

December 5, 2016

#5B25501-BG1

NMOCD D2 Mike Bratcher 811 S First St. Artesia, NM 88210

SUBJECT: FINAL CLOSURE REPORT FOR INCIDENT 2RP-3917-0, WELCH WESTERN #002, Unit I Section 9-T18S-R28E NMPM, API# 30-015-02674, EDDY COUNTY, NEW MEXICO

Dear Mr. Keyes:

On behalf of Judah Oil, LLC. (Judah), Souder Miller & Associates is pleased to submit a Final Closure Report for the remediation of the release site located at the Welch Western # 2 in Eddy County, New Mexico. The purpose of the Final Report is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for the closure of the release that occurred on private property on July 4, 2014.

Souder, Miller & Associates (SMA) responded at the request of Judah to assess and delineate the release of crude oil associated with the Welch Western # 2 well location. The release was initially reported to NMOCD by Judah on July 4, 2014 and was a result of a production tank failure. The table below summarizes information regarding the release.

Table 1: Release information and Site Ranking											
Name		We	lch Westerr	า #2							
	Incident Number	API Number	, Township	, Range							
Location	2RP- 3917-0	30-015- 02674	NE/SE (Unit I)	Section 9	T18 S, R 28E NMPM						
Estimated Date of Release	July 4, 2014										
Date Reported to NMOCD	July 4, 2014										
Reported by	Judah Oil,	LLC									
Land Owner	State of NM										
Reported To	NM Oil Conservation Division (NMOCD)										
Source of Release	Production Tank										
Released Material	Crude Oil										
Released Volume	160 bbls	Crude Oil									
Recovered Volume	30 bbls C	rude Oil									
Net Release	160 bbls	Crude Oil									
Nearest Surface Water	8.9 Miles	East of the	e location								



Depth to Groundwater	Estimated Average to be 112 Feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	Initial: 7/4/14 Mitigation Activities: 11/3/16
Subcontractors	Nunez Backhoe Service
Disposal Facility	Lea Land, LLC
Estimated Yd ³ Contaminated Soil Excavated and Disposed	220

Attached is a copy of the C-141 final located in Appendix B. For questions or comments pertaining to the release or the attached Closure Report please feel free to contact either of us.

Submitted by:

SOUDER, MILLER & ASSOCIATES

- Meisant

Austin Weyant Project Scientist

Reviewed by:

Cynthia Gray, CHMM Senior Scientist

SOIL REMEDIATION FINAL CLOSURE FOR INCIDENT 2RP-3917-0

JUDAH OIL, LLC.

WELCH WESTERN #2

UL I, SECTION 9, T18S R28E, NMPM API #30-015-02674 EDDY COUNTY, NM



Prepared for: Judah Oil, LLC. 611 W. Mahone Drive #D Artesia, NM 88210

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

> December 5, 2016 SMA Reference 5B25501 BG1

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1.0 Introduction

On behalf of Judah Oil, LLC, Souder, Miller & Associates (SMA) has prepared this report that describes the assessment, initial delineation by Judah, and subsequent mitigation of a release associated with the Welch Western # 2 location API# 30-015-02674. The site is located in Section 9, Township 18S, Range 28E NMPM, Eddy County, New Mexico, on State of New Mexico land administered by the NMOCD. Figure 1 illustrates the vicinity and location of the site. Judah Oil, LLC. tasked SMA to resample and assess the release location.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 8.3 miles east of the Pecos River, with an elevation of approximately 3,620 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 112 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. One well is located within a one mile radius of the site. Figure 1 depicts the site vicinity and Figure 2 shows the site itself. The physical location of this release is within the jurisdiction of NMOCD.

Based on the NMOCD Guidelines Ranking Criteria, this release location has been assigned a NMOCD ranking of 0 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 5000 ppm total petroleum hydrocarbons (TPH). Table 1 illustrates site ranking rationale.

3.0 Assessment and Initial Results

An initial assessment and work plan was submitted to NMOCD on July 31, 2014. During the initial site work, spill pile samples were collected. Those samples were below NMOCD standards for BTEX, Benzene, and Chlorides.

4.0 Soil Remediation Summary

During the initial site work, approximately 220 cubic yards of crude oil contaminated soil was removed. Per the work plan submitted July 31, 2014 the spill pile received in-situ remediation efforts.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 0: 10 ppm (mg/kg) Benzene, 50 ppm total BTEX, and 5000 ppm TPH.

Laboratory analytical results for all final closure samples collected were below NMOCD closure standards for TPH as well as below laboratory detection limits for BTEX and Benzene for the methods used. No further remedial activities are recommended. Soil sample locations are illustrated in Figure 2. A summary of laboratory analytical results is included in Table 2. Laboratory reports are included in Appendix C.

Photo documentation is available by request.

6.0 Closure and Limitations

The scope of our services consisted of the performance of confirmatory spill and spill mitigation assessment sampling, verification of release stabilization, regulatory liaison, and preparation of this Closure Report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-7040 or Cindy Gray at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES

Austin Weyant Project Scientist

Cynthia Gray, CHMM Senior Scientist

Figures:

Figure 1: Vicinity Map Figure 2: Detailed Site and Sample Map

Tables:

Table 1: Release Information and Site Ranking Table 2: Summary of Laboratory Analyses

Appendices:

Appendix A: Laboratory Analytical Reports Appendix B: Form C141 Final

FIGURE 1 VICINITY MAP

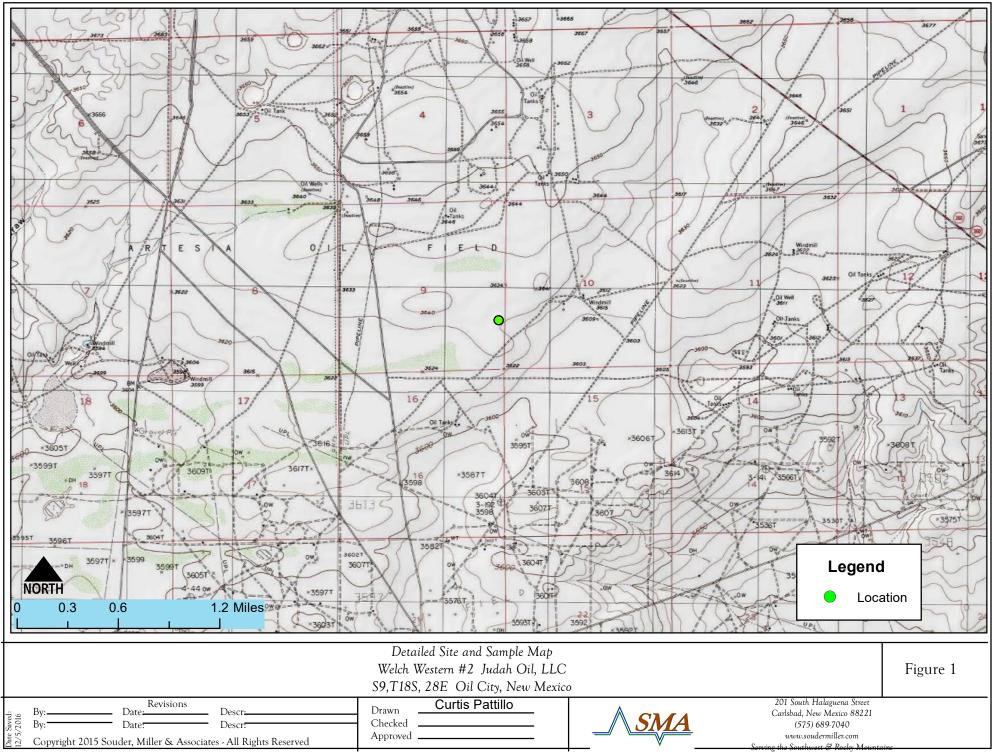


FIGURE 2 DETAILED SITE AND SAMPLE MAP

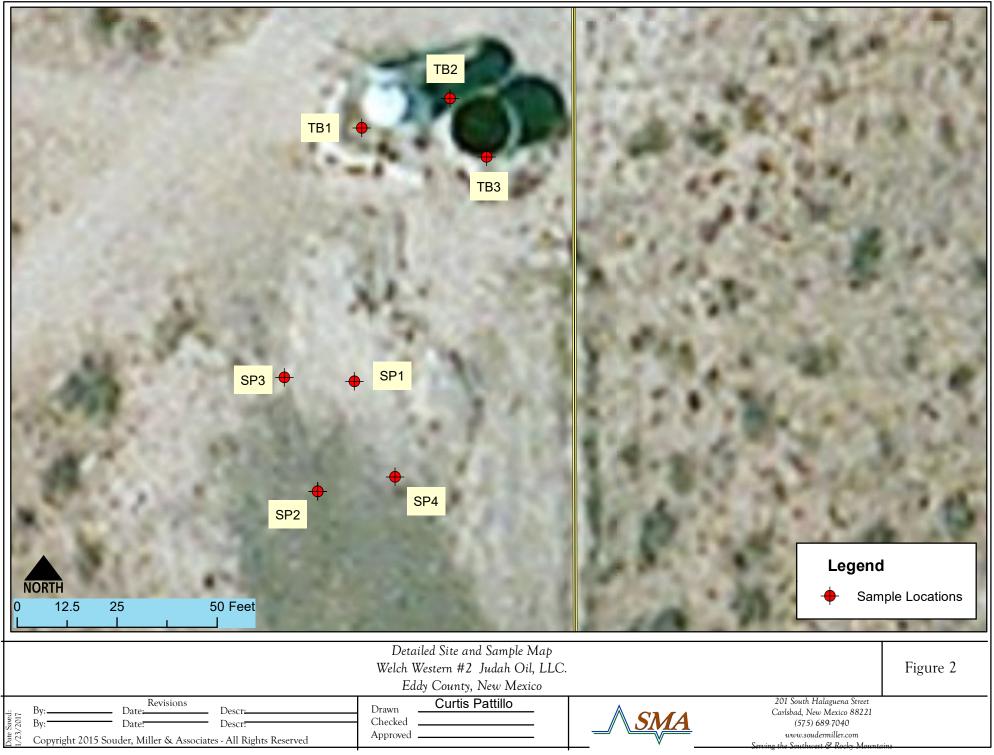


TABLE 1 RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking										
Name		We	Ich Westerr	n #2						
	Incident API Section, Township, Ran Number Number									
Location	1RP-09-7- 2230	30-015- 02674	NE/SE (Unit I)	Section 18S	T18 S, R 28 E NMPM					
Estimated Date of Release	July 3, 2014	1								
Date Reported to NMOCD	July 4, 2014									
Reported by	Judah Oil, LLC.									
Land Owner	Private									
Reported To	NM Oil Conservation Division (NMOCD)									
Source of Release	Production Tank Corrosion									
Released Material	Crude Oil									
Released Volume	160 bbls C	rude Oil								
Recovered Volume	30 bbls Crude Oil									
Net Release	160 bbls C	Crude Oil								
Nearest Surface Water	8.3 Miles V	Vest of the	location							
Depth to Groundwater	Estimated t	o be 112								
Nearest Domestic Water Source	Greater th	an 1,000 fe	et							
NMOCD Ranking	0									
SMA Response Dates	Initial: 7/4/	14 Mitigati	on Activitie	s: 11/3/16						
Subcontractors	Nunez Back	khoe Service	5							
Disposal Facility	Lea Land									
Estimated Yd ³ Contaminated Soil Excavated and Disposed	22									

TABLE 2 SUMMARY OF LABORATORY ANALYSES

Analytical Report- 1606F36	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	TPH mg/Kg
1611409- 001	SP1	11/3/2016	0-6"	N/A	N/A	6.1	1300	1306.1
1611409- 002	SP4	11/3/2016	0-6"	N/A	N/A	BDL	260	260
1611409- 003	TB1	11/3/2016	0-6"	N/A	N/A	BDL	290	290
1611409- 004	TB2	11/3/2016	0-6"	N/A	N/A	BDL	150	150
1611409- 005	SP2	11/3/2016	0-6"	N/A	N/A	BDL	430	430
1611409- 006	TB3	11/3/2016	0-6"	N/A	N/A	BDL	690	690
1611409- 007	SP3	11/3/2016	0-6"	N/A	N/A	BDL	2700	2700

Table 2: Summary of Laboratory Analyses Welch Western #2

APPENDIX A LABORATORY ANALYTICAL REPORTS



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

November 14, 2016

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

OrderNo.: 1611409

RE: Western Welch 2

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/8/2016 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 <u>www.hallenvironmental.com</u> 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

CLIENT: Souder, Miller & Associates			C	lient Sampl	e ID: SP	1						
Project: Western Welch 2	Collection Date: 11/3/2016 9:00:00 AM											
Lab ID: 1611409-001	Matrix:	SOIL	8/2016 10:10:00 AM									
Analyses	Result	PQL ()ual	Units	DF	DF Date Analyzed						
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	том					
Diesel Range Organics (DRO)	1300	98		mg/Kg	10	11/11/2016 3:32:29 PM	28604					
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 3:32:29 PM	28604					
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys						
							. N2B					
Gasoline Range Organics (GRO)	6.1	4.8		mg/Kg	1	11/10/2016 7:36:11 PM	-					

Hall Environmental Analysis Laboratory, Inc.

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

* **Qualifiers:** Value exceeds Maximum Contaminant Level. В

- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 1 of 9 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

CLIENT: Souder, Miller & Associates			С	lient Sampl	e ID: SP	4							
Project: Western Welch 2		Collection Date: 11/3/2016 9:00:00 AM											
Lab ID: 1611409-002	Matrix:	SOIL	Received Date: 11/8/2016 10:10:00 AM										
Analyses	Result	PQL ()ual	Units	DF	Date Analyzed	Batch						
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analys	t: TOM						
Diesel Range Organics (DRO)	260	98		mg/Kg	10	11/11/2016 3:54:09 PM	1 28604						
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 3:54:09 PM	1 28604						
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys							
						/ inalyo	t: NSB						
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/10/2016 8:46:43 PM	-						

Hall Environmental Analysis Laboratory, Inc.

Oualifiers: * V	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associate
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- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- ted Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 9 J
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

CLIENT: Souder, Miller & Associates			C	lient Sampl	e ID: TB	1							
Project: Western Welch 2		Collection Date: 11/3/2016 9:00:00 AM											
Lab ID: 1611409-003	Matrix:	SOIL		Received 1	Date: 11/	8/2016 10:10:00 AM							
Analyses	Result	PQL ()ual	Units	DF	Date Analyzed	Batch						
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	s				Analys	t: TOM						
Diesel Range Organics (DRO)	290	97		mg/Kg	10	11/11/2016 4:15:56 PI	A 28604						
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 4:15:56 PI	A 28604						
EPA METHOD 8015D: GASOLINE RAN	IGE					Analys	t: NSB						
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/10/2016 9:10:15 PI	A 28565						
Surr: BFB	84.9	68.3-144		%Rec		11/10/2016 9:10:15 PI	A 28565						

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Meth

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- thod Blank
- E Value above quantitation range
- Analyte detected below quantitation limits Page 3 of 9 J
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

CLIENT: Souder, Miller & Associates			С	lient Sampl	e ID: TB	2							
Project: Western Welch 2		Collection Date: 11/3/2016 9:00:00 AM											
Lab ID: 1611409-004	Matrix:	SOIL		Received l	Date: 11/	8/2016 10:10:00 AM							
Analyses	Result	PQL (Jual Units		DF	Date Analyzed	Batch						
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	s				Analys	t: TOM						
Diesel Range Organics (DRO)	150	99		mg/Kg	10	11/11/2016 3:49:34 PM	1 28604						
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 3:49:34 PN	1 28604						
EPA METHOD 8015D: GASOLINE RAM	NGE					Analys	t: NSB						
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/10/2016 9:33:47 PM	1 28565						

Hall Environmental Analysis Laboratory, Inc.

		-		• 1		•	C	00		-		•			
Qualifiers:	*	Value exc	ceeds]	Maxim	um Contamina	nt Lev	vel.	В	Ana	ılyte d	etected	in the a	associate	ed Metl	hod E

- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 4 of 9 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

CLIENT: Souder, Miller & Associates	5		C	lient Sampl	e ID: SP	2				
Project: Western Welch 2				Collection]	Date: 11/	/3/2016 9:00:00 AM				
Lab ID: 1611409-005	Matrix:	SOIL		Received	ed Date: 11/8/2016 10:10:00 AM					
Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch			
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANIC	S				Analys	t: TOM			
Diesel Range Organics (DRO)	430	98		mg/Kg	10	11/11/2016 4:12:26 PM	1 28604			
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 4:12:26 PM	1 28604			
EPA METHOD 8015D: GASOLINE RA	NGE					Analys	t: NSB			
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/10/2016 9:57:14 PM	28565			
Surr: BFB	83.3	68.3-144		%Rec	1	11/10/2016 9:57:14 PM	28565			

Hall Environmental Analysis Laboratory, Inc.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associate

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- ted Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 9 J
- Р Sample pH Not In Range
- Reporting Detection Limit RL
- W Sample container temperature is out of limit as specified

CLIENT: Souder, Miller & Associates Project: Western Welch 2			C	Client Sampl		3 3/2016 9:00:00 AM			
Lab ID: 1611409-006	Matrix:	SOIL		00110011011	Date: 11/8/2016 10:10:00 AM				
Analyses	Result	PQL ()ual	Units	DF	Date Analyzed	Batch		
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analy	st: TOM		
Diesel Range Organics (DRO)	690	94		mg/Kg	10	11/11/2016 4:03:18 P	M 28604		
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 4:03:18 P			
							M 28604		
EPA METHOD 8015D: GASOLINE RAN	IGE					Analy	M 28604 st: NSB		
EPA METHOD 8015D: GASOLINE RAN Gasoline Range Organics (GRO)	IGE ND	5.0		mg/Kg	1	Analy 11/10/2016 10:20:51	st: NSB		

Hall Environmental Analysis Laboratory, Inc.

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

* **Qualifiers:** Value exceeds Maximum Contaminant Level.

- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 6 of 9 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

CLIENT: Souder, Miller & Associates			C	lient Sampl	e ID: SP	3					
Project: Western Welch 2	Collection Date: 11/3/2016 9:00:00 AM										
Lab ID: 1611409-007	Matrix:	8/2016 10:10:00 AN	Л								
Analyses	Result	PQL (Qual	Units	DF	Date Analyzed	Batch				
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	s				Analy	st: TOM				
Diesel Range Organics (DRO)	2700	96		mg/Kg	10	11/11/2016 3:36:06 F	PM 28604				
Surr: DNOP	0	70-130	S	%Rec	10	11/11/2016 3:36:06 F	PM 28604				
EPA METHOD 8015D: GASOLINE RANG	GE					Analy	vst: NSB				
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/10/2016 10:44:18	PM 28565				
							= = = = =				

Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 7 of 9 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

	r, Miller & As rn Welch 2	ssociate	es							
Sample ID LCS-28604	SampTy	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS										
Prep Date: 11/10/2016										
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.5	62.6	124			
Surr: DNOP	4.4		5.000		88.8	70	130			
Sample ID MB-28604	SampTy	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: 28	604	R	RunNo: 3	8641				
Prep Date: 11/10/2016	Date: 11/10/2016 Analysis Date: 11/11/2016 SeqNo: 1207022									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.3		10.00		93.2	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Souder, N Western	Ailler & As Welch 2	ssociate	es							
Sample ID	MB-28565	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID:	PBS	Batch	ID: 28	565	F	RunNo: 3	8598				
Prep Date:	11/9/2016	Analysis D	ate: 1	1/10/2016	5	SeqNo: 1	206108	Units: mg/K	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 850	5.0	1000		84.9	68.3	144			
Sample ID	LCS-28565	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID:	LCSS	Batch	ID: 28	565	F	unNo: 3	8598				
Prep Date: 11/9/2016 Analysis Date: 11/10/2016 SeqNo: 1206109 Units: mg/Kg											
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	24	5.0	25.00	0	96.5	74.6	123			
Surr: BFB		910		1000		91.0	68.3	144			
Sample ID	1611409-001AMS	SampT	ype: MS	S	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID:	SP1	Batch	ID: 28	565	F	unNo: 3	8598				
Prep Date:	11/9/2016	Analysis D	ate: 1	1/10/2016	5	SeqNo: 1	206111	Units: mg/K	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	32	4.9	24.53	6.063	106	61.3	150			
Surr: BFB		1200		981.4		122	68.3	144			
Sample ID	1611409-001AMS	D SampT	ype: M	SD	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID:	SP1	Batch	ID: 28	565	F	unNo: 3	8598				
Prep Date:	11/9/2016	Analysis D	ate: 1	1/10/2016	S	SeqNo: 1	206112	Units: mg/k	íg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	28	4.9	24.37	6.063	88.6	61.3	150	14.5	20	
Surr: BFB		1200		974.7		124	68.3	144	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-345-39	4901 Hawkir. Ibuquerque, NM 8 75 FAX: 505-345- hallenvironmenta	^{ns NE} 27109 Samj 4107	ole Log-In Ch	eck List
Client Name: SMA-CARLSBAD Work Order Number	er: 1611409		RcptNo:	
Received by/date: LC 11108116				
Logged By: Lindsay Mangin 11/8/2016 10:10:00 /	AM	Struby Hengo	·	
Completed By: Lindsay Mangin 11/8/2016 2:58:32 Pl Reviewed By: Image: Imag		finakii Alempo		
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?	<u>Courier</u>			
<u>Log In</u>				
4. Was an attempt made to cool the samples?	Yes 🗹	No 🗌	NA 🗔	
5. Were all samples received at a temperature of $>0^{\circ}$ 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 🗹	# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗌	for pH:	>12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗆	Adjusted?	
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 🗌	Checked by:	· <u></u> .
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes	No 🗍	NA 🗹	
Person Notified: Date	nan 17 and 1844 Sandardan Ananasan I			
By Whom: Via:	eMail	Phone 🔄 Fax	In Person	
Regarding:	····			
Client Instructions:				
17. Additional remarks:	,			
18. <u>Cooler Information</u> │ Cooler No │ Temp ºC │ Condition │ Seal Intact │ Seal No │	Seal Date	Signed By		
1 3.8 Good Yes				

		www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107		(I926	əíΩ\asi biologia	3085 1) 1)	13 r 0 	04 80 04 9 00 5 01 1 0 01 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	M + XIT Hetho HTPH (Meth TPH (Meth B1 Hetho B2 B2 B2 B2 B2 B2 B2 CO CO CO CO CO CO CO CO CO CO CO CO CO						X	X			Remarks:		
	Z Standard D Rush	Project Name:	WESTERN WELCH #2	Project #:		Project Manager:	AUSTEN WEUGHT	, ,	On Ice: X Yes 🗆 No	Sample Temperature: 3. 8	Container Preservative HEAL No. Type and # Type /////00	1001 Y 1 m	-002	EW-	100-	- W5-	-006	- 07			Redelived hv	ar Correba ulvolue	
Chain-or-Custogy Record	Slient: SMA		Vailing Address: 201 S HW HUNUW		*hone #: 575 694 - 7040	Fax#:	JA/QC Package:		□ Other	D EDD (Type)	Matrix Sample Request ID	112 gm 505 581	· ·		787	745	621	Eds			Dates Times Dedisorutehood hur		Date: Time: Relinquished by:

2 õ 9 If necessary, samples submitted

APPENDIX B FORM C141 FINAL

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

			Rel	ease Notific	atio	n and Co	rrective A	ction			
11 00						OPERA	TOR		🗍 Ini	tial Report	X Final Report
Name of Co Address		Judah Oil				Contact J	ames B Campar	nella			
Facility Nan	ne Welc	h Western #	Drive # D	Artesia, NM 882			lo. 575-748-54	-88			
						Facility Typ	e Oil Well				
Surface Own	ner State	of New Mey	kico	Mineral C	wner				API No	. 30-015-02	2674
		·····			TIO	N OF REI	LEASE				
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/W	est Line	County	
Ι	09	18S	28E	1650	S		330	Е		EDDY	
				Latitude 32	.75908	Longitude	-104.17297	I			
				NAT	URE	OF RELI	EASE				
Type of Relea						Volume of	Release 160bbl	T	Volume R	lecovered 301	bbl
Source of Rele	ease Produ	iction Tank					our of Occurrence	e	Date and	Hour of Disco	
Was Immedia	te Notice C	liven?				7/4/14 Ear If YES, To			7/4/14 9a	m	
			Yes X	No 🗌 Not Req	uired	II 110, 10	whom:				
By Whom?						Date and H	our				
Was a Waterco	ourse Reac	hed?	Yes X	No		If YES, Vo	ume Impacting th	he Water	course.		
If a Watercour	no was Im										
ii a watercoui	se was mig	bacted, Descri	be Fully.*								
Describe Caus											
location exca the productio	vating im n tank tak	pacted soils	from rele vice. 22	ne location's bat released onto the case by 2:00pm 7 yds of impacted l were remediate	$\frac{1}{\sqrt{4}}$ pad. V $\frac{1}{4}$	An approxi	(s) called to real mate area of 150 and scraped to	cover re 0' X 200	eleased lic D'. Battery	uids. Backhov and well we	oe crew on
Describe Area Vertical and I	norizontal	delineation	samples	will be taken and	1 analy	sis run for T	PH and BTEV	(ablarid	og for de		
closure. If the Mexico State	analytica Office of	I results are the State En	above the gineer):	e RRAL's (site e RRAL a work Wellhead protec	plan w	ig 1s 0) a fina ill be submit ea: No, dista	al report, C-141 ted to the OCD nce to surface w	will be . Depth vater bo	submitte to ground dy:>1000	d to the OCE d water:>100 b', site ranking) requesting (112' New g is 0.
public health or should their op	r the environerations has had here to be a series of the s	onment. The a ve failed to ad dition, NMOC	equately i	is true and comple d/or file certain rel e of a C-141 repor investigate and ren ance of a C-141 re	t by the	NMOCD mai	t perform corrective ked as "Final Rep that pose a threat the operator of re	ive action port" doe at to grou esponsibi	ns for relea es not relie and water, ility for con	ases which ma eve the operato surface water, mpliance with	y endanger or of liability , human health any other
Signature	.th	MI	JW	in	1		OIL CONS	ERVA	TION I	DIVISION	
Printed Name:	J. 1	15.50	119	EMAN	A	pproved by E	nvironmental Spe	ecialist:			
Title:	P	nsec	1	BLI	A	pproval Date:		Ex	piration D	ate:	
E-mail Address	111	T	50	ATGLERA		onditions of A	pproval:			Attached	
Date:		3	Phone:								