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

OIL CONS. DIV DIST. 3

NOV 05 2014

Name of Company **ConocoPhillips Company**	Contact **Lisa Hunter**
Address **3401 East 30th St, Farmington, NM**	Telephone No. **(505) 326-9786**
Facility Name: **Blanco Unit 202A**	Facility Type: **Gas Well**

Surface Owner **BLM**	Mineral Owner **BLM**	API No. **3004532262**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	**26**	**31N**	**08W**	**2000**	**FSL**	**700**	**East**	**San Juan**

Latitude 36.83714 Longitude -107.63768

NATURE OF RELEASE

Type of Release **Produced Water**	Volume of Release **5 BBL**	Volume Recovered **0 BBL**
Source of Release **Transfer pump**	Date and Hour of Occurrence **Unknown**	Date and Hour of Discovery **09/05/14 @ 4:30 p.m.**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **N/A**	
By Whom? **N/A**	Date and Hour **N/A**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

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

Describe Cause of Problem and Remedial Action Taken.*
One inched nipple on discharge of transfer pump broke while pump was running, causing the release of 5 bbls Produced Water. Release remained contained in bermed area. Pump shut off and isolated.

Describe Area Affected and Cleanup Action Taken.*
ConocoPhillips will assess the soil to determine a path forward for clean-up if necessary. Release assessment was completed by third-party environmental and Analytical results were below the NMOCD regulatory standards – no further action required. The soil sampling report is attached for review. No further remediation 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 Approved by Environmental Specialist:	
Printed Name: **Lisa Hunter**		
Title: **Field Environmental Specialist**	Approval Date: 11/17/14	Expiration Date:
E-mail Address: **Lisa.Hunter@cop.com**	Conditions of Approval:	Attached ☐
Date: **November 3, 2014** Phone: **(505) 326-9786**		

* Attach Additional Sheets If Necessary

#NCS1432147527

(20)

October 27, 2014

Lisa Hunter
ConocoPhillips
San Juan Business Unit
Office 214-04
5525 Hwy 64
Farmington, New Mexico 87401

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

RE: Release Assessment Report
Blanco #202A
San Juan County, New Mexico

Dear Ms. Hunter:

On September 12, 2014, Animas Environmental Services, LLC (AES) completed a release assessment at the ConocoPhillips (CoP) Blanco #202A, located in San Juan County, New Mexico. The release consisted of approximately five barrels (bbls) of produced water associated with a leak in the transfer pump at the location.

1.0 Site Information

1.1 Location

Site Name – Blanco #202A
Location – NE¼ SE¼, Section 26, T31N, R8W, San Juan County, New Mexico
Well Head Latitude/Longitude – N36.86716 and W107.63829, respectively
Release Location Latitude/Longitude – N36.86694 and W107.63810, respectively
Land Jurisdiction – Bureau of Land Management (BLM)
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2014

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

1911 Main, Ste 280
Durango, CO
970-403-3084

www.animasenvironmental.com

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to site work. The release was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** A cathodic protection report form dated March 2005 for the location reported the depth to groundwater at 160 feet below ground surface (bgs). (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** A small stock pond and an unnamed wash, located approximately 280 feet to the south, discharge to Simon Canyon wash and ultimately to the San Juan River. (10 points)

1.3 Assessment

AES was initially contacted by Lisa Hunter of CoP on September 8, 2014, and on September 12, 2014, Corwin Lameman and Sam Glasses of AES completed the release assessment field work. The assessment included collection and field sampling of eight soil samples from four borings within the release area. All soil borings were terminated at two feet below grade. Sample locations are presented on Figure 3.

2.0 Soil Sampling

A total of eight soil samples from four borings (SB-1 through SB-4) were collected during the assessments. All soil samples were field screened for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), and chlorides. The four discrete surface samples were also submitted for confirmation laboratory analysis.

2.1 Field Sampling

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 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

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

2.2 Laboratory Analyses

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

- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D; and
- Chloride per USEPA Method 300.0.

2.3 Field and Laboratory Analytical Results

On September 12, 2014, release assessment field screening results for VOCs via OVM showed concentrations ranging from 1.0 ppm in SB-1 and SB-2 up to 3.5 ppm in SB-4. Field TPH concentrations ranged from less than 20.0 mg/kg in SB-1 up to 30.9 mg/kg in SB-3. Field chloride concentrations ranged from 40 mg/kg in SB-2 up to 100 mg/kg in SB-1, SB-2 and SB-3. Results are included below in Table 1 and on Figure 3. The AES Field Sampling Report is attached.

Table 1. Field Sampling VOCs, TPH, and Chloride Results
Blanco #202A Release Assessment, September 2014

Sample ID	*Date Sampled*	*Sample Depth (ft bgs)*	*VOCs via OVM (ppm)*	*TPH 418.1 (mg/kg)*	*Chlorides (mg/kg)*
*NMOCD Action Level**			*100*	*1,000*	*NE*
SB-1	9/12/14	Surface	1.7	21.3	100
		2	1.0	18.5	60
SB-2	9/12/14	Surface	1.6	22.6	100
		2	1.0	29.5	40

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	TPH 418.1 (mg/kg)	Chlorides (mg/kg)
*NMOCD Action Level**			*100*	*1,000*	*NE*
SB-3	9/12/14	Surface	3.0	30.9	100
		2	1.9	22.6	60
SB-4	9/12/14	Surface	3.5	28.2	80
		2	3.0	29.5	80

NE - not established
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

Laboratory analyses for SB-1 through SB-4 were used to confirm field sampling results of the release assessment. TPH concentrations as GRO/DRO were reported below laboratory detection limits in each sample. Chloride concentrations were reported in SB-1 (280 mg/kg), SB-2 (220 mg/kg), SB-3 (400 mg/kg), and SB-4 (200 mg/kg). Results are presented in Table 2 and on Figure 3. The laboratory analytical report is attached.

Table 2. Laboratory Analytical Results –TPH and Chlorides
Blanco #202A Release Assessment, September 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	GRO (mg/kg)	DRO (mg/kg)	Chlorides (mg/kg)
*NMOCD Action Level**			*1,000*		*NE*
SB-1	9/12/14	Surface	<5.0	<9.9	280
SB-2	9/12/14	Surface	<4.9	<9.8	220
SB-3	9/12/14	Surface	<4.8	<9.8	400
SB-4	9/12/14	Surface	<4.8	<9.9	200

NE - not established
*Action level determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993)

3.0 Conclusions and Recommendations

On September 12, 2014, AES conducted a release assessment of petroleum contaminated soils associated with a release of produced water at the Blanco #202A. Action levels for releases are determined by the NMOCD ranking score per *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993), and the site was assigned a rank of 10.

Release assessment field sampling results were reported below the NMOCD action level of 100 ppm VOCs and 1,000 mg/kg TPH in all samples. The highest VOC concentration was reported in SB-4 with 3.5 ppm, and the highest TPH concentration was reported in SB-3 with 30.9 mg/kg. Chloride concentrations were reported up to 100 mg/kg in SB-1 through SB-3.

Laboratory analyses for SB-1 through SB-4 were used to confirm field sampling results. TPH concentrations as GRO/DRO were below laboratory detection limits and the NMOCD action level of 1,000 mg/kg in all samples. Chloride concentrations were reported from 200 mg/kg (SB-4) up to 400 mg/kg (SB-3).

Based on field sampling and laboratory analytical results of the release assessment at the Blanco #202A, VOC and TPH concentrations were below applicable NMOCD action levels. No further work is recommended.

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

Sincerely,

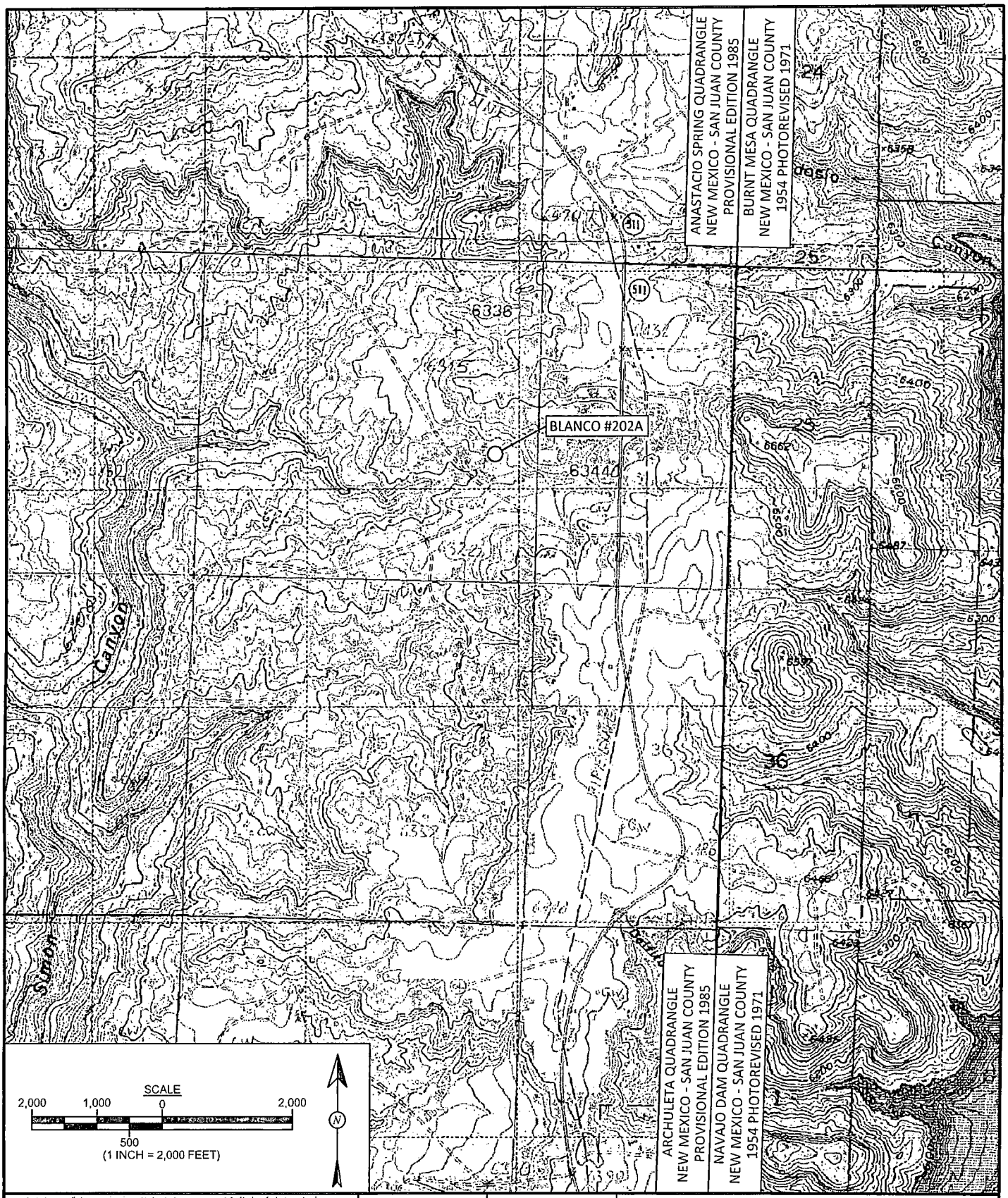
David J. Reese
Environmental Scientist

Elizabeth McNally, PE

Attachments:

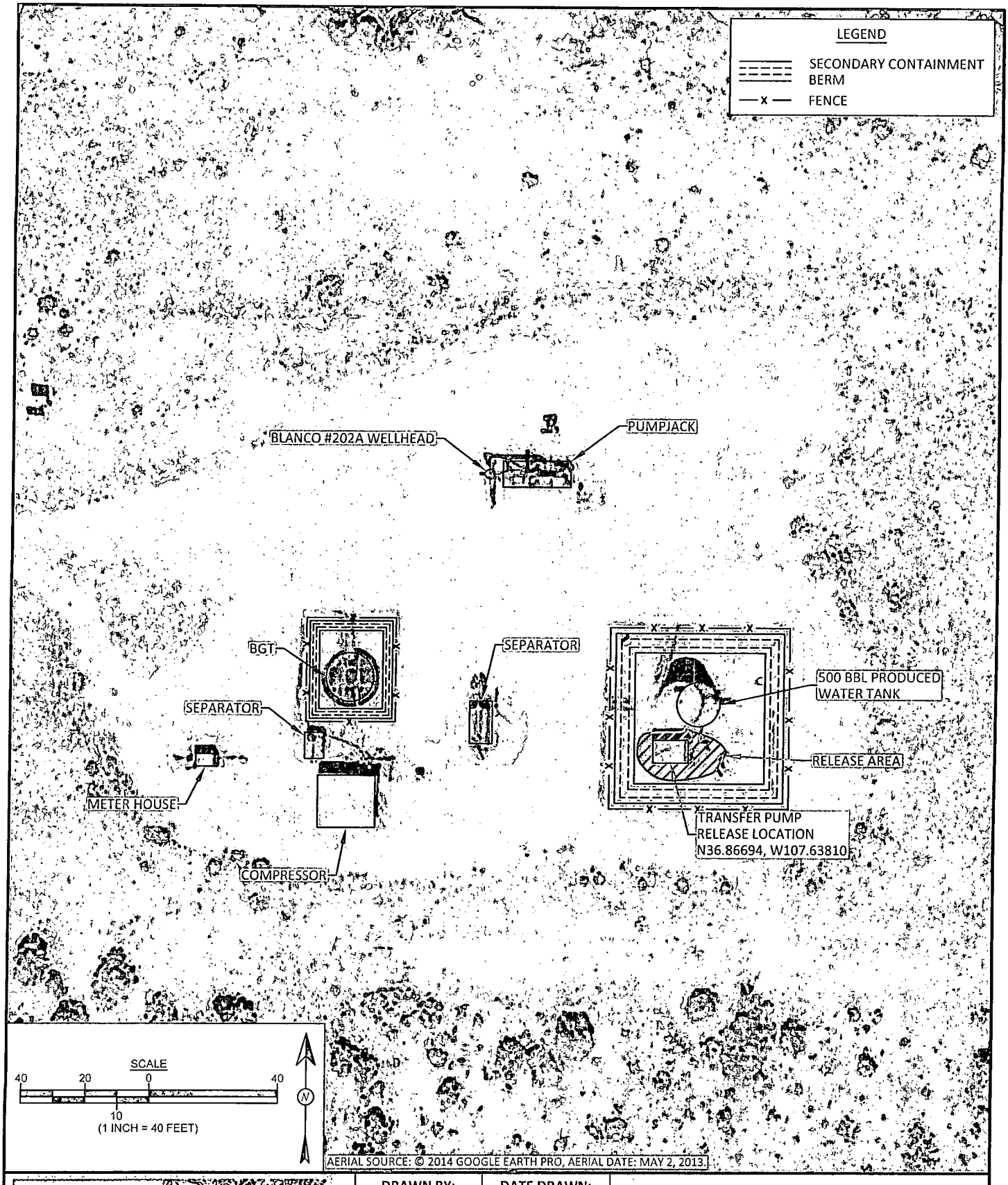
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Map, September 2014
Figure 3. Release Assessment Sample Locations and Results, September 2014
AES Field Sampling Report 091214
Hall Laboratory Analytical Report 1409642

C:\Users\emcnally\Dropbox (Animas Environmental)\0000 Animas Server Dropbox EM\2014 Projects\ConocoPhillips\Blanco #202A\Blanco #202A Release Assessment Report 102714.docx



Animas Environmental Services, LLC

DRAWN BY: C. Lameman	**DATE DRAWN:** September 15, 2014	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** September 15, 2014	**TOPOGRAPHIC SITE LOCATION MAP**
CHECKED BY: E. Skyles	**DATE CHECKED:** September 15, 2014	ConocoPhillips BLANCO #202A NE¼ SE¼, SECTION 26, T31N, R8W SAN JUAN COUNTY, NEW MEXICO N36.86716, W107.63829
APPROVED BY: E. McNally	**DATE APPROVED:** September 15, 2014	



Animas Environmental Services, LLC

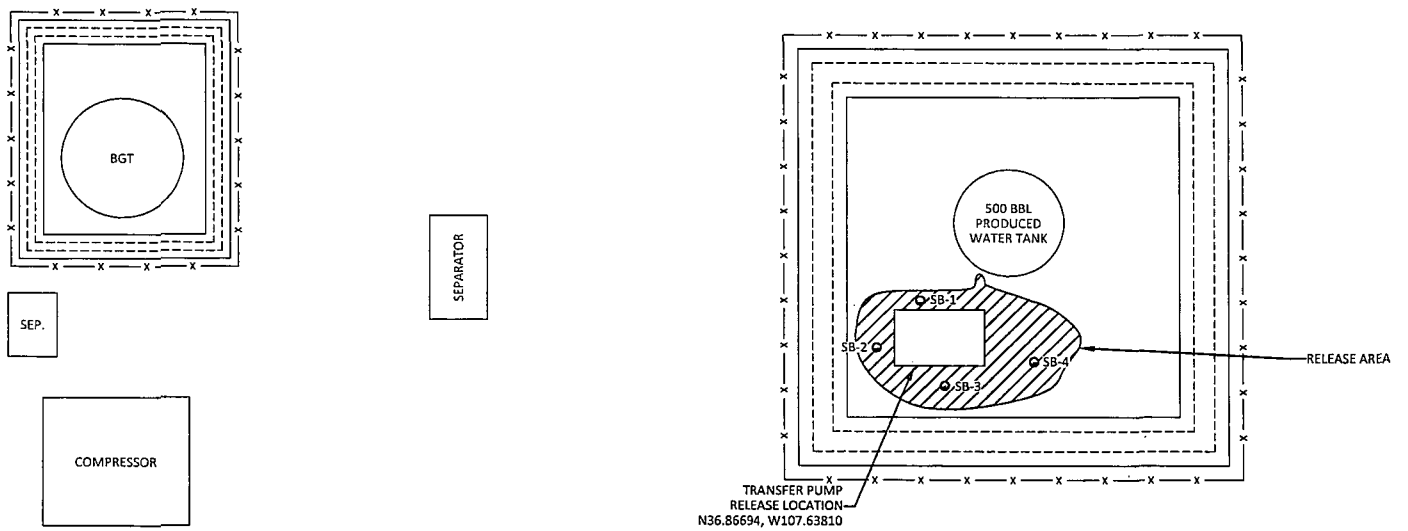
DRAWN BY: C. Lameman	**DATE DRAWN:** September 15, 2014
REVISIONS BY: C. Lameman	**DATE REVISED:** September 15, 2014
CHECKED BY: E. Skyles	**DATE CHECKED:** September 15, 2014
APPROVED BY: E. McNally	**DATE APPROVED:** September 15, 2014

FIGURE 2

AERIAL SITE MAP
SEPTEMBER 2014
ConocoPhillips
BLANCO #202A
NE¼ SE¼, SECTION 26, T31N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.86716, W107.63829

FIGURE 3

RELEASE ASSESSMENT SAMPLE LOCATIONS AND RESULTS
SEPTEMBER 2014
ConocoPhillips
BLANCO #202A
NE¼ SE¼, SECTION 26, T31N, R8W
SAN JUAN COUNTY, NEW MEXICO
N36.86716, W107.63829



Field Sampling Results

Sample ID	Date	Depth (ft)	OVM-PID (ppm)	TPH (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			100	1,000	NE
SB-1	9/12/14	Surface	1.7	21.3	100
		2	1.0	<20.0	60
SB-2	9/12/14	Surface	1.6	22.6	100
		2	1.0	29.5	40
SB-3	9/12/14	Surface	3.0	30.9	100
		2	1.9	22.6	60
SB-4	9/12/14	Surface	3.5	28.2	80
		2	3.0	29.5	80

Laboratory Analytical Results

Sample ID	Date	Depth (ft)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			1,000		NE
SB-1	9/12/14	Surface	<5.0	<9.9	280
SB-2	9/12/14	Surface	<4.9	<9.8	220
SB-3	9/12/14	Surface	<4.8	<9.8	400
SB-4	9/12/14	Surface	<4.8	<9.9	200
ALL SAMPLES WERE ANALYZED PER USEPA METHOD 8015D AND 300.0					

Animas Environmental Services, LLC

DRAWN BY: C. Lameman	DATE DRAWN: September 15, 2014
REVISIONS BY: C. Lameman	DATE REVISED: September 15, 2014
CHECKED BY: E. Skyles	DATE CHECKED: September 15, 2014
APPROVED BY: E. McNally	DATE APPROVED: September 15, 2014

LEGEND

- SOIL BORING LOCATIONS
- SECONDARY CONTAINMENT BERM
- —x— FENCE

SCALE
15 10 5 0 15
(1 INCH = 15 FEET)

AES Field Sampling 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: Blanco #202A

Date: 9/12/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Field Chloride (mg/kg)	Field TPH* (mg/kg)	Field TPH Analysis Time	TPH PQL (mg/kg)	DF	TPH Analysts Initials
SB-1 @ surface	9/12/2014	12:30	1.7	100	21.3	13:13	20.0	1	CL
SB-1 @ 2'	9/12/2014	12:35	1.0	60	18.5	13:18	20.0	1	CL
SB-2 @ surface	9/12/2014	12:39	1.6	100	22.6	13:23	20.0	1	CL
SB-2 @ 2'	9/12/2014	12:42	1.0	40	29.5	13:26	20.0	1	CL
SB-3 @ surface	9/12/2014	12:43	3.0	100	30.9	13:30	20.0	1	CL
SB-3 @ 2'	9/12/2014	12:48	1.9	60	22.6	13:32	20.0	1	CL
SB-4 @ surface	9/12/2014	12:50	3.5	80	28.2	13:36	20.0	1	CL
SB-4 @ 2'	9/12/2014	12:56	3.0	80	29.5	13:40	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:

Report Finalized: 9/12/14

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

September 24, 2014

Emilee Skyles
Animas Environmental
624 East Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: Blanco #202A OrderNo.: 1409642

Dear Emilee Skyles:

Hall Environmental Analysis Laboratory received 4 sample(s) on 9/13/2014 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.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1409642**
Date Reported: **9/24/2014**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: Blanco #202A
Lab ID: 1409642-001 **Matrix:** SOIL

Client Sample ID: SB-1 @ surface
Collection Date: 9/12/2014 12:30:00 PM
Received Date: 9/13/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/17/2014 4:02:12 PM	15281
Surr: DNOP	98.7	57.9-140		%REC	1	9/17/2014 4:02:12 PM	15281
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/17/2014 10:16:54 PM	15287
Surr: BFB	94.6	80-120		%REC	1	9/17/2014 10:16:54 PM	15287
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Chloride	280	30		mg/Kg	20	9/15/2014 9:43:09 PM	15303

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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Client Sample ID: SB-2 @ surface
Project: Blanco #202A
Collection Date: 9/12/2014 12:39:00 PM
Lab ID: 1409642-002 **Matrix:** SOIL **Received Date:** 9/13/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/17/2014 4:23:55 PM	15281
Surr: DNOP	98.0	57.9-140		%REC	1	9/17/2014 4:23:55 PM	15281
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/17/2014 10:45:33 PM	15287
Surr: BFB	93.4	80-120		%REC	1	9/17/2014 10:45:33 PM	15287
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Chloride	220	30		mg/Kg	20	9/15/2014 10:20:23 PM	15303

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.
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: Blanco #202A
Lab ID: 1409642-003 **Matrix:** SOIL

Client Sample ID: SB-3 @ surface
Collection Date: 9/12/2014 12:43:00 PM
Received Date: 9/13/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/17/2014 4:45:32 PM	15281
Surr: DNOP	102	57.9-140		%REC	1	9/17/2014 4:45:32 PM	15281
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/17/2014 11:14:11 PM	15287
Surr: BFB	92.9	80-120		%REC	1	9/17/2014 11:14:11 PM	15287
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Chloride	400	30		mg/Kg	20	9/15/2014 10:57:37 PM	15303

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

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
S	Spike Recovery 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.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental
Project: Blanco #202A
Lab ID: 1409642-004 **Matrix:** SOIL

Client Sample ID: SB-4 @ surface
Collection Date: 9/12/2014 12:50:00 PM
Received Date: 9/13/2014 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS						Analyst: **BCN**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/17/2014 5:07:17 PM	15281
Surr: DNOP	98.8	57.9-140		%REC	1	9/17/2014 5:07:17 PM	15281
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/17/2014 11:42:41 PM	15287
Surr: BFB	93.3	80-120		%REC	1	9/17/2014 11:42:41 PM	15287
EPA METHOD 300.0: ANIONS						Analyst: **LGP**	
Chloride	200	30		mg/Kg	20	9/15/2014 11:10:01 PM	15303

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.
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#: **1409642**

24-Sep-14

Client: Animas Environmental

Project: Blanco #202A

Sample ID	**MB-15303**	SampType: **MBLK**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **15303**			RunNo: **21227**					
Prep Date:	**9/15/2014**	Analysis Date: **9/15/2014**			SeqNo: **618414**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-15303**	SampType: **LCS**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **15303**			RunNo: **21227**					
Prep Date:	**9/15/2014**	Analysis Date: **9/15/2014**			SeqNo: **618415**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409642**

24-Sep-14

Client: Animas Environmental

Project: Blanco #202A

Sample ID **MB-15281**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **15281**	RunNo: **21197**
Prep Date: **9/15/2014**	Analysis Date: **9/15/2014**	SeqNo: **617317** 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	12		10.00		116	57.9	140			

Sample ID **LCS-15281**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **15281**	RunNo: **21197**
Prep Date: **9/15/2014**	Analysis Date: **9/15/2014**	SeqNo: **617442** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	68.6	130			
Surr: DNOP	5.3		5.000		107	57.9	140			

Sample ID **LCS-15369**	SampType: **LCS**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **15369**	RunNo: **21309**
Prep Date: **9/18/2014**	Analysis Date: **9/19/2014**	SeqNo: **622110** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	57.9	140			

Sample ID **MB-15369**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **15369**	RunNo: **21309**
Prep Date: **9/18/2014**	Analysis Date: **9/19/2014**	SeqNo: **622115** Units: **%REC**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.3	57.9	140			

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
- S Spike Recovery 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.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1409642**

24-Sep-14

Client: Animas Environmental

Project: Blanco #202A

Sample ID **MB-15287**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **15287**	RunNo: **21265**
Prep Date: **9/15/2014**	Analysis Date: **9/17/2014**	SeqNo: **620315** 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		91.4	80	120			

Sample ID **LCS-15287**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **15287**	RunNo: **21265**
Prep Date: **9/15/2014**	Analysis Date: **9/17/2014**	SeqNo: **620316** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	119	65.8	139			
Surr: BFB	990		1000		99.1	80	120			

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
- S Spike Recovery 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.
- 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: 1409642 RcptNo: 1

Received by/date: 09/13/14

Logged By: Lindsay Mangin 9/13/2014 8:00:00 AM

Completed By: Lindsay Mangin 9/13/2014 9:35:50 AM

Reviewed By: 09/15/14

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	1.8	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, LLC	X Standard ☐ Rush
Mailing Address: 604 Pinon Farmington, NM 87401	Project Name: Blanco #202A
Phone #: 505-564-2281	Project #:
Email or Fax#:	Project Manager: E. Skyles
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	Sampler: CL/SG
Accreditation: ☐ NELAP ☐ Other ☐ EDD (Type)	On Ice: X Yes ☐ No Sample Temperature: 5

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1409148	TPH - EPA 8015 (DRO/GRO)	300.0 Chlorides	Air Bubbles (Y or N)
9/12/14	12:30	Soil	SB-1 @ surface	1 - 4 oz.	cool	-001	X	X	
9/12/14	12:39	Soil	SB-2 @ surface	1 - 4 oz.	cool	-002	X	X	
9/12/14	12:43	Soil	SB-3 @ surface	1 - 4 oz.	cool	-003	X	X	
9/12/14	12:50	Soil	SB-4 @ surface	1 - 4 oz.	cool	-004	X	X	

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/12/14	1645			9/12/14	1645
Date:	Time:	Relinquished by:	Received by:	Date	Time
9/12/14	1800			09/13/14	0800

Remarks: Bill to Conoco Phillips
WO #: 20364324
Area: 5
Supervisor: Jim Peace
USER: MCINNSK
Requested 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 notated on the analytical report.