FINAL REPORT SUMMARIZING CLOSURE FOR INCIDENT 2RP-2919

RICHARDS ENERGY COMPRESSION RJ UNIT #129 API# 30-015-03780 SECTION 35, T17S R29E, NM EDDY, NM



Prepared by: Souder, Miller & Associates 201 S. Halagueno Carlsbad, NM 88221 575-689-7040

Prepared for: Richards Energy Compression 3222 North Enterprise Drive Hobbs, NM 88240

> April 07, 2015 Reference 5B23838 BG1



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INTRODUCTION

On behalf of Richards Energy Compression, Souder Miller & Associates (SMA) has prepared this report of closure activities related to incident # 2RP-2919, providing a summary of the release and spill response efforts at the RJ Unit #129, a lease held by COG Operating. For #2RP-2919, On March 05, 2015 according to the Release Notification and Corrective Action Form C-141, a Compression service company drove over the line causing the line to break. A backhoe was on site and able to isolate the impacted area quickly. According to the initial C-141, "The impacted area was approximately 10' X 300' in the roadway. The backhoe scraped up the impacted soil and hauled to a NMOCD approved facility." (Appendix B). The total volume of releases was estimated at 3 bbls of oil and 10 bbls of produced water.

The site is located in Unit F, Section 35, Township 17 South, Range 29 East, Eddy, New Mexico. Figure 1, Site Location Map, illustrates the location of the release.

This document presents the results of the initial assessment and soil sampling performed at the Site, the regulatory framework for existing activities, and a summary of work done at the location designed to facilitate incident mitigation and closure. Site details, sampling locations and the remedial excavation area are presented in Figure 2. Appendices include the laboratory analytical reports for the initial sampling, New Mexico Oil Conservation Division (NMOCD) form C-141 (final), and the manifest for the transport and disposal of RCRA exempt soils from the initial response to the NMOCD approved facility Lea Land Inc.

REGULATORY FRAMEWORK AND SITE CLASSIFICATION

This project was conducted under the regulatory jurisdiction of the NMOCD, which requires the vadose zone to be abated so that water contaminants in the vadose zone will not, with reasonable probability, contaminate groundwater or surface water (toxic pollutants as defined in 20.6.2.7 New Mexico Administration Code shall not be present) through leaching, percolation, or other transport mechanisms (19.15.1.19 NMAC, Subsection B, Paragraphs 1 and 2). The NMOCD hydrocarbon soil remediation levels are determined by ranking criteria on a site-by-site basis, as outlined in the NMOCD "Guidelines for Remediation of Spills, Leaks, and Releases", dated August 13, 1993. The ranking criteria are based on three site characteristics: depth to groundwater, wellhead protection, and distance to surface water.

According to the Office of the State Engineer's records, no water wells are located within 1,000 feet of the well pad and tank battery. The estimated depth to groundwater is greater than 100 feet below ground surface. No surface water bodies are located within 1,000 feet of the well pad and battery. The table below illustrates the ranking criteria, used by the NMOCD, and includes site specific characteristics at the West Brushy 8 location.

Criteria Site Characteristics	Ranki	ng Score
Depth to Ground Water	>100 feet	0
Wellhead Protection Area	>1000 feet	0
Distance to Surface Water	>1000 feet	0_
Total Ranking Score		0

Based on the site characteristics and the NMOCD guidelines, the site has a ranking score of 0. Consequently, Recommended Remediation Action Levels (RRALs) of 10 milligrams per kilogram (mg/Kg)

Benzene, 50 mg/Kg total Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX); and 5000 mg/Kg Total Petroleum Hydrocarbons (TPH) are proposed for remediation at the site.

SOIL SAMPLING RESULTS

Samples were taken after the initial spill response clean up occurred. Sample locations RJ 1 thought RJ4 are samples taken with the spill area shown in Table 1. Sample RJ 5 is a representative sample of the spill pile and BG1 is the background sample of the area. Specific sample locations are depicted on Figure 2 (Sample Location Map) along with sampling details. All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for BTEX utilizing EPA Method 8021B, GRO and MRO using EPA Method 8015D and Total Chlorides using EPA Method 300.0.

TABLE 1 SPILL SAMPLES

Analytical Report- 1503775	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX mg/Kg	GRO mg/Kg	DRO mg/Kg	CI- mg/Kg
1503775-001	RJ 1	3/13/2015	Surface	N/A	BDL	1100	3600
1503775-002	RJ 2	3/13/2015	Surface	N/A	BDL	500	2400
1503775-003	RJ 3	3/13/2015	Surface	N/A	BDL	140	3200
1503775-004	RJ 4	3/13/2015	Surface	0.48	9	350	1200
1503775-005	RJ 5	3/13/2015	Surface	4.2	120	8300	4300
1503775-006	BG 1	3/13/2015	Surface	BDL	BDL	36	3000

N/A – Not Analyzed BDL – Below Detection Limits for the Method. Refer to Analytical Reports Appendix A

All laboratory analytical results expect for RJ 5, the spill pile sample are below the site specific NMOCD RRALs based on the ranking criteria.

PROJECT SUMMARY

The initial soil assessment activities performed by SMA effectively delineated the horizontal and vertical extent of chloride and hydrocarbon-affected soils in accordance to NMOCD regulatory guidance. These activities were performed after the contaminated soil was removed.

Based on the initial soil sampling results for the Site (Analytical Report- 1503775), excavation activities were affective in nature and did not exceed 6 inches in depth reached in the Initial Response Action. All contaminated soil was excavated using heavy equipment and transported off location to an NMOCD approved disposal facility. Soil samples were taken within the excavation to confirm that remediation goals had been achieved. The samples were sent to a third party laboratory for analysis and are summarized in Table #1.

CONFIRMATION SAMPLING

The initial samples taken by SMA, will act as confirmation samples as well. Locations of the confirmation samples in the spill area (Figure 2). Each sample container was labeled, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The cooler was sealed for shipment to the laboratory, accompanied by proper chain-of-custody documentation. The soil samples were delivered on 03/18/15 to Hall Environmental Analysis Laboratory, Inc., in Albuquerque, New Mexico for analysis by EPA METHOD 8015D, EPA METHOD 8021B and EPA METHOD 300.

SITE CLOSURE

All excavated contaminated soil was transported to an NMOCD approved disposal facility. The soils was sampled by SMA and tested by a third party laboratory (Table 1) confirming that the soil meets the site-specific NMOCD is cleanup levels of 10 mg/Kg Benzene, 50 mg/Kg total BTEX and 5000 mg/Kg TPH. A closure request was submitted to the NMOCD as a C-141 final on 04/06/15 (Appendix B).

LIST OF FIGURES

FIGURE 1 SITE LOCATION MAP
FIGURE 2 SITE DETAILS AND SAMPLE LOCATION MAP

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FIGURE 1 SITE LOCATION MAP

FIGURE 2 SITE DETAILS AND SAMPLE LOCATIONS MAP

Site Map RJ Unit #129 Artesia, New Mexico

Figure 2



rigure 2

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Carlibad, New Mexico 88221
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Serving the Southwest & Rocky Mountains

APPENDIX A LABORATORY ANALYTICAL REPORTS



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

March 30, 2015

Austin Weyant Souder, Miller & Associates 201 S Halagueno Carlsbad, NM 88221 TEL: (575) 689-7040

FAX

RE: RJ Unit 129 OrderNo.: 1503775

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/18/2015 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

Indest

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order **1503775**

Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: RJ 1

 Project:
 RJ Unit 129
 Collection Date: 3/13/2015 9:00:00 AM

 Lab ID:
 1503775-001
 Matrix: SOIL
 Received Date: 3/18/2015 9:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS					Analys	: JME
Diesel Range Organics (DRO)	1100	99		mg/Kg	10	3/21/2015 10:08:50 PM	1 18201
Surr: DNOP	0	63.5-128	S	%REC	10	3/21/2015 10:08:50 PM	1 18201
EPA METHOD 8015D: GASOLINE RAM	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/19/2015 11:30:01 PM	1 18213
Surr: BFB	92.1	80-120		%REC	1	3/19/2015 11:30:01 PM	1 18213
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048		mg/Kg	1	3/19/2015 11:30:01 PM	1 18213
Toluene	ND	0.048		mg/Kg	1	3/19/2015 11:30:01 PM	1 18213
Ethylbenzene	ND	0.048		mg/Kg	1	3/19/2015 11:30:01 PM	1 18213
Xylenes, Total	ND	0.096		mg/Kg	1	3/19/2015 11:30:01 PM	1 18213
Surr: 4-Bromofluorobenzene	105	80-120		%REC	1	3/19/2015 11:30:01 PM	1 18213
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	3600	150		mg/Kg	100	3/26/2015 3:54:31 AM	18295

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

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- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order **1503775**

Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: RJ 2

 Project:
 RJ Unit 129
 Collection Date: 3/13/2015 9:00:00 AM

 Lab ID:
 1503775-002
 Matrix: SOIL
 Received Date: 3/18/2015 9:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS					Analys	t: JME
Diesel Range Organics (DRO)	500	98		mg/Kg	10	3/21/2015 10:51:44 PM	1 18201
Surr: DNOP	0	63.5-128	S	%REC	10	3/21/2015 10:51:44 PM	1 18201
EPA METHOD 8015D: GASOLINE RAN	GE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/20/2015 12:56:08 AN	1 18213
Surr: BFB	94.9	80-120		%REC	1	3/20/2015 12:56:08 AM	1 18213
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048		mg/Kg	1	3/20/2015 12:56:08 AM	1 18213
Toluene	ND	0.048		mg/Kg	1	3/20/2015 12:56:08 AM	1 18213
Ethylbenzene	ND	0.048		mg/Kg	1	3/20/2015 12:56:08 AM	1 18213
Xylenes, Total	ND	0.096		mg/Kg	1	3/20/2015 12:56:08 AN	1 18213
Surr: 4-Bromofluorobenzene	108	80-120		%REC	1	3/20/2015 12:56:08 AM	1 18213
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	2400	75		mg/Kg	50	3/26/2015 4:06:56 AM	18295

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

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- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order **1503775**

Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: RJ 3

 Project:
 RJ Unit 129
 Collection Date: 3/13/2015 9:00:00 AM

 Lab ID:
 1503775-003
 Matrix: SOIL
 Received Date: 3/18/2015 9:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS					Analys	t: JME
Diesel Range Organics (DRO)	140	10		mg/Kg	1	3/21/2015 11:34:39 PM	1 18201
Surr: DNOP	128	63.5-128	S	%REC	1	3/21/2015 11:34:39 PM	1 18201
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/20/2015 12:07:02 PM	1 18213
Surr: BFB	95.6	80-120		%REC	1	3/20/2015 12:07:02 PM	1 18213
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Benzene	ND	0.048		mg/Kg	1	3/20/2015 12:07:02 PM	1 18213
Toluene	ND	0.048		mg/Kg	1	3/20/2015 12:07:02 PM	1 18213
Ethylbenzene	ND	0.048		mg/Kg	1	3/20/2015 12:07:02 PM	1 18213
Xylenes, Total	ND	0.097		mg/Kg	1	3/20/2015 12:07:02 PM	1 18213
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	3/20/2015 12:07:02 PM	1 18213
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	3200	150		mg/Kg	100	3/26/2015 4:19:21 AM	18295

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

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- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order 1503775

Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: RJ 4

Collection Date: 3/13/2015 9:00:00 AM **Project:** RJ Unit 129 1503775-004 Matrix: SOIL Lab ID: Received Date: 3/18/2015 9:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE (ORGANICS					Analyst	: JME
Diesel Range Organics (DRO)	350	99		mg/Kg	10	3/22/2015 12:17:24 AM	1 18201
Surr: DNOP	0	63.5-128	S	%REC	10	3/22/2015 12:17:24 AM	1 18201
EPA METHOD 8015D: GASOLINE RANG	SE .					Analyst	: NSB
Gasoline Range Organics (GRO)	9.0	4.7		mg/Kg	1	3/20/2015 12:35:44 PM	1 18213
Surr: BFB	151	80-120	S	%REC	1	3/20/2015 12:35:44 PM	1 18213
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.047		mg/Kg	1	3/20/2015 12:35:44 PM	1 18213
Toluene	ND	0.047		mg/Kg	1	3/20/2015 12:35:44 PM	1 18213
Ethylbenzene	0.16	0.047		mg/Kg	1	3/20/2015 12:35:44 PM	1 18213
Xylenes, Total	0.32	0.095		mg/Kg	1	3/20/2015 12:35:44 PM	1 18213
Surr: 4-Bromofluorobenzene	122	80-120	S	%REC	1	3/20/2015 12:35:44 PM	1 18213
EPA METHOD 300.0: ANIONS						Analyst	:: LGT
Chloride	1200	30		mg/Kg	20	3/24/2015 12:55:54 PM	1 18295

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits
- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

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- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order **1503775**

, Inc. Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: RJ 5

 Project:
 RJ Unit 129
 Collection Date: 3/13/2015 9:00:00 AM

 Lab ID:
 1503775-005
 Matrix: SOIL
 Received Date: 3/18/2015 9:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE (ORGANICS					Analyst	: JME
Diesel Range Organics (DRO)	8300	1000		mg/Kg	100	3/22/2015 12:59:54 AM	18201
Surr: DNOP	0	63.5-128	S	%REC	100	3/22/2015 12:59:54 AM	18201
EPA METHOD 8015D: GASOLINE RANG	SE .					Analyst	: NSB
Gasoline Range Organics (GRO)	120	19		mg/Kg	4	3/20/2015 1:04:27 PM	18213
Surr: BFB	242	80-120	S	%REC	4	3/20/2015 1:04:27 PM	18213
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.19		mg/Kg	4	3/20/2015 1:04:27 PM	18213
Toluene	ND	0.19		mg/Kg	4	3/20/2015 1:04:27 PM	18213
Ethylbenzene	1.4	0.19		mg/Kg	4	3/20/2015 1:04:27 PM	18213
Xylenes, Total	2.9	0.38		mg/Kg	4	3/20/2015 1:04:27 PM	18213
Surr: 4-Bromofluorobenzene	143	80-120	S	%REC	4	3/20/2015 1:04:27 PM	18213
EPA METHOD 300.0: ANIONS						Analyst	: LGT
Chloride	4300	150		mg/Kg	100	3/26/2015 4:31:45 AM	18295

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

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- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order **1503775**

Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: BG 1

 Project:
 RJ Unit 129
 Collection Date: 3/13/2015 9:00:00 AM

 Lab ID:
 1503775-006
 Matrix: SOIL
 Received Date: 3/18/2015 9:30:00 AM

Analyses	Result	RL (Qual U	U nits	D	F	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS						Analys	t: JME
Diesel Range Organics (DRO)	36	9.9		mg/Kg	,	l	3/21/2015 2:31:34 PM	18201
Surr: DNOP	104	63.5-128		%REC	•	l	3/21/2015 2:31:34 PM	18201
EPA METHOD 8015D: GASOLINE RANG	GE						Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	,	l	3/20/2015 2:01:44 PM	18213
Surr: BFB	95.4	80-120		%REC	•	l	3/20/2015 2:01:44 PM	18213
EPA METHOD 8021B: VOLATILES							Analys	t: NSB
Benzene	ND	0.049		mg/Kg	,	l	3/20/2015 2:01:44 PM	18213
Toluene	ND	0.049		mg/Kg	•	l	3/20/2015 2:01:44 PM	18213
Ethylbenzene	ND	0.049		mg/Kg	•	l	3/20/2015 2:01:44 PM	18213
Xylenes, Total	ND	0.098		mg/Kg	•		3/20/2015 2:01:44 PM	18213
Surr: 4-Bromofluorobenzene	121	80-120	S	%REC	•	l	3/20/2015 2:01:44 PM	18213
EPA METHOD 300.0: ANIONS							Analys	t: LGT
Chloride	3000	150		mg/Kg	,	00	3/26/2015 4:44:09 AM	18295

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 Not In Range

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RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

WO#: **1503775**

30-Mar-15

Client: Souder, Miller & Associates

Project: RJ Unit 129

Sample ID MB-18295 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 18295 RunNo: 25049

Prep Date: 3/24/2015 Analysis Date: 3/24/2015 SeqNo: 739028 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-18295 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 18295 RunNo: 25049

Prep Date: 3/24/2015 Analysis Date: 3/24/2015 SeqNo: 739029 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.9 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 Not In Range
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1503775**

30-Mar-15

Client: Souder, Miller & Associates

Project: RJ Unit 129

Sample ID MB-18201 SampType: MBLK TestCode: EPA Method 8015D: Diesel Range Organics

Client ID: PBS Batch ID: 18201 RunNo: 24912

Prep Date: 3/18/2015 Analysis Date: 3/19/2015 SeqNo: 734292 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 10.00 124 63.5 128

Sample ID LCS-18201 SampType: LCS TestCode: EPA Method 8015D: Diesel Range Organics

Client ID: LCSS Batch ID: 18201 RunNo: 24912

Prep Date: 3/18/2015 Analysis Date: 3/19/2015 SeqNo: 734682 Units: mg/Kg

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

 Diesel Range Organics (DRO)
 53
 10
 50.00
 0
 107
 67.8
 130

 Surr: DNOP
 5.0
 5.000
 99.7
 63.5
 128

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 Not In Range
- RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1503775**

30-Mar-15

Client: Souder, Miller & Associates

Project: RJ Unit 129

Sample ID MB-18213 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 18213 RunNo: 24929

Prep Date: 3/18/2015 Analysis Date: 3/19/2015 SeqNo: 734777 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 930 1000 93.4 80 120

Sample ID LCS-18213 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 18213 RunNo: 24929

Prep Date: 3/18/2015 Analysis Date: 3/19/2015 SeqNo: 734778 Units: mg/Kg

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

 Gasoline Range Organics (GRO)
 27
 5.0
 25.00
 0
 107
 64
 130

 Surr: BFB
 1000
 1000
 100
 80
 120

Sample ID 1503775-001AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: RJ 1 Batch ID: 18213 RunNo: 24929

Prep Date: 3/18/2015 Analysis Date: 3/19/2015 SeqNo: 734790 Units: mg/Kg

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

 Gasoline Range Organics (GRO)
 30
 4.8
 23.97
 0
 124
 47.9
 144

 Surr: BFB
 980
 958.8
 102
 80
 120

Sample ID 1503775-001AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: RJ 1 Batch ID: 18213 RunNo: 24929

Prep Date: 3/18/2015 Analysis Date: 3/20/2015 SeqNo: 734791 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 31 4.8 24.02 128 47.9 144 3.94 29.9 Λ Surr: BFB 980 960.6 102 80 120 0 0

Qualifiers:

Value exceeds Maximum Contaminant Level.

E Value above quantitation range

J Analyte detected below quantitation limits

O RSD is greater than RSDlimit

R RPD outside accepted recovery limits

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 Not In Range

RL Reporting Detection Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1503775**

30-Mar-15

Client: Souder, Miller & Associates

Project: RJ Unit 129

Sample ID MB-18213 SampType: MBLK TestCode: EPA Method 8021B: Volatiles
Client ID: PBS Batch ID: 18213 RunNo: 24929

Prep Date: 3/18/2015 Analysis Date: 3/19/2015 SeqNo: 734804 Units: mg/Kg

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

 Benzene
 ND
 0.050

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 1.1 1.000 107 80 120

Sample ID LCS-18213	Samp ¹	Гуре: LC	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	h ID: 18	213	F	RunNo: 24929							
Prep Date: 3/18/2015	Analysis [Date: 3/	19/2015	S	SeqNo: 7	34805	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	76.6	128					
Toluene	0.98	0.050	1.000	0	97.8	75	124					
Ethylbenzene	0.97	0.050	1.000	0	96.8	79.5	126					
Xylenes, Total 2.9 0.10 3.000 0 96.7 78.8 124												
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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 Not In Range
- RL Reporting Detection Limit

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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

Work Order Number: 1503775 RcptNo: 1 SMA-CARLSBAD Client Name: Received by/date: Celin Som 3/18/2015 9:30:00 AM Logged By: Celina Sessa 3/18/2015 9:48-22 AM Completed By: Celina Sessa Reviewed By: Chain of Custody No . Not Present Y Yes _ 1. Custody seals intact on sample bottles? No Not Present Yes 🗸 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In NA | No . 4. Was an attempt made to cool the samples? NA Were all samples received at a temperature of >0° C to 6.0°C Yes 🗸 No No 🗌 Yes 🗸 Sample(s) in proper container(s)? No Yes Sufficient sample volume for indicated test(s)? No ... Yes 8. Are samples (except VOA and ONG) properly preserved? No V NA . Yes 9. Was preservative added to bottles? No VOA Vials V No . Yes 10.VOA vials have zero headspace? Yes 🗌 No V 11. Were any sample containers received broken? # of preserved bottles checked No for pH: Yes V 12.Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 13. Are matrices correctly identified on Chain of Custody? No 14. Is it clear what analyses were requested? Checked by: Yes V No 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) No 🗌 NA V Yes 16. Was client notified of all discrepancies with this order? Date Person Notified: Phone Fax In Person Via: eMail By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date Signed By 5.0 Good Yes

HWNCGIVNE 1 FE	ANALYSIS LABORA		Albuquerque, NM 87109	Fax 505-345-4107	Analysis Request	CBI	ions (Cl) 81 Pesticides / 8082 PCB' 70 (Semi-VOA) EX				80978 1 T808	X	X	x	x	x	X X						
Ū.	>		- Albu		Analy					-		ВСВА											
4	Z		4901 Hawkins NE -	Tel. 505-345-3975								8370 (8370 (_				
I	4		awkin	5-345								1) H9T											
	Gate		01 Hz	J. 50!		!O/	sec) 8 <u>9</u>	301	po	leth	N HqT	×	×	×	×	×	×					
			49	۳								- X3T8								 			Domarke.
	.					ıcı	181 =	אפי	NT +	- A8T	- 17	- ХЭТВ									_	_	۱
										□ No	5.0°C	HEAL NO.	100 -	200-	500-	+00-	500-	900-					Date : Time.
Time:	□ Rush	8 RJ Unit 129				ger:	nt			¥Yes		Preservative Type											\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Turn-Around Time	1 1 Standard	Project Name RJ Unit 129		Project #:	·	Project Manager:	Austin Weyant	;	Sampler:	On Ice:	Sample Temperature:	Container Type and #	4 oz	4 oz	4 02	4 oz	4 oz	4 oz					Received by: 1.
Chain-of-Custody Record	Souder Miller and Associates			4M 88220	5351	lucas.middleton@soudermiller.com		☐ Level 4 (Full Validation)				Sample Request ID	RJ 1	RJ 2	RJ 3	RJ 4	RJ 5	BG 1				Yang, managan m	d hv.
of-Cus	Willer and			201 S Halagueno Carlsbad, NM 88220	575-689-5351	lucas.mid				Other		Matrix	Soil	Soil	Soil	Soil	Soil	Soil					Relinguished hv.
hain⊣	Souder		ddress:	agueno		Fax#:	ıckage:	ard	tion:	Ð	Type)	Time	9.00 Soil	9:00 Soil					Time.				
℧	Client:		Mailing Address:	201 S Hal	Phone #:	email or Fax#:	QA/QC Package	□ Standard	Accreditation:	□ NELAP	□ EDD (Type)	Date	3/13/15	3/13/15	3/13/15	3/13/15	3/13/15	3/13/15					Date:

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 analyti

APPENDIX B FORM C141 FINAL

<u>District I</u> 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

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

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

Form C-141

Revised August 8, 2011

Release Notification and Corrective Action												
						OPERA	ΓOR		☐ Initia	l Report	\boxtimes	Final Report
Name of Co	mpany: C	OG Operation	ng LLC		(Contact: Ro	bert McNeill					
Address: 60			e, Midlan	d TX 79701			No. 432-230-007	77				
Facility Nar	ne: RJ Uni	t 129			F	Facility Typ	e: Wellhead					
Surface Ow	ner: Feder	al		Mineral Own	er:			30-015-0	0-015-03780			
				LOCATI	ON	OF REI						
Unit Letter	Section	Township	Range			South Line	Feet from the	County				
F	35	17S	29E	1980'	N	North	1980'	1	West		Eddy	<i>y</i>
			Lati	tude32.7928243621	1668	3 Longitude	e -104.04752859	94664				
NATURE OF RELEASE												
Type of Relea						Volume of			Volume Ro			
Oil and Produ Source of Re							10 bbls PW			; 0 bbls PW Hour of Dise		
Flowline	lease.					3/5/2015 1		e.	3/5/2015 1		covery	
Was Immedia	ate Notice C	liven?				If YES, To						
			Yes	No 🛛 Not Requir	ed							
By Whom?						Date and H						
Was a Watero	course Reac	hed?	Yes 🗵	l No		If YES, Vo	lume Impacting t	he Wat	ercourse.			
70 777												
If a Watercourse was Impacted, Describe Fully.* Describe Cause of Problem and Remedial Action Taken.* A driver from Richard's Energy Compression Services drove over the line causing the line to break. A backhoe was on site and able to isolate the impacted area quickly.												
	l area was a	pproximately	10' x 300	en.* in the roadway. The accordance with NMC				soil and	hauled to an	NMOCD	approv	ed facility.
regulations al public health should their o	l operators or the envir operations h nment. In a	are required to conment. The ave failed to a ddition, NMO	o report ar acceptance adequately OCD accep	is true and complete ad/or file certain release of a C-141 report by investigate and remeditance of a C-141 repo	se no y the diate	tifications ar NMOCD m contamination	nd perform correct arked as "Final Roon that pose a three	tive act eport" o eat to gr	ions for releated loes not relies round water,	ases which eve the oper surface wa	may en rator of iter, hu	ndanger Tliability man health
Signature:	A	1-/-	injel	lle		Annroved by	OIL CONS			DIVISIC	<u> N</u>	
Printed Name	e: Amanda	Trujillo				ipproved by	Liivii Oiiiileileal S	pecians				
Title: Senior	Environme	ntal Coordinat	or		A	Approval Dat	e:		Expiration D	Date:		
E-mail Addre	ess: <u>atrujillo</u>	@concho.con	1		C	Conditions of	Approval:	Attached \(\square\)				

Phone: 575-748-6940

Date: April 6, 2015

^{*} Attach Additional Sheets If Necessary

APPENDIX C WASTE MANIFEST

APPENDIX D PHOTO GALLERY

RJ Unit #129 Incident Closure Report SMA Ref 5B23838 BG1 04/1/15





Spill path on road. Taken on 03/05/15

RJ Unit #129 Incident Closure Report SMA Ref 5B23838 BG1 04/1/15





Road after remediation action occurred. Taken on 03/31/15