, June 2012

Sample ID	Date Sampled	Depth (ft)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	Chlorides (mg/kg)
NMOCD Action Level (NMAC 19.15.17.13E)			**0.2/10***	**50**	**100/5,000***		**250**
SC-1	06/07/12	0.5	<0.50	<2.5	88	490	<30

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

3.0 Conclusions

3.1 BGT Closure

NMOCD action levels for BGT closures are specified in New Mexico Administrative Code (NMAC) 19.15.17.13E. Field TPH concentrations for samples S-1 through S-5 were above the applicable NMOCD action level of 100 mg/kg with concentrations ranging from 187 mg/kg in S-3 up to 2,570 mg/kg in S-5. Based on field screening results on June 7, 2012, a release is confirmed at the SJ 29-7 #82A BGT location.

3.2 Release Confirmation

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

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

Sincerely,

Heather M. Woods

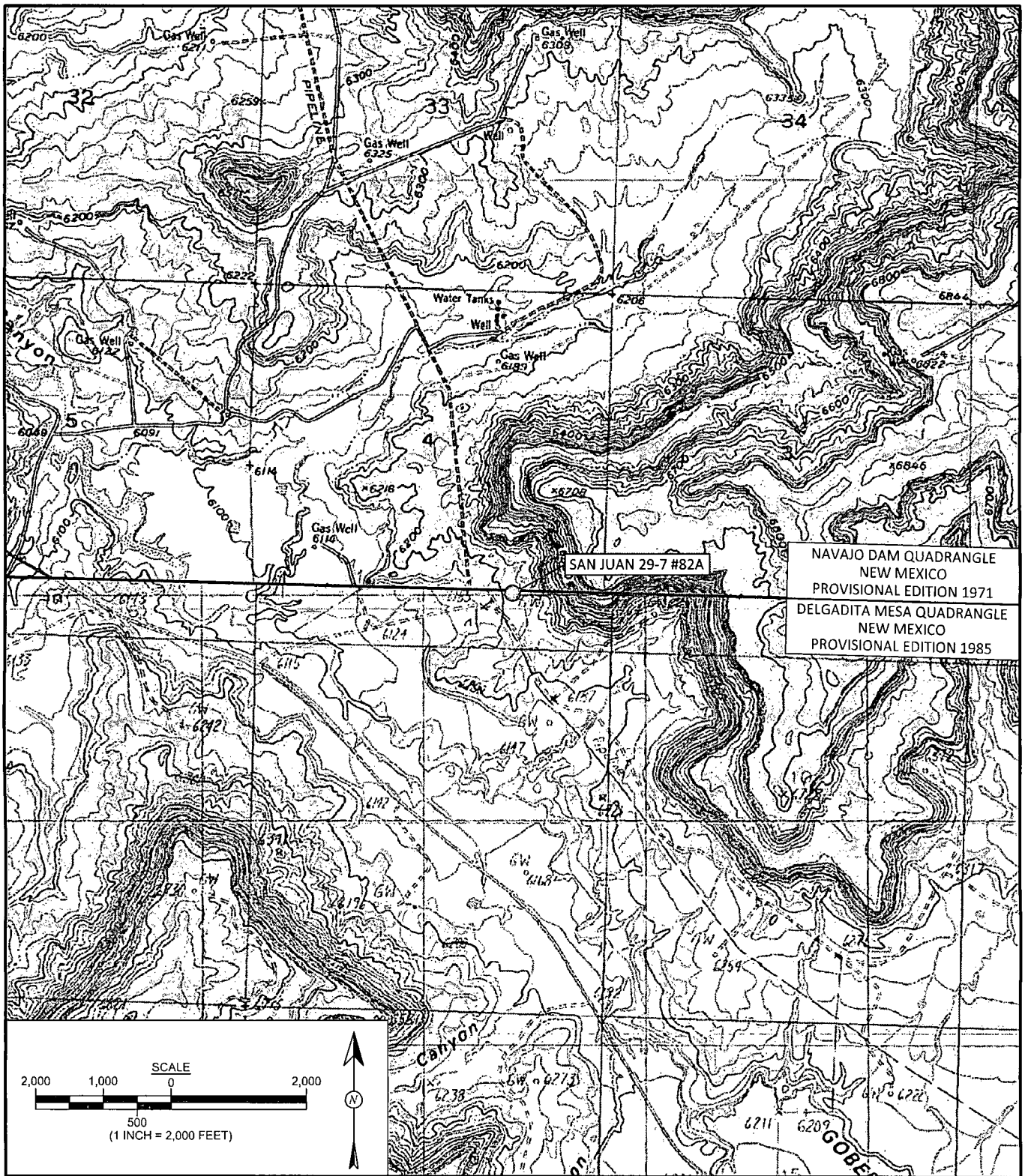
Heather Woods
Geologist

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map
Figure 2. General Site Map, June 2012
AES Field Screening Report 060712
Hall Analytical Report 1206333

S:\Animas 2000\2012 Projects\Conoco Phillips\SJ 29-7 #82A\BGT Closure Report SJ 29-7 #82A 062712.docx



Animas Environmental Services, LLC

DRAWN BY: N. Willis	**DATE DRAWN:** June 18, 2012
REVISIONS BY: N. Willis	**DATE REVISED:** June 18, 2012
CHECKED BY: D. Watson	**DATE CHECKED:** June 18, 2012
APPROVED BY: E. McNally	**DATE APPROVED:** June 27, 2012

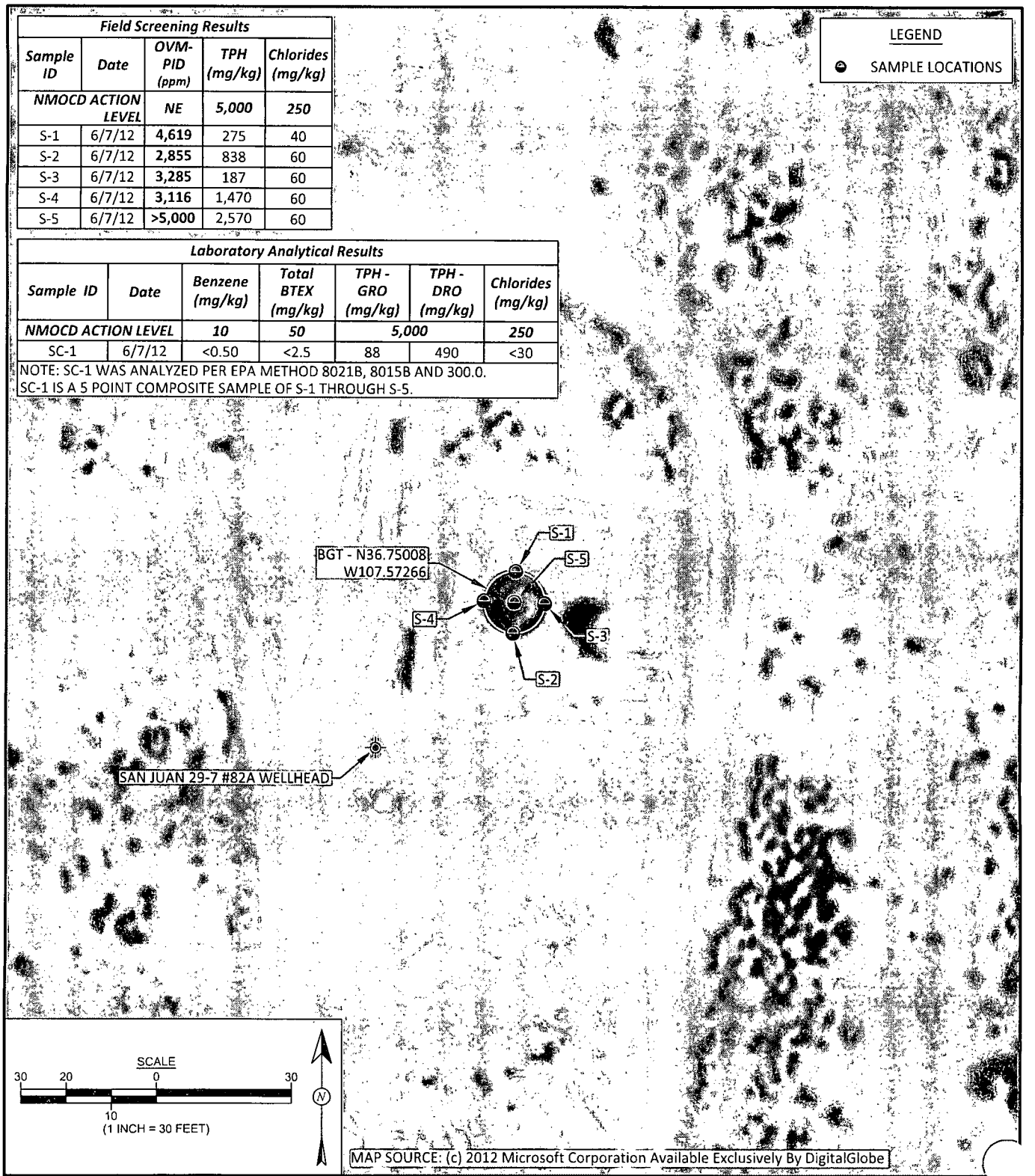
FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
ConocoPhillips
SAN JUAN 29-7 #82A
RIO ARRIBA COUNTY, NEW MEXICO
SW¼, SE¼, SECTION 4, T29N, R7W
N36.74998, W107.57274

Field Screening Results				
Sample ID	Date	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL		NE	5,000	250
S-1	6/7/12	**4,619**	275	40
S-2	6/7/12	**2,855**	838	60
S-3	6/7/12	**3,285**	187	60
S-4	6/7/12	**3,116**	1,470	60
S-5	6/7/12	**>5,000**	2,570	60

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	5,000		250
SC-1	6/7/12	<0.50	<2.5	88	490	<30

NOTE: SC-1 WAS ANALYZED PER EPA METHOD 8021B, 8015B AND 300.0.
SC-1 IS A 5 POINT COMPOSITE SAMPLE OF S-1 THROUGH S-5.



Animas Environmental Services, LLC

DRAWN BY: N. Willis	DATE DRAWN: June 18, 2012
REVISIONS BY: N. Willis	DATE REVISED: June 18, 2012
CHECKED BY: D. Watson	DATE CHECKED: June 18, 2012
APPROVED BY: E. McNally	DATE APPROVED: June 27, 2012

FIGURE 2

GENERAL SITE MAP
BELOW GRADE TANK CLOSURE
JUNE 2012
ConocoPhillips
SAN JUAN 29-7 #82A
RIO ARRIBA COUNTY, NEW MEXICO
SW¼, SE¼, SECTION 4, T29N, R7W
N36.74998, W107.57274

AES Field Screening Report

Animas Environmental Services, LLC
www.animasenvironmental.com
624 E. Comanche
Farmington, NM 87401
505-564-2281
Durango, Colorado
970-403-3274

Client: ConocoPhillips

Project Location: SJ 29-7 #82A

Date: 6/7/2012

Matrix: Soil

Sample ID *North* BGT	Collection Date	Time of Sample Collection	Sample Location	OVM (ppm)	Field Chloride (mg/kg)	Field TPH Analysis Time	Field TPH* (mg/kg)	TPH PQL (mg/kg)	DF	TPH Analysts Initials
S-1	6/7/2012	9:15	North	4,619	40	10:45	275	20.0	1	DAW
S-2	6/7/2012	9:19	South	2,855	60	10:50	838	20.0	1	DAW
S-3	6/7/2012	9:22	East	3,285	60	10:56	187	20.0	1	DAW
S-4	6/7/2012	9:25	West	3,116	60	10:59	1,470	20.0	1	DAW
S-5	6/7/2012	9:28	Center	>5,000	60	11:10	2,570	20.0	1	DAW

PQL Practical Quantitation Limit
ND Not Detected at the Reporting Limit
DF Dilution Factor
**Field TPH concentrations recorded may be below PQL.*

Field Chloride - Quantab Chloride Titrators or Drop Count Titration with Silver Nitrate
Total Petroleum Hydrocarbons - USEPA 418.1

Analyst: Debnah Watson

Report Finalized: 06/18/12

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

June 11, 2012

Ross Kennemer

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-1776
FAX (505) 324-2022

RE: CoP San Juan 29-7 82A OrderNo.: 1206333

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/8/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1206333**
Date Reported: **6/11/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-1
Project: CoP San Juan 29-7 82A
Collection Date: 6/7/2012 9:35:00 AM
Lab ID: 1206333-001
Matrix: MEOH (SOIL)
Received Date: 6/8/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	490	98		mg/Kg	10	6/8/2012 11:51:42 AM
Surr: DNOP	0	77.6-140	S	%REC	10	6/8/2012 11:51:42 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	88	50		mg/Kg	10	6/8/2012 1:17:47 PM
Surr: BFB	295	69.7-121	S	%REC	10	6/8/2012 1:17:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	10	6/8/2012 1:17:47 PM
Toluene	ND	0.50		mg/Kg	10	6/8/2012 1:17:47 PM
Ethylbenzene	ND	0.50		mg/Kg	10	6/8/2012 1:17:47 PM
Xylenes, Total	ND	1.0		mg/Kg	10	6/8/2012 1:17:47 PM
Surr: 4-Bromofluorobenzene	104	80-120		%REC	10	6/8/2012 1:17:47 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	ND	30		mg/Kg	20	6/8/2012 11:22:14 AM

Qualifiers:

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

Analytical Report
Lab Order **1206333**
Date Reported: **6/11/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: SC-2
Project: CoP San Juan 29-7 82A
Collection Date: 6/7/2012 11:45:00 AM
Lab ID: 1206333-002
Matrix: MEOH (SOIL)
Received Date: 6/8/2012 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/8/2012 11:26:04 AM
Surr: DNOP	112	77.6-140		%REC	1	6/8/2012 11:26:04 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/8/2012 12:48:02 PM
Surr: BFB	93.1	69.7-121		%REC	1	6/8/2012 12:48:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.050		mg/Kg	1	6/8/2012 12:48:02 PM
Toluene	ND	0.050		mg/Kg	1	6/8/2012 12:48:02 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/8/2012 12:48:02 PM
Xylenes, Total	ND	0.10		mg/Kg	1	6/8/2012 12:48:02 PM
Surr: 4-Bromofluorobenzene	97.9	80-120		%REC	1	6/8/2012 12:48:02 PM
EPA METHOD 300.0: ANIONS						Analyst: **SRM**
Chloride	ND	30		mg/Kg	20	6/8/2012 11:34:38 AM

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206333**

11-Jun-12

Client: Animas Environmental Services

Project: CoP San Juan 29-7 82A

Sample ID **MB-2302**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **2302**	RunNo: **3315**
Prep Date: **6/8/2012**	Analysis Date: **6/8/2012**	SeqNo: **92200** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-2302**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **2302**	RunNo: **3315**
Prep Date: **6/8/2012**	Analysis Date: **6/8/2012**	SeqNo: **92201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

Sample ID **1206336-001BMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **2302**	RunNo: **3315**
Prep Date: **6/8/2012**	Analysis Date: **6/8/2012**	SeqNo: **92254** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	30	15.00	0	119	74.6	118			S

Sample ID **1206336-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **2302**	RunNo: **3315**
Prep Date: **6/8/2012**	Analysis Date: **6/8/2012**	SeqNo: **92255** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	30	15.00	0	119	74.6	118	0	20	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206333**

11-Jun-12

Client: Animas Environmental Services

Project: CoP San Juan 29-7 82A

Sample ID **MB-2300**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **2300**	RunNo: **3291**
Prep Date: **6/8/2012**	Analysis Date: **6/8/2012**	SeqNo: **91877** 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	13		10.00		126	77.6	140			

Sample ID **LCS-2300**	SampType: **LCS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **2300**	RunNo: **3291**
Prep Date: **6/8/2012**	Analysis Date: **6/8/2012**	SeqNo: **91992** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.3	52.6	130			
Surr: DNOP	5.3		5.000		106	77.6	140			

Sample ID **1206302-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2300**	RunNo: **3318**
Prep Date: **6/8/2012**	Analysis Date: **6/9/2012**	SeqNo: **92453** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	51.49	0	80.0	57.2	146			
Surr: DNOP	4.7		5.149		92.0	77.6	140			

Sample ID **1206302-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Diesel Range Organics**
Client ID: **BatchQC**	Batch ID: **2300**	RunNo: **3318**
Prep Date: **6/8/2012**	Analysis Date: **6/9/2012**	SeqNo: **92454** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	52.14	0	82.3	57.2	146	3.97	24.5	
Surr: DNOP	4.8		5.214		92.8	77.6	140	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206333**

11-Jun-12

Client: Animas Environmental Services

Project: CoP San Juan 29-7 82A

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **R3304**	RunNo: **3304**
Prep Date:	Analysis Date: **6/8/2012**	SeqNo: **92363** 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	910		1000		91.5	69.7	121			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R3304**	RunNo: **3304**
Prep Date:	Analysis Date: **6/8/2012**	SeqNo: **92364** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	98.5	133			
Surr: BFB	1000		1000		103	69.7	121			

Sample ID **1206333-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SC-2**	Batch ID: **R3304**	RunNo: **3304**
Prep Date:	Analysis Date: **6/8/2012**	SeqNo: **92366** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	5.0	19.41	0	80.3	85.4	147			S
Surr: BFB	810		776.4		105	69.7	121			

Sample ID **1206333-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **SC-2**	Batch ID: **R3304**	RunNo: **3304**
Prep Date:	Analysis Date: **6/8/2012**	SeqNo: **92367** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	19.41	0	104	85.4	147	25.8	19.2	R
Surr: BFB	810		776.4		105	69.7	121	0	0	

Sample ID **MB-2269**	SampType: **MBLK**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **PBS**	Batch ID: **2269**	RunNo: **3304**
Prep Date: **6/6/2012**	Analysis Date: **6/8/2012**	SeqNo: **92372** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		93.4	69.7	121			

Sample ID **LCS-2269**	SampType: **LCS**	TestCode: **EPA Method 8015B: Gasoline Range**
Client ID: **LCSS**	Batch ID: **2269**	RunNo: **3304**
Prep Date: **6/6/2012**	Analysis Date: **6/8/2012**	SeqNo: **92373** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	69.7	121			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206333**

11-Jun-12

Client: Animas Environmental Services

Project: CoP San Juan 29-7 82A

Sample ID	**1206135-010AMS**	SampType: **MS**		TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**BatchQC**	Batch ID: **2269**		RunNo: **3304**					
Prep Date:	**6/6/2012**	Analysis Date: **6/8/2012**		SeqNo: **92375**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		972.8		98.8	69.7	121			

Sample ID	**1206135-010AMSD**	SampType: **MSD**		TestCode: **EPA Method 8015B: Gasoline Range**					
Client ID:	**BatchQC**	Batch ID: **2269**		RunNo: **3304**					
Prep Date:	**6/6/2012**	Analysis Date: **6/9/2012**		SeqNo: **92376**		Units: **%REC**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		984.3		98.6	69.7	121	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1206333**

11-Jun-12

Client: Animas Environmental Services

Project: CoP San Juan 29-7 82A

Sample ID **MB-2269**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **2269**	RunNo: **3304**
Prep Date: **6/6/2012**	Analysis Date: **6/8/2012**	SeqNo: **92408** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.3	80	120			

Sample ID **LCS-2269**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **2269**	RunNo: **3304**
Prep Date: **6/6/2012**	Analysis Date: **6/8/2012**	SeqNo: **92409** 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	103	83.3	107			
Toluene	1.0	0.050	1.000	0	101	74.3	115			
Ethylbenzene	0.98	0.050	1.000	0	97.6	80.9	122			
Xylenes, Total	3.0	0.10	3.000	0	99.2	85.2	123			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **1206135-011AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **2269**	RunNo: **3304**
Prep Date: **6/6/2012**	Analysis Date: **6/9/2012**	SeqNo: **92420** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.048	0.9606	0	96.3	67.2	113			
Toluene	0.93	0.048	0.9606	0	97.3	62.1	116			
Ethylbenzene	0.91	0.048	0.9606	0	95.1	67.9	127			
Xylenes, Total	2.8	0.096	2.882	0	95.6	60.6	134			
Surr: 4-Bromofluorobenzene	0.96		0.9606		100	80	120			

Sample ID **1206135-011AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BatchQC**	Batch ID: **2269**	RunNo: **3304**
Prep Date: **6/6/2012**	Analysis Date: **6/9/2012**	SeqNo: **92421** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.048	0.9634	0	98.9	67.2	113	2.96	14.3	
Toluene	0.95	0.048	0.9634	0	99.0	62.1	116	2.04	15.9	
Ethylbenzene	0.93	0.048	0.9634	0	96.7	67.9	127	1.95	14.4	
Xylenes, Total	2.8	0.096	2.890	0	97.3	60.6	134	2.03	12.6	
Surr: 4-Bromofluorobenzene	0.97		0.9634		101	80	120	0	0	

Qualifiers:

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

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: 1206333

Received by/date: 06/08/12

Logged By: Ashley Gallegos 6/8/2012 9:55:00 AM

Completed By: Ashley Gallegos 6/8/2012 10:03:18 AM

Reviewed By: 06/08/12

Chain of Custody

1.	Were seals intact?	Yes	No	Not Present ✔
2.	Is Chain of Custody complete?	Yes ✔	No	Not Present
3.	How was the sample delivered?	Courier		

Log In

4.	Coolers are present? (see 19. for cooler specific information)	Yes ✔	No	NA
5.	Was an attempt made to cool the samples?	Yes ✔	No	NA
6.	Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
7.	Sample(s) in proper container(s)?	Yes ✔	No	
8.	Sufficient sample volume for indicated test(s)?	Yes ✔	No	
9.	Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
10.	Was preservative added to bottles?	Yes	No ✔	NA
11.	VOA vials have zero headspace?	Yes	No	No VOA Vials ✔
12.	Were any sample containers received broken?	Yes	No ✔	
13.	Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH:
14.	Are matrices correctly identified on Chain of Custody?	Yes ✔	No	(<2 or >12 unless noted)
15.	Is it clear what analyses were requested?	Yes ✔	No	Adjusted?
16.	Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	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 same day

Project Name: CoP Sanchez 29-7 82A

Project #:

Project Manager: R. Kennemer

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1201833	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	300.0 Chlorides	Air Bubbles (Y or N)
6-7-12	0935	Soil	SC-1	1-4oz 1-MeOH Kit	MeOH	-001	X		X									X	
6-7-12	1145	Soil	SC-2	1-4oz 1-MeOH Kit	MeOH	-002	X		X									X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/7/12	1720			6/7/12	1720
6/7/12	1742			06/08/12	0955

Remarks: Bill to ConocoPhillips
WO: 10336210
ach STRIP
Supervisor: Sheldon Montoya
Approver ID: Brenda
Ordered by: Spur Mackey
Area: 7

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.