

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Burlington Resources, a Wholly Owned Subsidiary of ConocoPhillips Company	Contact Lisa Hunter
Address 3401 East 30th St, Farmington, NM	Telephone No. (505) 326-9786
Facility Name: San Juan 30-6 Unit 400	Facility Type: Gas Well

Surface Owner Federal (B. of Reclamation)	Mineral Owner BLM	API No. 3003923934
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LOCATION OF RELEASE

RCVD SEP 11 '14

Unit Letter M	Section 14	Township 30N	Range 07W	Feet from the 300'	North/South Line South	Feet from the 990'	East/West Line West	County Rio Arriba
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Latitude **36.80604** Longitude **-107.5451**

OIL CONS. DIV.

NATURE OF RELEASE

DIST. 3

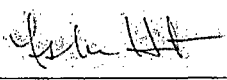
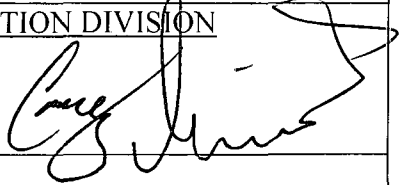
Type of Release Produced Water	Volume of Release 38 BBLs	Volume Recovered 38 BBLs
Source of Release Overflow of Below Grade Tank	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 08/04/14 @ 8:52 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Shari Ketcham & Mark Kelly, BLM Jonathan Kelly & Brandon Powell, NMOCD	
By Whom? Lindsay Dumas	Date and Hour BLM 08/04/14 @ 4:09 p.m. NMOCD 08/04/14 @ 4:12 p.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.*
Overflowing of Below Grade Tank as discovered by MSO and pumping unit shut down and re-directed pump line to the 500 BBL tanks. 38 bbls produced water stayed within cribbing area. Water truck called immediately and recovered standing fluid (38 bbls).

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		
Printed Name: Lisa Hunter	Approved by Environmental Specialist: 		
Title: Field Environmental Specialist	Approval Date: 9/18/14	Expiration Date:	
E-mail Address: Lisa.Hunter@cop.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: September 8, 2014	Phone: (505) 326-9786		

* Attach Additional Sheets If Necessary

#10051426138806

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**CONESTOGA-ROVERS
& ASSOCIATES**

6121 Indian School Road NE, Suite 200
Albuquerque, New Mexico 87110
Telephone: (505) 884-0672 Fax: (505) 884-4932
www.CRAworld.com

September 4, 2014

Reference No. 086082

Mrs. Lisa Hunter
ConocoPhillips
San Juan Business Unit
5525 Hwy 64
Farmington, New Mexico 87401

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

**Re: Release Assessment Report
San Juan 30-6 No. 400
San Juan County, New Mexico**

Dear Lisa Hunter:

On August 18, 2014 Conestoga-Rovers & Associates (CRA) completed a release assessment at the ConocoPhillips (CoP) San Juan 30-6 No. 400 (Site), located in San Juan County, New Mexico. The release consisted of approximately 38 barrels (bbls) of produced water from the onsite below grade tank (BGT). Of the 38 bbls of produced water released, 38 bbls were recovered.

1.0 Site Information

1.1 Location

Location – Unit letter M, Section 14, Township 30N, Range 07W, San Juan County, New Mexico
API Number: 30-039-23934

Well Head Latitude/Longitude – N36.8064, W107.5451, respectively

Release Location Latitude/Longitude – N36.806409, W107.546067, respectively

Land Jurisdiction – Bureau of Land Management (BLM)

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map

Figure 3. Release Assessment Sample Locations and Results

1.2 Site Ranking

In accordance with the New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD Guidelines for Remediation of Leaks, Spills, and

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Releases (August 1993) prior to site work. The release was given a ranking score of 10 based on the following factors:

- **Depth to Groundwater:** Groundwater depth in the vicinity of the release is estimated to be approximately 190 feet based on a New Mexico Office of the State Engineer database search of wells in the area. (0 points)
- **Wellhead Protection Area:** The release location is not within a wellhead protection area. (0 points)
- **Distance to Surface Water Body:** St. Francis Creek is located approximately 800 horizontal feet from the release location. (10 points)

1.3 Assessment

CRA was initially contacted by Lindsay Dumas of CoP on August 6, 2014, and on August 13, 2014 Christine Mathews of CRA completed the release assessment field work. The assessment included collection and field screening of five soil samples from soil borings in and around the release area. Soil borings were terminated at approximately six inches below the bottom of the BGT containment area. Sample locations are presented on Figure 3.

2.0 Soil Sampling

Five soil samples from five hand-augered soil borings, B-1 through B-5, were collected during the assessment. All soil samples were field screened for volatile organic compounds (VOCs) and chlorides. The five soil samples were also analyzed by Hall Environmental Analysis Laboratory for confirmation laboratory analysis

2.1 Field Sampling

2.1.1 Volatile Organic Compounds

Field screening for VOCs was conducted with a photo-ionization detector (PID. Before performing any field screening, the PID was calibrated with 100 parts per million (ppm) isobutylene gas.

2.1.2 HACH Chloride Field Analysis

Field chloride samples were screened using HACH low range (30 to 600 milligrams per liter (mg/L)) chloride test strips. The field screening procedure followed was that contained in the



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document Field Determination of Chloride in Salt Impacted Soils by David G. Boyer, P.G., Safety and Environmental Solutions, Inc., Hobbs, New Mexico. Chloride field screening results achieved from the above referenced method are typically comparable to laboratory analytical results. One factor that can interfere with field results, however, is turbid solutions. Small soil particles are capable of plugging up the capillary pores of the HACH chloride test strips resulting in slow or incomplete reactions. Solutions for each of the five soil samples collected for field screening were turbid since soils consist of silty clay. Due to the incomplete reaction of the 5 samples that were field screened for chloride, the test strips indicated that chloride levels were below <128 mg/L. In comparison to laboratory analytical results (see below), it is evident that the turbid solutions impeded the reaction during field screening for chlorides.

2.2 Laboratory Analysis

A soil sample from each of the five borings was submitted for laboratory analysis. Samples were placed into laboratory supplied containers, properly labeled, placed on ice, and transported to Hall Environmental Analysis Laboratory (Hall), of Albuquerque, New Mexico under chain of custody documentation. All soil samples were analyzed by Hall for the following constituents.

- TPH GRO and DRO by EPA Method 8015
- BTEX by EPA Method 8021
- Chloride by EPA Method 300.1

2.3 Field and Laboratory Analytical Results

On August 13, 2014, release assessment field screening results for VOCs via PID showed concentrations were 0.3 ppm in all samples except for B-3 and B-4 with results of 0.1 ppm and 0.2 ppm, respectively. Field chloride concentrations were determined to be less than 128 mg/L based on partially reacted HACH chloride test strip, as explained above. Results are included in Table 1 and on Figure 3. The CRA Field Sampling Report is also attached.

Table 1. VOC and Chloride Field Screening Results
San Jan 30-6 No. 400 Release Assessment, August 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)	Chloride (mg/kg)
NMOCD Action Level*			100	NE



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B-1	8/13/2014	0.5	0.3	370
B-2	8/13/2014	0.5	0.3	350
B-3	8/13/2014	0.5	0.1	250
B-4	8/13/2014	0.5	0.2	270
B-5	8/13/2014	0.5	0.3	300

NE ~ not established

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

Laboratory analyses for all five soil samples were used to confirm field screening results. The laboratory analyses reported concentrations of TPH GRO and DRO, BTEX, and benzene below the NMOCD site specific action levels of 1,000 mg/kg, 50 mg/Kg, and 10 mg/Kg respectively. Analytical results are presented in Table 2 and on Figure 3. The laboratory analytical report is also attached.

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, TPH and Chloride
San Juan 30-6 No. 400 Release Assessment, August 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	Chloride (mg/kg)
<i>NMOCD Action Level*</i>			10	50	1,000		NE
B-1	8/13/2014	0.5	< 0.050	< 0.250	< 5.0	26	370
B-2	8/13/2014	0.5	< 0.048	< 0.241	< 4.8	10	350
B-3	8/13/2014	0.5	< 0.048	< 0.241	< 4.8	<10	250
B-4	8/13/2014	0.5	< 0.046	< 0.231	< 4.6	88	270
B-5	8/13/2014	0.5	< 0.047	< 0.235	< 4.7	410	300

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 August 13, 2014, CRA conducted a release assessment of soils associated with an overflow of produced water from a BGT at the San Juan 30-6 No. 400. Action levels for releases are



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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.

Field screening results for VOCs were below 0.5 ppm in all collected samples. Laboratory confirmation results for VOCs and TPH GRO and DRO indicated concentrations below the NMOCD action levels. Laboratory analysis for VOCs indicated concentrations of BTEX below laboratory detection limits. The highest laboratory analytical TPH concentration was reported in B-5 with 410 mg/kg.

The release was completely contained within the BGT bermed area and all liquids were essentially recovered by a vacuum truck. Laboratory analytical results were below applicable NMOCD action levels. These results, combined with a significant depth to groundwater, do not present any potential impacts to surface or groundwater and therefore CRA recommends no further action at the Site.

If you have any questions about this report or site conditions please do not hesitate to contact Bernard Bockisch at 505-884-0672.

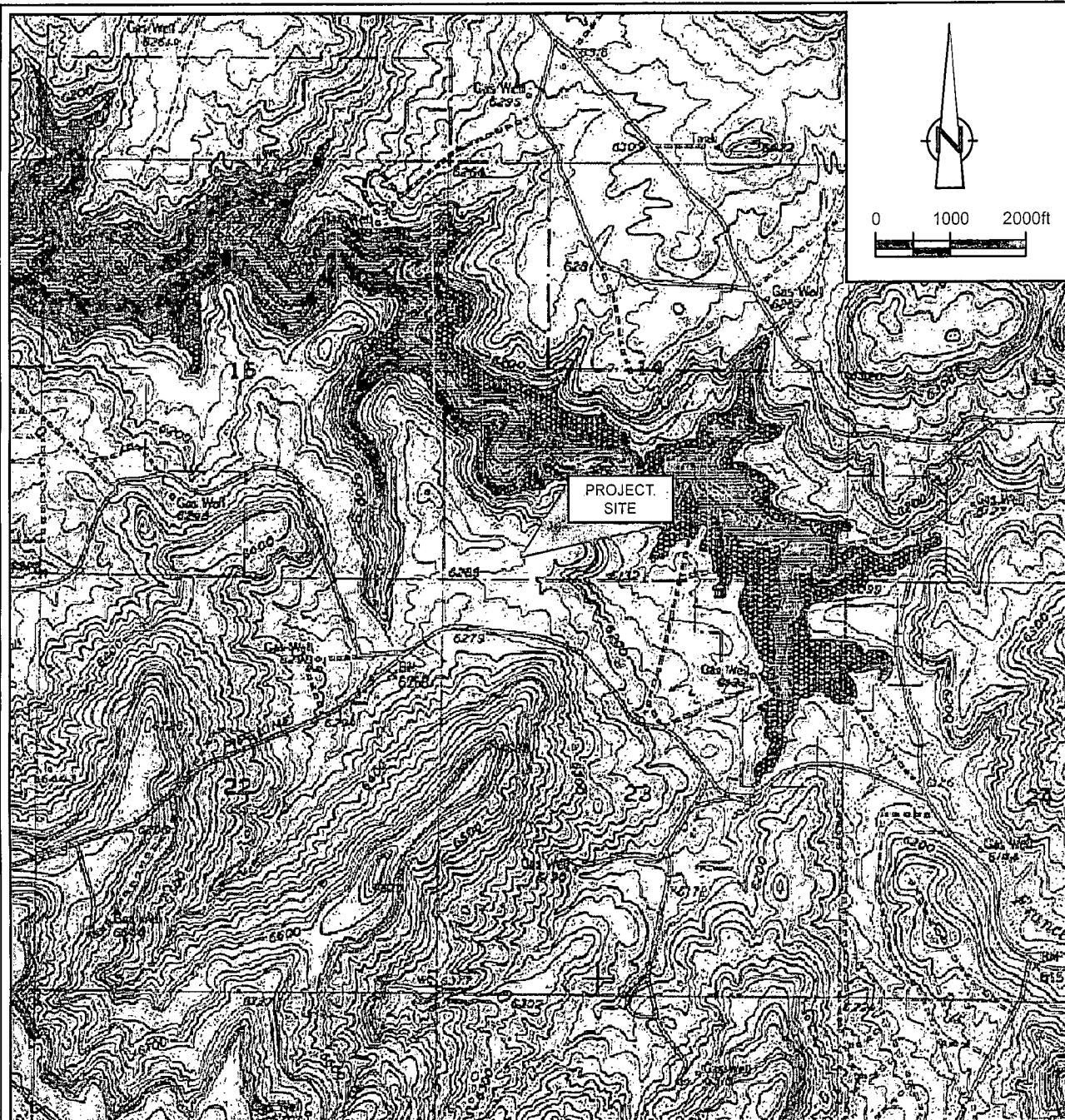
Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Bernard Bockisch

BB/MC/01

Encl.



SOURCE: USGS 7.5 MINUTE QUAD
"NAVAJO DAM, NEW MEXICO"

LAT/LONG: 36.8063° NORTH, 107.5459° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO CENTRAL

Figure 1

TOPOGRAPHIC SITE LOCATION MAP
SAN JUAN 30-6 No.400, UNIT LETTER M
SECTION 14, T30N, R07W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



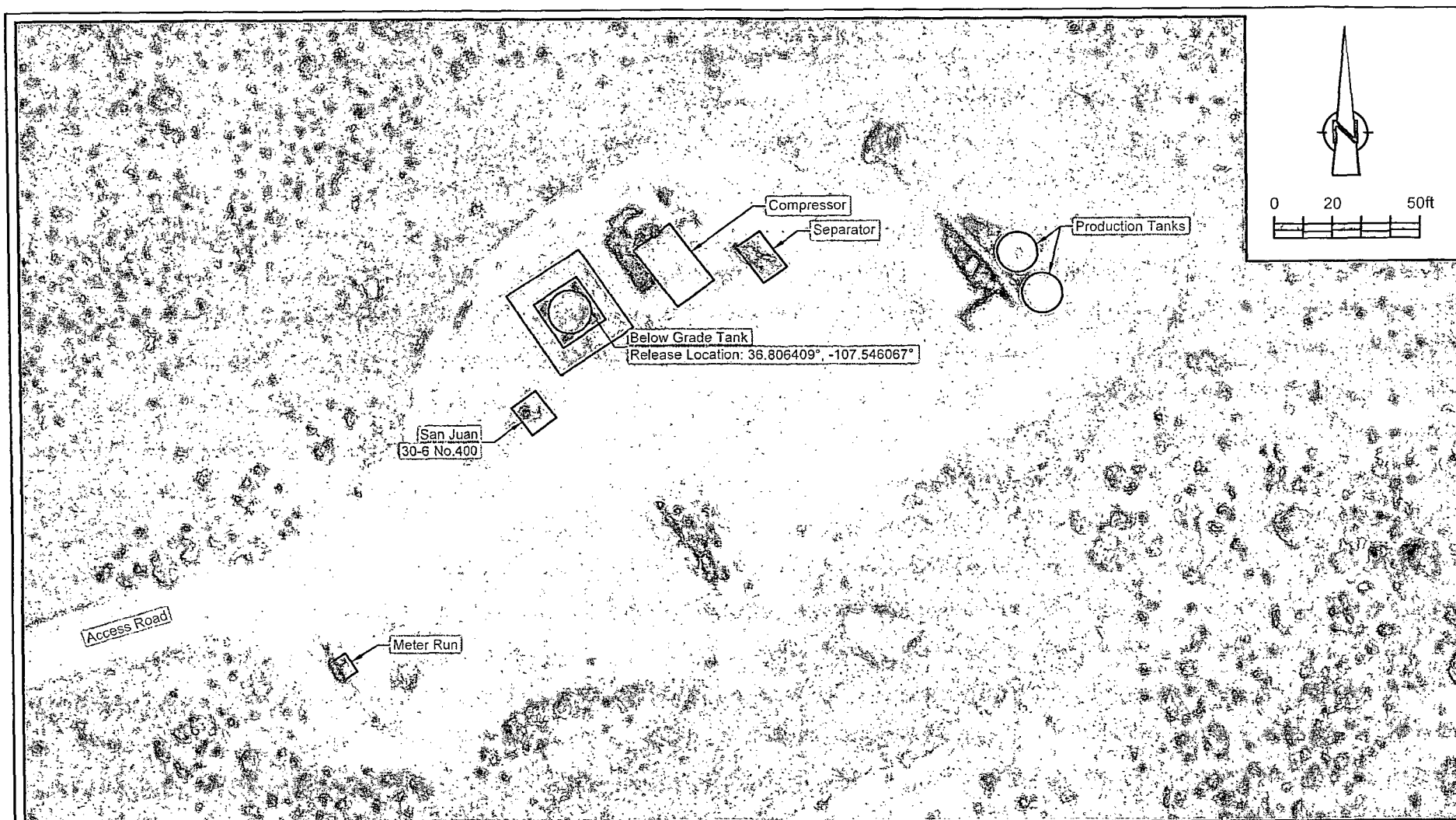


Figure 2

AERIAL SITE MAP
SAN JUAN 30-6 No.400, UNIT LETTER M
SECTION 14, T30N, R07W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



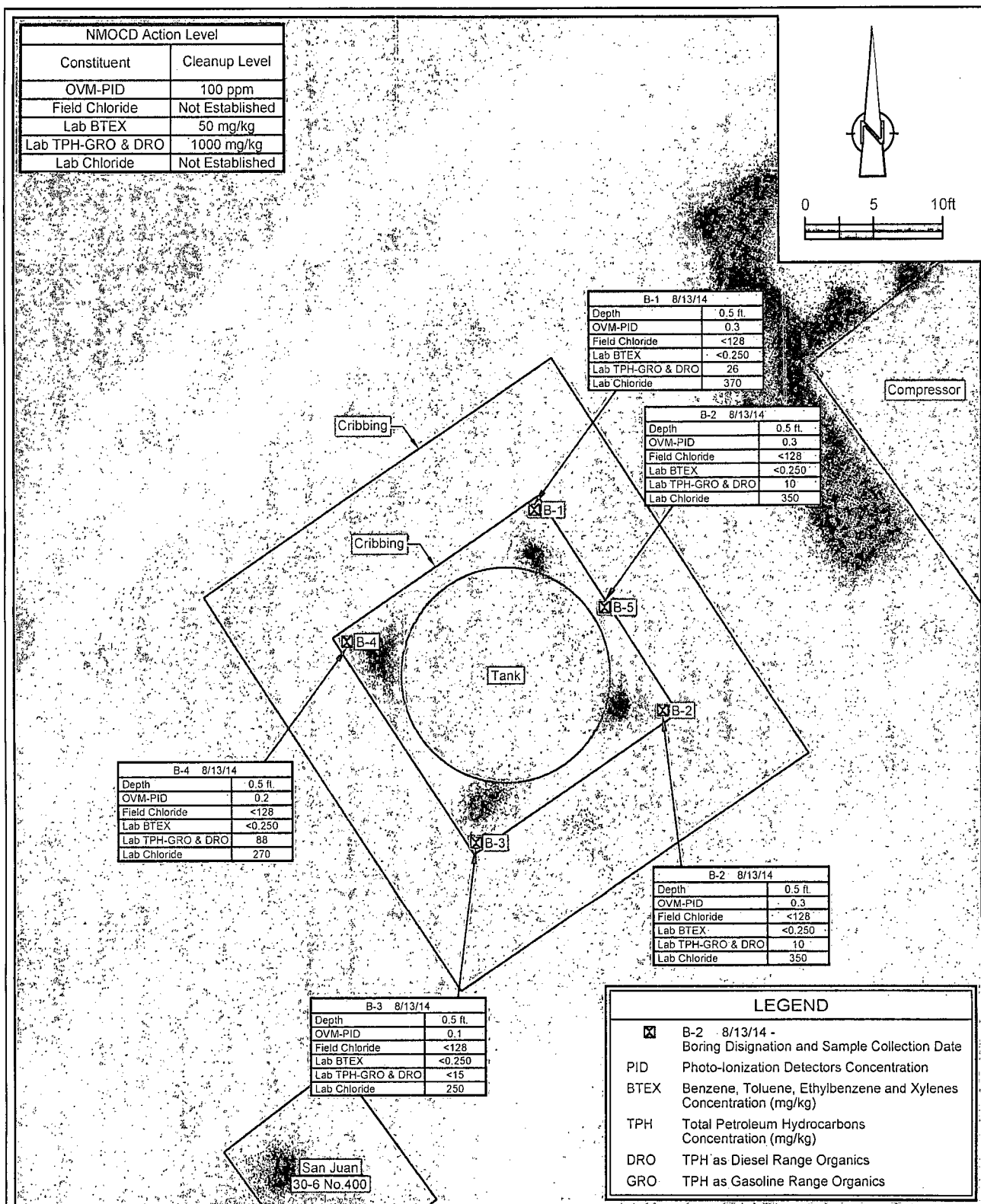


Figure 3
 RELEASE ASSESSMENT SAMPLE LOCATIONS AND RESULTS
 SAN JUAN 30-6 No.400, UNIT LETTER M
 SECTION 14, T30N, R07W, SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



Conestoga-Rovers & Associates Field Sampling Report

Client: ConocoPhillips

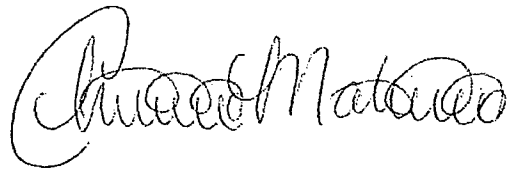
Project Location: San Juan 30-6 No. 400

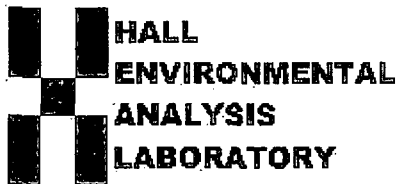
Date: 8/12/2014

Matrix: Soil

Sample ID	Collection Date	Collection Time	OVM (ppm)	Chloride (mg/kg)	Analysts Initials
B-1 (0-6")	8/13/2014	1305	0.3	< 128	CM
B-2 (0-6")	8/13/2014	1320	0.3	< 128	CM
B-3 (0-6")	8/13/2014	1340	0.1	< 128	CM
B-4 (0-6")	8/13/2014	1355	0.2	< 128	CM
B-5 (0-6")	8/13/2014	1415	0.3	< 128	CM

Analyst: Christine Mathews

A handwritten signature in black ink, appearing to read "Christine Mathews", written in a cursive style.



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

August 20, 2014

Jeff Walker

CRA

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: San Juan 30-6 No. 400

OrderNo.: 1408768

Dear Jeff Walker:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/14/2014 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 qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1408768

Date Reported: 8/20/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CRA

Client Sample ID: SS-081314-CM-B1(0-6")

Project: San Juan 30-6 No. 400

Collection Date: 8/13/2014 1:05:00 PM

Lab ID: 1408768-001

Matrix: SOIL

Received Date: 8/14/2014 2:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	26	9.9		mg/Kg	1	8/18/2014 5:29:56 PM	14785
Surr: DNOP	76.2	57.9-140		%REC	1	8/18/2014 5:29:56 PM	14785
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/18/2014 11:06:17 PM	14792
Surr: BFB	98.5	80-120		%REC	1	8/18/2014 11:06:17 PM	14792
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/18/2014 11:06:17 PM	14792
Benzene	ND	0.050		mg/Kg	1	8/18/2014 11:06:17 PM	14792
Toluene	ND	0.050		mg/Kg	1	8/18/2014 11:06:17 PM	14792
Ethylbenzene	ND	0.050		mg/Kg	1	8/18/2014 11:06:17 PM	14792
Xylenes, Total	ND	0.10		mg/Kg	1	8/18/2014 11:06:17 PM	14792
Surr: 4-Bromofluorobenzene	109	80-120		%REC	1	8/18/2014 11:06:17 PM	14792
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	370	30		mg/Kg	20	8/18/2014 12:44:17 PM	14812

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		

Analytical ReportLab Order **1408768**Date Reported: **8/20/2014****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** CRA**Client Sample ID:** SS-081314-CM-B2(0-6")**Project:** San Juan 30-6 No. 400**Collection Date:** 8/13/2014 1:20:00 PM**Lab ID:** 1408768-002**Matrix:** SOIL**Received Date:** 8/14/2014 2:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	10	9.9		mg/Kg	1	8/18/2014 5:51:13 PM	14785
Surr: DNOP	84.9	57.9-140		%REC	1	8/18/2014 5:51:13 PM	14785
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/18/2014 11:34:53 PM	14792
Surr: BFB	98.5	80-120		%REC	1	8/18/2014 11:34:53 PM	14792
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	8/18/2014 11:34:53 PM	14792
Benzene	ND	0.048		mg/Kg	1	8/18/2014 11:34:53 PM	14792
Toluene	ND	0.048		mg/Kg	1	8/18/2014 11:34:53 PM	14792
Ethylbenzene	ND	0.048		mg/Kg	1	8/18/2014 11:34:53 PM	14792
Xylenes, Total	ND	0.097		mg/Kg	1	8/18/2014 11:34:53 PM	14792
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	8/18/2014 11:34:53 PM	14792
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	350	30		mg/Kg	20	8/18/2014 1:09:07 PM	14812

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		

Analytical Report

Lab Order 1408768

Date Reported: 8/20/2014

Hall Environmental Analysis Laboratory, Inc.

CLIENT: CRA

Client Sample ID: SS-081314-CM-B3(0-6")

Project: San Juan 30-6 No. 400

Collection Date: 8/13/2014 1:40:00 PM

Lab ID: 1408768-003

Matrix: SOIL

Received Date: 8/14/2014 2:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/19/2014 2:50:25 PM	14785
Surr: DNOP	79.0	57.9-140		%REC	1	8/19/2014 2:50:25 PM	14785
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/19/2014 12:03:23 AM	14792
Surr: BFB	99.6	80-120		%REC	1	8/19/2014 12:03:23 AM	14792
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	8/19/2014 12:03:23 AM	14792
Benzene	ND	0.048		mg/Kg	1	8/19/2014 12:03:23 AM	14792
Toluene	ND	0.048		mg/Kg	1	8/19/2014 12:03:23 AM	14792
Ethylbenzene	ND	0.048		mg/Kg	1	8/19/2014 12:03:23 AM	14792
Xylenes, Total	ND	0.096		mg/Kg	1	8/19/2014 12:03:23 AM	14792
Surr: 4-Bromofluorobenzene	112	80-120		%REC	1	8/19/2014 12:03:23 AM	14792
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	250	7.5		mg/Kg	5	8/18/2014 1:46:21 PM	14812

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	Page 3 of 9
	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: CRA Client Sample ID: SS-081314-CM-B4(0-6")
 Project: San Juan 30-6 No. 400 Collection Date: 8/13/2014 1:55:00 PM
 Lab ID: 1408768-004 Matrix: SOIL Received Date: 8/14/2014 2:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	88	10		mg/Kg	1	8/18/2014 6:34:01 PM	14785
Surr: DNOP	74.0	57.9-140		%REC	1	8/18/2014 6:34:01 PM	14785
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/19/2014 12:31:57 AM	14792
Surr: BFB	99.7	80-120		%REC	1	8/19/2014 12:31:57 AM	14792
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	8/19/2014 12:31:57 AM	14792
Benzene	ND	0.046		mg/Kg	1	8/19/2014 12:31:57 AM	14792
Toluene	ND	0.046		mg/Kg	1	8/19/2014 12:31:57 AM	14792
Ethylbenzene	ND	0.046		mg/Kg	1	8/19/2014 12:31:57 AM	14792
Xylenes, Total	ND	0.093		mg/Kg	1	8/19/2014 12:31:57 AM	14792
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	8/19/2014 12:31:57 AM	14792
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	270	30		mg/Kg	20	8/18/2014 2:23:36 PM	14812

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	Page 4 of 9
	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			

Analytical Report

Lab Order 1408768

Date Reported: 8/20/2014

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** CRA**Client Sample ID:** SS-081314-CM-B5(0-6")**Project:** San Juan 30-6 No. 400**Collection Date:** 8/13/2014 2:15:00 PM**Lab ID:** 1408768-005**Matrix:** SOIL**Received Date:** 8/14/2014 2:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	410	100		mg/Kg	10	8/19/2014 3:33:22 PM	14785
Surr: DNOP	0	57.9-140	S	%REC	10	8/19/2014 3:33:22 PM	14785
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/19/2014 1:00:38 AM	14792
Surr: BFB	100	80-120		%REC	1	8/19/2014 1:00:38 AM	14792
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	8/19/2014 1:00:38 AM	14792
Benzene	ND	0.047		mg/Kg	1	8/19/2014 1:00:38 AM	14792
Toluene	ND	0.047		mg/Kg	1	8/19/2014 1:00:38 AM	14792
Ethylbenzene	ND	0.047		mg/Kg	1	8/19/2014 1:00:38 AM	14792
Xylenes, Total	ND	0.094		mg/Kg	1	8/19/2014 1:00:38 AM	14792
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	8/19/2014 1:00:38 AM	14792
EPA METHOD 300.0: ANIONS							Analyst: JRR
Chloride	300	7.5		mg/Kg	5	8/18/2014 2:36:01 PM	14812

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#: 1408768

22-Aug-14

Client: CRA

Project: San Juan 30-6 No. 400

Sample ID	MB-14812	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	14812	RunNo:	20645					
Prep Date:	8/18/2014	Analysis Date:	8/18/2014	SeqNo:	600822	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-14812	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	14812	RunNo:	20645					
Prep Date:	8/18/2014	Analysis Date:	8/18/2014	SeqNo:	600823	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	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#: 1408768

22-Aug-14

Client: CRA
Project: San Juan 30-6 No. 400

Sample ID	MB-14785	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	14785	RunNo:	20630					
Prep Date:	8/15/2014	Analysis Date:	8/18/2014	SeqNo:	600244	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.5		10.00		74.9	57.9	140			

Sample ID	LCS-14785	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	14785	RunNo:	20630					
Prep Date:	8/15/2014	Analysis Date:	8/18/2014	SeqNo:	600245	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	44	10	50.00	0	87.7	68.6	130			
Surr: DNOP	4.2		5.000		84.6	57.9	140			

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#: 1408768

22-Aug-14

Client: CRA

Project: San Juan 30-6 No. 400

Sample ID	MB-14792	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	14792	RunNo:	20627					
Prep Date:	8/15/2014	Analysis Date:	8/18/2014	SeqNo:	600274	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	1000		1000		99.6	80	120			

Sample ID	LCS-14792	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	14792	RunNo:	20627					
Prep Date:	8/15/2014	Analysis Date:	8/18/2014	SeqNo:	600275	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	65.8	139			
Surr: BFB	1100		1000		108	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1408768

22-Aug-14

Client: CRA

Project: San Juan 30-6 No. 400

Sample ID	MB-14792	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	14792	RunNo:	20627					
Prep Date:	8/15/2014	Analysis Date:	8/18/2014	SeqNo:	600307	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID	LCS-14792	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	14792	RunNo:	20627					
Prep Date:	8/15/2014	Analysis Date:	8/18/2014	SeqNo:	600308	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.10	1.000	0	106	80	120			
Benzene	1.0	0.050	1.000	0	100	80	120			
Toluene	1.0	0.050	1.000	0	99.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		119	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

Sample Log-In Check List

Client Name: CRA Albuquerque

Work Order Number: 1408768

RcptNo: 1

Received by/date: KS 08/14/15

Logged By: **Celina Sessa** 8/14/2014 2:05:00 PM

Completed By: **Celina Sessa** 8/15/2014 8:42:37 AM

Reviewed By: [Signature] 08/15/14

Celina Sessa

Celina Sessa

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? Client

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 8.0°C? Yes ☐ No ☒ NA ☐
Not required
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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> 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	8.3	Good	Not Present			

Chain-of-Custody Record		Turn-Around Time:	
Client: CRA for ConocoPhillips/JBU		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Mailing Address: 6121 Indian School / #200 Albuquerque, NM 87110		Project Name: San Juan 30-6 No. 400	
Phone #: 505-884-0672		Project #: TBD	
email or Fax#: 505-884-4932		Project Manager:	
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Jeff Walker	
Accreditation <input type="checkbox"/> NELAP <input type="checkbox"/> Other		Sampler: Christine Matthews	
<input type="checkbox"/> EDD (Type) none		On Ice: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		Sample Temperature: 8.3	

☒ Standard ☐ Rush

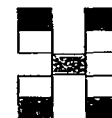
San Juan 30-6 No. 400

TBD

Jeff Walker

Sampler: Christina Matthews

On Ice: ☒ Yes ☐ No

Sample Temperature: 25°C 



www.hallenvironmental.com

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

Analysis Request

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
14/14	14:05			8/14/14	14:05
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks:

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.