Souder, Miller & Associates • 201 S. Halagueno St. • Carlsbad, NM 88220



July 6, 2020

#5E29071-BG2

NMOCD District 2 Victoria Venegas 811 S First St. Artesia, New Mexico 88210

SUBJECT: Remediation Plan for the Ford State 1 Release (2RP-634), Carlsbad, New Mexico

Ms. Venegas:

On behalf of Judah Oil, LLC, Souder, Miller & Associates (SMA) has prepared this Remediation Plan that describes the delineation and proposed remediation for a release of liquids related to oil and gas production activities at the Ford State 1 site. The site is in Unit C, Section 2, Township 22S, Range 28E, Eddy County, New Mexico, on state land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes information regarding the release.

	Table 1: Release Information	on and Closure	Criteria
Name	Ford State 1	Company	Judah Oil LLC
API Number	30-015-22512	Location	32.42858, -104.05852
Incident Number		2RP-634	
Estimated Date of Release	2/4/2011	Date Reported to NMOCD	3/3/2011
Land Owner	State	Reported To	NMOCD
Source of Release	A flowline was punctured due to a h	neavy equipmen	t driving over it.
Released Volume	42 BBLS, 42 BBLS	Released Material	Crude Oil & Produced Water
Recovered Volume	0	Net Release	84 BBLS
NMOCD Closure Criteria	>100 feet to groundwater		
SMA Response Dates	2/28/2020, 4/8/2020, 6/15/2020		

Ford State #1 Remediation Plan (2RP-634) July 6, 2020 Page 2 of 4

1.0 Background

On February 4, 2011, a release was discovered at the Ford State No.1 site due to a poly flowline rupture caused by a vehicle driving over it. Initial response activities were conducted by Judah Oil personnel, and included source elimination and site security activities, which were unable to recover any free-standing fluid. Figure 1 illustrates the vicinity and site location, Figures 2 and 3 illustrate the release location. The C-141 form is included in Appendix A.

2.0 Site Information and Closure Criteria

The Ford State No.1 is located approximately 10 miles from Carlsbad, New Mexico on State land at an elevation of approximately 3180 feet above mean sea level (amsl).

Based upon water well data (Appendix B), depth to groundwater in the area is estimated to be 140 feet below grade surface (bgs). There are no known water sources within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 7/2/2020). However, an exploratory well in the vicinity (0.47 miles to the north east) approximates depth to groundwater to be over 100 feet bgs. The nearest significant watercourse is an unnamed pond, located approximately 5,000 feet to the south. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC. The site is not considered an "exploration, development, production or storage site" and therefore the top four feet must be remediated to the most stringent standards. Additionally, the release area did not occur on land considered "in-use", as outlined by 19.15.29.13.D NMAC. Therefore, the release area shall be reclaimed within the upper four feet to meet the standards of 19.15.29.13.D(1).

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for groundwater depth of greater than 100 feet bgs in addition to the requirements of reclamation for the upper four feet of impacted soil. Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

3.0 Release Characterization Activities and Findings

On February 28, April 8, and June 15, 2020, SMA performed site delineation activities at the Ford State No.1 by collecting soil samples around the release site, using the guidance of Judah Oil personnel. Soil samples were field-screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 3000 photoionization detector (PID) equipped with a 10.6 eV.

A total of eight (8) sample locations (S1-S8) were investigated using an anchor machine, to depths up to 11 feet bgs, in addition to four sidewalls samples (SW1-SW4) collected from the surface. A total of twenty-eight (28) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Locations for all samples are depicted on Figure 3.

Laboratory samples were collected in accordance with the sampling protocol included in Appendix C. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico and Cardinal Laboratories in Hobbs, New Mexico (Appendix D).

As summarized in Table 3, results indicate that an area approximately 85 feet by 45 feet by 2-11 feet deep has been impacted.

Ford State #1 Remediation Plan (2RP-634) July 6, 2020 Page 3 of 4

4.0 Proposed Soil Remediation Work Plan

SMA proposes excavation and removal of contaminated soil, along with the placement of a liner at the most impacted areas. The impacted area surrounding sample points (S1 & S5) will be excavated to four (4) feet bgs, followed by the placement of a 40-mil liner to prevent further migration of contaminants. The area surrounding sample point (S2) will be excavated to approximately two (2) feet bgs, and the area surrounding sample point (S3) will be excavated to three (3) feet bgs. SMA will guide the excavation by collecting composite soil samples for field screens using the methods above.

The release area will be excavated to the NMOCD Closure Criteria as demonstrated in the attached Table 2. In addition, the top four (4) feet of impacted areas off of the well pad will meet the Reclamation requirement of 19.15.29.13(D)(1).

Confirmation samples will be comprised of representative wall and base 5-point composite samples, in accordance with a systematic sampling approach, as defined by SW846 using Gilbert, 1987 equation 5.2.3 for Stratified Random Sampling (Appendix C). This systematic method meets the EPAs data quality assessment standards (DQA) for composite sampling.

Approximately 315 cubic yards of contaminated soil is expected to be removed and replaced with topsoil material from a nearby source in order to return the surface to previous contours. The contaminated soil will be transported for disposal at R360 Environmental Solutions near Hobbs, NM, an NMOCD permitted disposal facility. Upon approval by NMOCD, the projected timeline for completion of remediation activities is approximately 90 days.

5.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization, regulatory liaison, and preparing this remediation plan. 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 Ashley Maxwell at 505-320-9241 or Shawna Chubbuck at 505-325-7535.

Submitted by: SOUDER, MILLER & ASSOCIATES

Reviewed by:

Ashley Maxwell Project Manager Shawna Chubbuck Senior Scientist

Shauna Chubbuck

Ford State #1 Remediation Plan (2RP-634) July 2, 2020 Page 4 of 4

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Surface Water Radius Map Figure 3: Site and Sample Location Map

Tables:

Table 2: NMOCD Closure Criteria Justification

Table 3: Summary of Sample Results

Appendices:

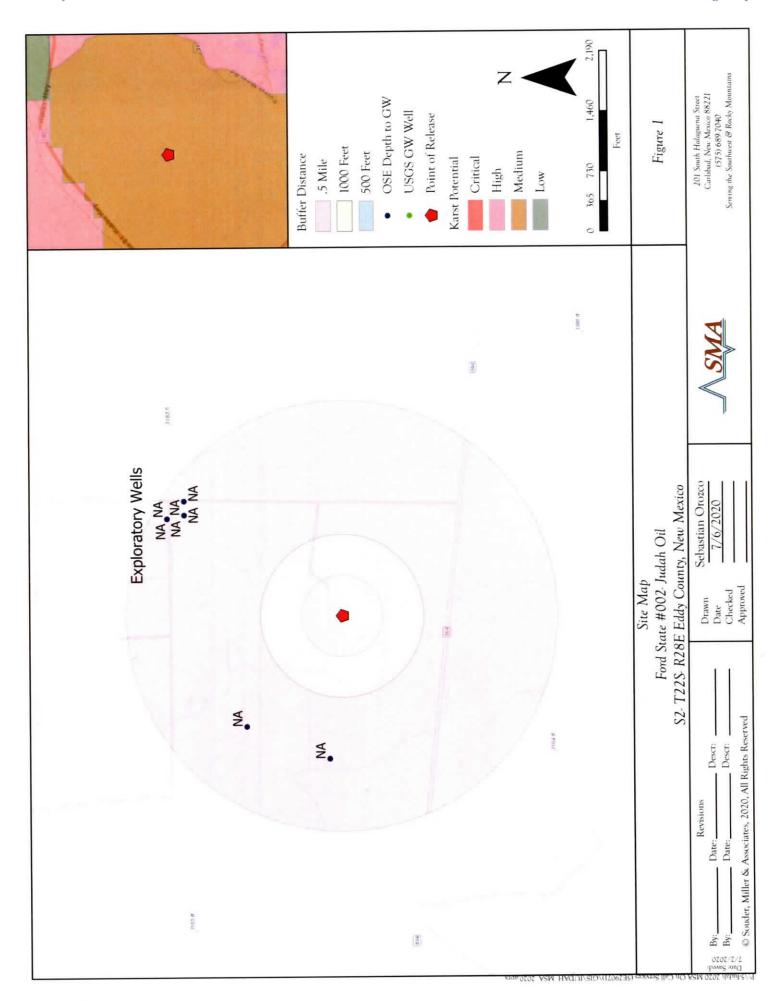
Appendix A: Form C141

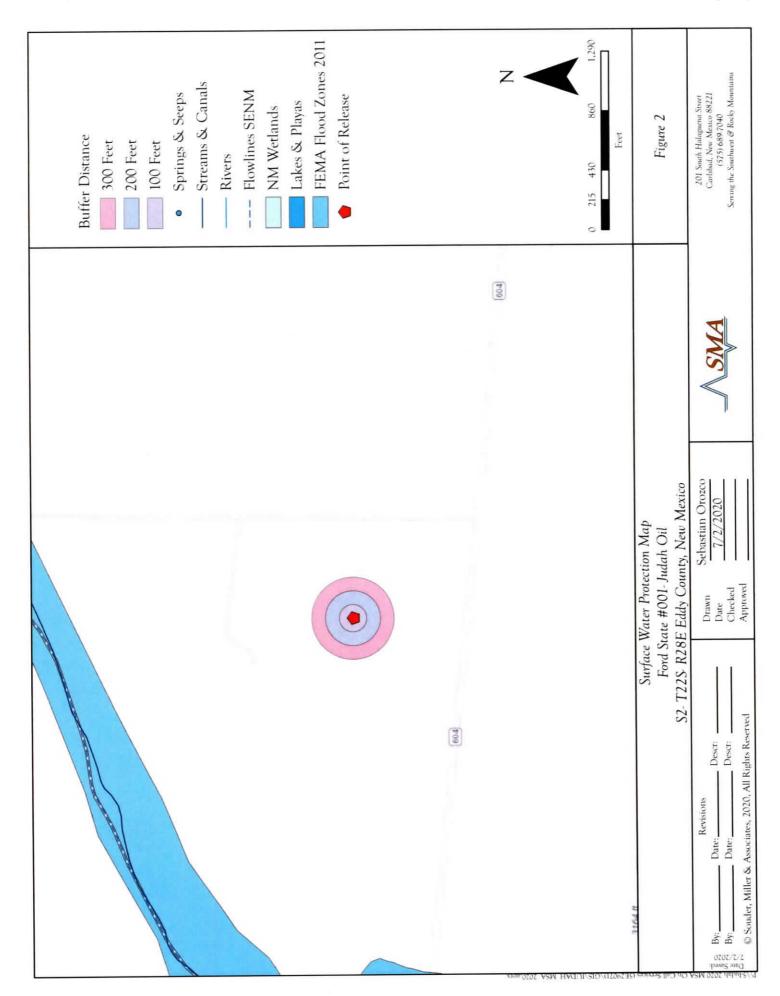
Appendix B: NMOSE Wells Report

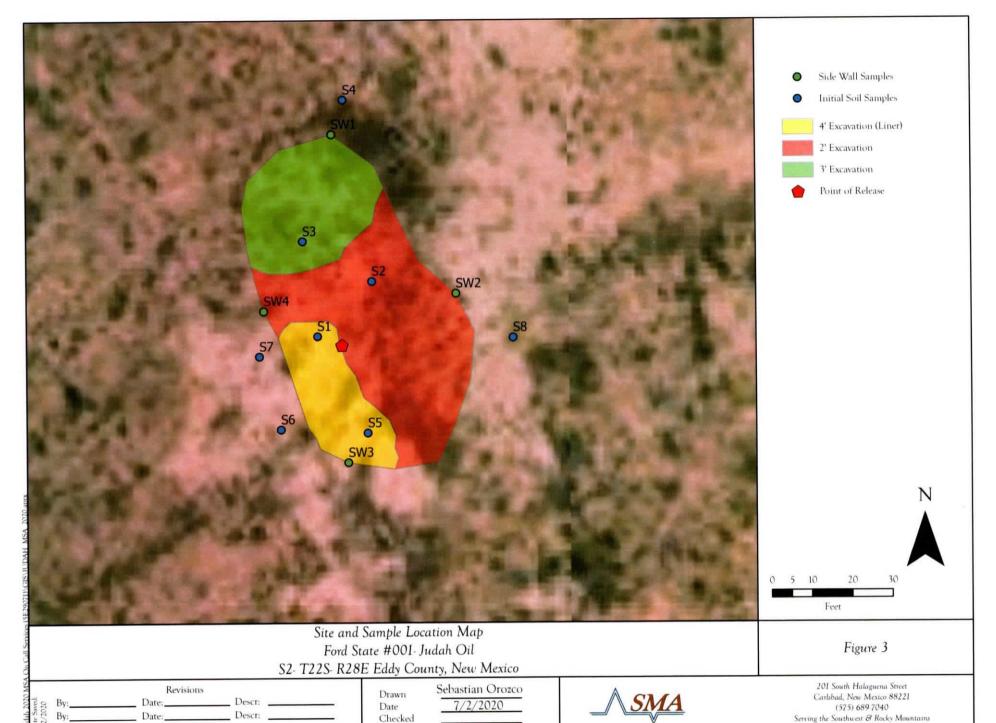
Appendix C: VSP

Appendix D: Laboratory Analytical Reports

FIGURES







Approved

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TABLES

Table 2: NMOCD Closure Criteria

Judah Oil LLC Ford State #1 (2RP-634)

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)	Source/Notes		
Depth to Groundwater (feet bgs)	140	NMOSE		
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	-	N/A		
Hortizontal Distance to Nearest Significant Watercourse (ft)	1,980	Unnamed Draw (North West)		

Closure Criteria (19.15.2	9.12.B(4) an	d Table 1 NMAC)		E 146 76	IT SHE	15kg 1932
		Closu	re Criteria	a (units in n	ng/kg)	PERMIT
Depth to Groundwater		Chloride *numerical limit or background, whichever is greater	ТРН	GRO + DRO	втех	Benzene
< 50' BGS		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'	X	20000	2500	1000	50	10
Surface Water	yes or no		if ye	s, then		
<300' from continuously flowing watercourse or other significant watercourse? <200' from lakebed, sinkhole or playa lake?	No No					
Water Well or Water Source	NA MARKET					
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					6/0/
Human and Other Areas		600	100		50	10
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No	1				
within area overlying a subsurface mine	No]				
within an unstable area?	No (Med)					
within a 100-year floodplain?	No	-1				

Table 3: Summary of Sample Results

Judah Oil Ford State #1 (RP#)

Sample	Sample	Depth	Proposed Action/ Action	BTEX	Benzene	GRO	DRO	MRO	Total TPH	CI-
ID	Date	(feet bgs)	Taken	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOC	D Reclamat	ion Requirem	nents (0-4 ft)	50	10	1,0	000		100	600
		sure Criteria		50	10	1,0	000	7	2,500	20,000
		2	excavate	16.08	<0.12	490	5,800	2,300	8,590	330
-		4	excavate	-		110	1,500	590	2,200	-
S1	4/8/2020	6	excavate	-		<4.9	280	150	430	-
		11	excavate	-	-	<4.9	51	<47	51	-
		1	excavate	<1.08	<0.12	<24	3000	3200	6200	130
00	0/00/0000	2	in- situ	< 0.224	<0.025	<5.0	<9.1	<46	<60.1	250
S2	2/28/2020	4	in- situ	-	-	<5.0	<9.5	<48	<62.5	
		5	in- situ	-		<4.9	<9.7	<49	<63.6	-
		2	excavate	<0.222	<0.025	<4.9	65	170	235	<60
S3	3 4/8/2020	3	in- situ	-	-	<5.0	25	59	84	
		4	in- situ	-	-	<5.0	10	<47	10	- 4
S4	2/28/2020	1	in- situ	< 0.207	<0.023	<4.6	<9.6	<48	<62.2	<60
	2/28/2020	1	excavate	<1.08	<0.12	<24	69	200	269	200
	4/8/2020	2	excavate	2.15	<0.20	100	2,400	1,300	2,800	390
S5		3	excavate			52	1,300	790	2,142	
		4	excavate	NEW P	- 5	30	730	480	1,240	
	6/15/2020	5	in- situ	< 0.217	<0.024	<4.8	<9.1	<46	<60	<60
		1	in- situ	< 0.224	<0.025	<5.0	<10	<50	<65.0	190
S6	4/8/2020	2	in- situ	< 0.224	<0.025	<5.0	<9.5	<48	<62.5	220
100000	DALLANDON I	4	in- situ	-	-	<4.9	<9.8	<49	<63.7	-
		1	in- situ	<0.221	<0.025	<4.9	23	<47	23	110
S7	4/8/2020	2	in- situ	< 0.224	<0.025	<5.0	<9.8	<49	<63.8	100
		4	in- situ	-	-	<4.9	11	<48	11	-
S8	2/28/2020	1	in- situ	<0.216	<0.024	<4.8	<9.8	<49	<63.6	140
SW1	4/8/2020	surface	in- situ	<0.222	<0.025	<4.9	<8.9	<45	<58.8	<60
SW2	4/8/2020	surface	in- situ	<0.222	<0.025	<4.9	<9.7	<48	<62.6	<60
SW3	4/8/2020	surface	in- situ	<1.11	<0.12	<25	<9.4	<47	<81.4	150
SW4	4/8/2020	surface	in- situ	<1.12	<0.12	<25	<9.0	<45	<79	<60

[&]quot;--" = Not Analyzed

APPENDIX A FORM C141

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

MAR 08 2011

RECEIVED

Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 NMOCD ARTES Ast ict Office in accordance with Rule 116 on back side of form

Release	Notification	and	Corrective	Action
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Hmu	1106	73578	Di Contractorio	ase Notific		OPERA			X Initial	Report	Final Report
		udah Oil, LL		245872	2 1	Contact: Bl	aise Campanella	1			
		, Artesia, NI				Telephone No.: 575-748-5488			NMOCD 2RP No.: 634		
Facility Name: Ford State No. 1					Facility Typ	e: Oil		API No.:	30-015-	22512	
Surface Ow	ner: State			Mineral C	wner:				State Lea	ase No.: E4	1205
				LOCA	TION	OF RE	LEASE				
Unit Letter C	Section 2	Township 22S	Range 28E	Feet from the 330	North/	rth/South Line Feet from the FNL 2310 FWL					ounty Eddy
			La	titude		Longitud	e				
				NAT	URE	OF REL	EASE				
Type of Rele	ase: Hydro	carbon and pr	oduced w		CKL	Volume of	Release: 42 bbls s. produced water				lone due to ntal and vertical
Source of Re	lease: Split	in poly flowl	ine cause	d by vehicle driving	ng over		lour of Occurrenc	e:		lour of Disc	
it.						Estimated If YES, To	4 February 2011.		18 Febru	ary 2011	1000 Hrs.
Was Immedi	ate Notice (X No	☐ Not Req	uired	Mike Bi					
By Whom?	Blaise Can	npanella / Che	ryl Winkl	er		Date and Hour: Approximately 1600 Hrs. 3 March: 2010->					
Was a Watercourse Reached?					If YES, Volume Impacting the Watercourse. N/A						
If a Waterco	urse was Im	pacted, Descr	ibe Fully.	*							
		N/A									
Subsequently Samples wil	y, Judah Oi Lbe taken a	l has taken in	nmediate	proactive steps to MOCD shall be n	to remov	ve the contar of the soil chl	ninated soils to a oride levels such t	n authorhat disc	orized dispos cernment ma	sal facility : y be employ	e discharge ceased. as soon as possible. yed in implementing ance with NMOCD
Describe Ar	ea Affected	d and Cleanu	p Action	Taken.*							
Please refer	to the Final	Remediation	Report fo	r details.							
regulations a	all operators	are required	to report and dition, l	re is true and comp and/or file certain NMOCD acceptant gulations.	release r	notifications a	and perform corre	ctive ac	ctions for rele	eases which	may endanger
any outer re-)0	/	,			OIL CON	SER'	VATION	DIVISIO	<u>)N</u>
6:		18		1	-			/	1/		
Signature:	/	- Je	1			Approved by	Distinted Byvi	MI	4 Brens	wer_	<u></u> -
Printed Na	me: Blai	se Campan	elfa				11				
Title: Me	mber/Mai	nager				Approval Da	nte: 3/8/20	711	Expiration	Date:	
E-mail Ad	dress: ju	dahoil@yah	oo.com	***		Conditions			s and	Attached	
Date: 3 M	larch 2011	Pl	one: 57	5-748-5488		REMEDIA	ATION per OCE) Rule	s anu		
Attach Add						Guidelines.	SUBMIT REME BY: 4/8/2	OH	UN		
					-	KUPUSAL	DI. 7/3/6				

Form C-141 Page 3

State of New Mexico Oil Conservation Division

Incident ID		
District RP	2RP-634	
Facility ID		
Application ID		

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	140 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vecontamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
 ⊠ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring we ⊠ Field data 	ils.

Data table of soil contaminant concentration data

Depth to water determination

Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release

Boring or excavation logs

Photographs including date and GIS information

Topographic/Aerial maps

Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141

Page 4

State of New Mexico Oil Conservation Division

Incident ID	
District RP	2RP-634
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release noti public health or the environment. The acceptance of a C-141 report by the C failed to adequately investigate and remediate contamination that pose a thre addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	OCD does not relieve the operator of liability should their operations have to groundwater, surface water, human health or the environment. In
Printed Name: Tames Banfane la Signature: Judaho, Coyahoo. Com	Title: Member / Manager Date: 2-13-2020 Telephone: 575-748-4730
OCD Only Received by:	Date:

Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID		
District RP	2RP-634	
Facility ID		
Application ID		

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.
 Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.
○ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. Printed Name: Title: Manager Manager
OCD Only
Received by: Date: Approved
Signature: Date: 2/28/2023
Conditions of Approval: 1. File was uploaded with the name "Ford St 1 closure". NMOCD did not review this report as a closure report but has been reviewed as a remediation plan. Closure has not been approved for this incident number. 2. Base and side wall samples must be representative of no more than 200 square feet.

- 3. Confirmation samples must be analyzed for all constituents in Table I.
- 4. Based on the data included on Table 3, a liner may not be necessary as contamination appears to meet the closure criteria of Table I for soils below 4 feet where groundwater is greater than 100 feet below ground surface.
- 5. 2RP-634 has been closed. Refer to incident #nKMW1106735785 in all future communication.
- 6. Submit a complete closure report per 19.15.29.12 NMAC through the OCD Permitting website by 5/28/2023.

Mr. James Blaise Campanella Member/Manager Judah Oil, LLC PO Box 568 Artesia, NM 88211-0568

MAR 0 8 2011
NMOCD ARTESIA

3 March 2011

Mr. Mike Bratcher
OIL CONSERVATION DIVISION
1301 West Grand Ave.
Artesia, NM 88210

Re: Ford State No. 1 Polyline Discharge Corrective Action Plan

U/I C Sec 2 22S 28E 330' FNL 2310' FWL

State Lease No.: E4205 API No.: 30-015-22512 NMOCD 2RP No.: 6-34

Dear Mr. Bratcher:

Judah Oil, LLC (Judah) herewith notifies the New Mexico Oil Conservation Division (NMOCD) that a hydrocarbon and produced water discharge occurred at the Ford State No. 1 which was discovered on 18 February 2011 by the pumper. The point of discharge occurred at a split that developed in the flowline running from the well to the remote tank battery when a geological survey crew drove across it.

Due to the fact that this point of discharge was approximately 640 feet from the Ford State No. 1 location and approximately 852 feet from the remote tank battery hidden in a dense grassy field exhibiting dull, straw-like winter killed vegetation supported within a noticeably undulating terrain, the discharge was not found immediately (photos enclosed). Production data indicates the discharge probably began on 4 February 2011 but remained unknown to the operator because the pumper apparently was not verifying or back checking his daily well production figures or he would have noticed something was wrong. When the monthly production figures reached Judah Oil's company office and the discrepancy was revealed, the pumper was severely reprimanded both for not notifying the office immediately and for repairing the flowline on 22 February 2011 and still not telling the office! However, the well was put back on line at this time.

Subsequently, Judah Oil has taken immediate proactive steps to remove the contaminated soils to an authorized disposal facility as soon as possible. Samples will be taken and following that, the NMOCD shall be notified of the soil chloride levels such that discernment may be employed in

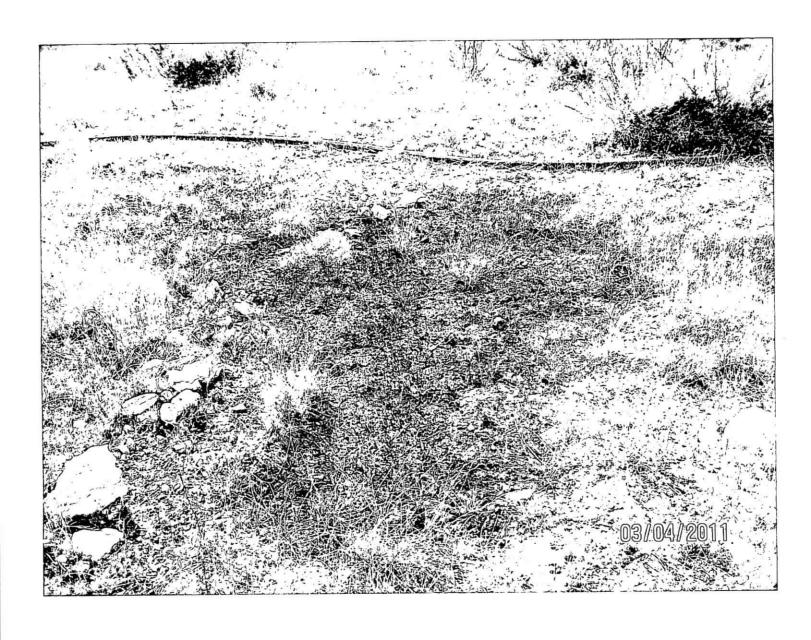
implementing the *Corrective Action Plan* as quickly as possible. Following excavation, confirmation samples will be taken to verify compliance with NMOCD standards. Should you have questions, please call (575-748-5488).

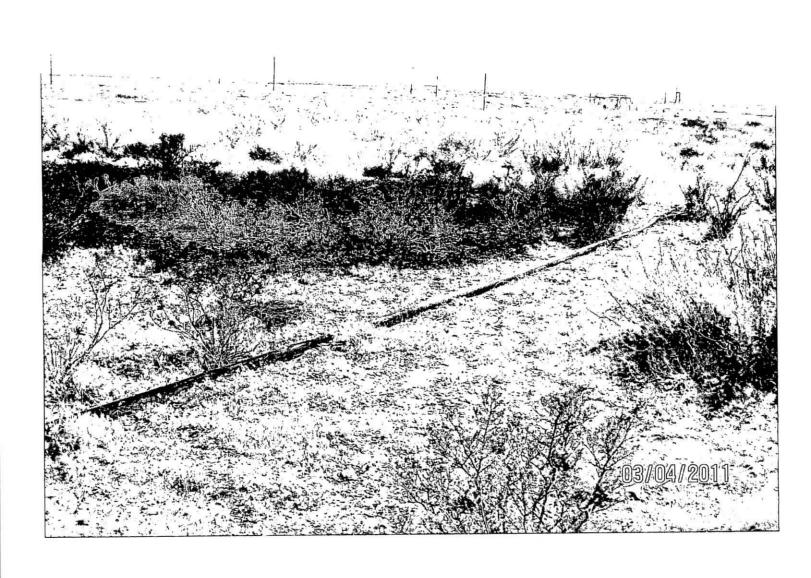
Sincerely,

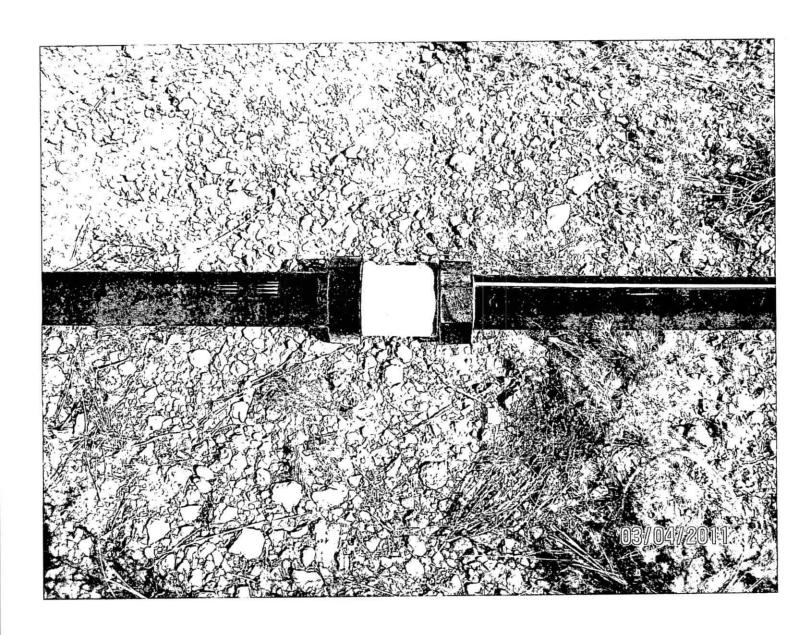
James Blaise Campanella

Member/Manager

Enclosures: Photos, Initial C-141







APPENDIX B NMOSE WELLS REPORT

_	-			
F	10.			



NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER



(check applicable box):

	For fees, see State Engineer wet	osite: http://www.ose.state.nm.us/	2.33050			
Purpose:	☐ Pollution Control And / Or Recovery	☐ Geo-Thermal				
	☐ Construction Site De-Watering	Other (Describe):				
☐ Monitoring	☐ Mineral De-Watering					
_ morntoning						
A separate permit wil	Il be required to apply water to beneficial use.					
☐ Temporary Reque	est - Requested Start Date: 5/20/2013	Requested End Da	te:			
Plugging Plan of Ope	erations Submitted? Yes No					
1. APPLICANT(S)						
Name: BOPCO, LP		Name:				
Contact or Agent:	check here if Agent 🛛	Contact or Agent:	check here if Agent 🛚			
Ben J. Arguijo (Bas	sin Environmental)					
Mailing Address: 310	00 Plains Hwy.	Mailing Address:				
City: Lovington		City:				
State: NM	Zip Code: 88220	State:	Zip Code:			
Phone: (806)549-95	97 ☐ Home ☒ Cell	Phone:	☐ Home ☐ Cell			
Phone (Work):		Phone (Work):				
E-mail (optional): b	jarguijo@basinenv.com	E-mail (optional):				
	POD Renum	bered				
	From: <u>CP</u>	-1171				
		171 POD 1-5				
	- Valle half		4 D 4 F 07 D 440/4			
	FOR OSE INTERN	A COL	for Permit, Form wr-07, Rev 4/12/12			
mr 4	File Number:	P-1171 Tm Num	00.,00			
	Trans Description	(optional): POD 1-5)			
	Sub-Basin:	ا ا ا د س				
	PÇW/LOG Due Da	ite: 5-3/-/4	Page 1 of			

	applicable to this ap		× 3305
ocation Required: Coordin	ate location must b	e reported in NM S	tate Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude
Lat/Long - WGS84)			
District II (Roswell) and Dist	rict VII (Cimarron) o	customers, provide	a PLSS location in addition to above.
☐ NM State Plane (NAD83)	(Feet)	UTM (NAD83) (Mete	ers) Lat/Long (WGS84) (to the nearest
☐ NM West Zone	L	Zone 12N	1/10 th of second)
☐ NM East Zone	L	Zone 13N	
☐ NM Central Zone	T .		Provide if known:
			-Public Land Survey System (PLSS)
	X or Easting or	Y or Northing	(Quarters or Halves , Section, Township, Range) OR
Well Number (if known):	Longitude:	or Latitude:	- Hydrographic Survey Map & Tract; OR
			- Lot, Block & Subdivision; OR
		20.00.04	- Land Grant Name Unit Letter "J" (NW/SE), Section 35, Township 21 South,
SB-6	104 3 19.5 w	32 26 2.1 n	
CP-INI PODI			Range 28 East
SB-7	104 3 19.5 w	32 26 2.1 n	Unit Letter "J" (NW/SE), Section 35, Township 21 South,
	104 0 10.0 11	02.00	Range 28 East
CP-1171 POD2	104 3 19.5 w	32 26 2.1 n	Unit Letter "J" (NW/SE), Section 35, Township 21 South,
SB-8	104 3 19.5 W	32 20 2.111	
CP-1171 POD3			Range 28 East
SB-9	104 3 19.5 w	32 26 2.1 n	Unit Letter "J" (NW/SE), Section 35, Township 21 South,
	SCORNER ANNOUNCES		Range 28 East
CP-1171 PODY			
SB-10	104 3 19.5 w	32 26 2.1 n	Unit Letter "J" (NW/SE), Section 35, Township 21 South,
	1		
			Range 28 East
(P-1171 PODS	ns need to be descr	ibed, complete for	
CP-1171 P0D5 NOTE: If more well location Additional well description	s are attached:	Yes ⊠ No	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many
CP-1171 P0D5 NOTE: If more well location Additional well description	s are attached:	Yes ⊠ No	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many
CP-1171 P0D5 NOTE: If more well location Additional well description	s are attached:	Yes ⊠ No	m WR-08 (Attachment 1 – POD Descriptions)
CP-1171 P0D5 NOTE: If more well location Additional well description Other description relating well	s are attached:	Yes No	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many The See attached Site Location Map.
CP-1171 PODS NOTE: If more well location Additional well description Other description relating well Well is on land owned by: US	s are attached: If to common landma B Department Of The	Yes No rks, streets, or other	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many To See attached Site Location Map. Of Land Management
CP-1171 PODS NOTE: If more well location Additional well description Other description relating well Well is on land owned by: US Well Information: NOTE: If	s are attached: If to common landma B Department Of The	Yes No rks, streets, or other	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many The See attached Site Location Map.
CP-1171 PODS NOTE: If more well location Additional well description Other description relating well Well is on land owned by: US Well Information: NOTE: If If yes, how many	s are attached: If to common landma Department Of The more than one (1) w	Yes No rks, streets, or other	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many To See attached Site Location Map. Of Land Management Scribed, provide attachment. Attached?
CP-1171 PDD5 NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well Information: NOTE: If If yes, how many Approximate depth of well (fee	S Department Of The more than one (1) weet): 50.00	Yes No rks, streets, or other	m WR-08 (Attachment 1 - POD Descriptions) If yes, how many
CP-1171 PODS NOTE: If more well location Additional well description Other description relating well Well is on land owned by: US Well Information: NOTE: If If yes, how many	S Department Of The more than one (1) weet): 50.00	Yes No rks, streets, or other	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many To See attached Site Location Map. Of Land Management Scribed, provide attachment. Attached?
CP-1171 PDD5 NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well Information: NOTE: If If yes, how many Approximate depth of well (fee	S Department Of The more than one (1) weet): 50.00	Yes No rks, streets, or other	m WR-08 (Attachment 1 - POD Descriptions) If yes, how many
CP-1171 PDD5 NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well Information: NOTE: If If yes, how many Approximate depth of well (fee	S Department Of The more than one (1) we eet): 50.00	Yes No rks, streets, or other e Interior - Bureau vell needs to be de	m WR-08 (Attachment 1 - POD Descriptions) If yes, how many
CP-117 PDD5 NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well information: NOTE: If If yes, how many Approximate depth of well (fee Driller Name: Straub Corporation). ADDITIONAL STATEMENT	s are attached: Il to common landma S Department Of The more than one (1) we eet): 50.00 ration	Yes No rks, streets, or other e Interior - Bureau vell needs to be de	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many See attached Site Location Map. Of Land Management scribed, provide attachment. Attached? Yes No Outside diameter of well casing (inches): 0.00 Driller License Number: WD1478
CP-1171 PODS NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well information: NOTE: If If yes, how many Approximate depth of well (fe Driller Name: Straub Corporation) ADDITIONAL STATEMENT	S Department Of The more than one (1) we set): 50.00 ration	yes No rks, streets, or other e Interior - Bureau vell needs to be de	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many
CP-1171 PODS NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well Information: NOTE: If If yes, how many Approximate depth of well (fee Driller Name: Straub Corporation) ADDITIONAL STATEMENT Up to five (5) soil borings we series of produced water and straub controls of the control of the	s are attached: Il to common landma Department Of The more than one (1) we eet): 50.00 ration S OR EXPLANATIO will be drilled on-site and depth(s) of the	PYES No rks, streets, or other	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many
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CP-1171 PODS NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well Information: NOTE: If If yes, how many Approximate depth of well (fee Driller Name: Straub Corporation) ADDITIONAL STATEMENT Up to five (5) soil borings we series of produced water and straub controls of the control of the	is are attached: If to common landma S Department Of The more than one (1) we eet): 50.00 ration S OR EXPLANATIO will be drilled on-site and depth(s) of the sto-lonization Detect	e Interior - Bureau vell needs to be de to investigate the uses at BOPCO's Insoil bore(s) will be tor. Due to the dep	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many
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NOTE: If more well location Additional well description Other description relating well well is on land owned by: US Well is on land owned by: US Well Information: NOTE: If If yes, how many Approximate depth of well (fee Driller Name: Straub Corporation) ADDITIONAL STATEMENT Up to five (5) soil borings we series of produced water are exact number, location(s), a chloride test kit and/or Photoground surface), it is unlike	s are attached: Il to common landma Department Of The more than one (1) we eet): 50.00 ration S OR EXPLANATIO fill be drilled on-site and depth(s) of the sto-lonization Detect ley that monitor well	e Interior - Bureau vell needs to be de to investigate the uses at BOPCO's Insoil bore(s) will be tor. Due to the dep	m WR-08 (Attachment 1 – POD Descriptions) If yes, how many

Released to Imaging: 2/28/2023 7:52:36 AM-

Application for Permit, Form wr-07

FOR OSE INTERNAL USE

File Number: P 1171

Trn Number: 527952

Page 2 of 3

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

- No water shall be appropriated and beneficially used under this permit.
- The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- No water shall be diverted from this well except for testing purposes which shall not exceed ten (10) cumulative days, and well shall be plugged or capped on or before, unless a permit to use water from this well is acquired from the Office of the State Engineer.
- The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.
- LOG The Point of Diversion CP 01171 POD1 must be completed and the Well Log filed on or before 05/31/2014.
- LOG The Point of Diversion CP 01171 POD2 must be completed and the Well Log filed on or before 05/31/2014.

Trn Desc: CP-1171 POD1-5 EXPL File Number: CP 01171

page: 1

Trn Number: 527952

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

- LOG The Point of Diversion CP 01171 POD3 must be completed and the Well Log filed on or before 05/31/2014.
- LOG The Point of Diversion CP 01171 POD4 must be completed and the Well Log filed on or before 05/31/2014.
- LOG The Point of Diversion CP 01171 POD5 must be completed and the Well Log filed on or before 05/31/2014.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: Date Rcvd. Corrected:
Formal Application Rcvd: 05/14/2013 Pub. of Notice Ordered:
Date Returned - Correction: Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 22 day of May A.D., 2013

Scott A. Verhines, P.E. , State Engineer

By: Andy Morley

Trn Desc: CP-1171 POD1-5 EXPL File Number: CP 01171
Trn Number: 527952

page: 2

2.32017

District 1
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

Form C-141 Revised October 10, 2003

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

			Kele	ease Nomica	ation	and Co	rrective A	cuon				
MC8/20:	524239	7			(OPERATOR Initial Report Final Report						port
Name of Co	mpany BC	PCO, L.P.		260737		Contact Tony Savoie						
Address 522	W. Mern	od, Suite 70	4 Carlsb	ad, N.M. 88220			No. 432-556-873	30				
Facility Nar	ne: Indian	Flats Bass F	ederal #	1 SWD	F	Facility Type: E&P 30-0/5 - 24					- 2496	Z_
Surface Ow	ner Federa	ıl		Mineral O	wner Fe	Federal Lease No. LC-067144						
Surface On	10110000	<u> </u>		LOCA	TION	OF REI	FASE					
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/W	est Line	County		
J	35	215	28E							Eddy		
			L	atitude_N 32.43	3905_	Longitu	de W 104.0554	25_				
NATURE OF RELEASE												
Type of Rele	ase: Produc	cod water					Release: 200 bbl	s		Recovered: 1		
Source of Re	clease: 1/3' fi	tting on the p	ump disch	arge line.			four of Occurrent ne unknown	ce	Date and 2/8/12 9:	Hour of Disc 00 a.m.	covery	
Was Immedi	ate Notice	Given?				If YES, To				**		
		◙	Yes [No Not Re	quired	Mike Brat	cher					
By Whom?							Hour 2/8/12 11:44					
Was a Water	rcourse Rea		Yes 2	No No		If YES, V	olume Impacting	the Wate	rcourse	RECI	EIVED	1
If a Waterco	urse was In	pacted, Descr	ibe Fully	•								T
										LEB 2	0 2012	ı
									1	MOCD	ARTESIA	
Describe Ca	use of Prob	lem and Remo	dial Action	on Taken. * a 1/3' fit	ting on t	the discharge	of the salt water	disposal	pump bro	ke. The fittin	g was replaced.	
Describe Ar	ea Affected	and Cleanup	Action Ta	ken. The released with a vacuum tru	fluid af	fected appro	ximately 10,875	sq. ft. are	a around t	the pump, leas	se road and calie	che
The Site ren	nediation fo	r the produces	water wi	ill follow the NMO	CD guio	delines for le	aks and spills.					
I hereby cert	tify that the	information g	riven abov	e is true and comp	lete to th	ne best of my	knowledge and	understa	nd that pu	rsuant to NM	OCD rules and	
regulations	all operators	are required	to report	and/or file certain r	elease n	otifications	and perform corre	ctive act	ions for re	leases which	may endanger	
should their	on the env	tronment. In	e acceptar adequate	nce of a C-141 report ly investigate and r	ort by the emediate	e contamina	tion that pose a th	reat to g	round wat	er, surface wi	ter, human heal	th
or the enviro	onment. In	addition, NM	OCD acce	ptance of a C-141	report d	oes not relie	ve the operator of	respons	ibility for	compliance v	vith any other	
federal, state	e, or local la	ws and/or reg	ulations.							· DE GOL	***	
		, _	2				OIL CON	SER	ATION	DIVISIO	<u>N</u>	
Signature:	1 8	y Z	auce	ع		Approved by	v District Supervi	sor: a	11 .			
	(J				Approved by District Supervisor: Signed By Mike Bearouser						
Printed Nam	ne: Tony Sa	voie			\rightarrow		FFD 0.4.0	040				_
Title: Waste	Mgmt.& R	temediation S	pecialist			Approval D	FEB 212	.012	Expiratio	n Date:		
E-mail Add	ress: TASas	voie@BassPer	com			Conditions	of Approval:					
D'illait 7100	1000. 17100	· Orogania or	.com			4	00	D Rules	&	Attached		
Date: 2/20/1				Phone:432-556-8	730		CHRMII KEI		ION	1		
Attach Add	litional She	eets If Neces	sary				L NOT LATER	T. C.		28	A-103	7
L 0 V	6 400	2 102			V h	بح	100					
						o na g						
		.508										
	FR. 115	SIAIS										

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District 1
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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 October 10, 2003

	1		Rele	ase Notific								
$\sqrt{M}Ln$	V 1219	350779				OPERAT		2		l Report		Final Repo
Name of Co	mpany BC	OPCO, L.P.		260737		Contact Tor	y Savoie No. 432-556-873	20				
Address 522	W. Mem	Flats Bass F	4 Carisb	ad, N.M. 88220		Facility Typ		30	-			
			cuciai #1				·					10-0
Surface Ow				Mineral C	wner F	ederal				io. LC-067		12
adian Flo	uts Bass	Fed#		LOCA	TION	OF RE	LEASE			-2496	8	
Unit Letter J	Section 35	Township 21S	Range 28E	Feet from the	North/	South Line	Feet from the	East/We	st Line	County Eddy		
Latitude_N 32.433905 Longitude W 104.055425_												
				NAT	TURE	OF REL	EASE					
Type of Release: Produced water							Release: 50 bbls			Recovered: 1		,00
Source of Release: A SWD pump							four of Occurrent me unknown		Date and 5/23/12 9	Hour of Dis	covery	Z
Was Immediate Notice Given?					If YES, To			31231127	.00 2.111.	-	17.	
was minicul	ale Hollee V		Yes [No Not R	equired		Emergency #104				3	7
By Whom?	Tony Savoie					Date and I	lour 5/23/12 1:30) p.m.			-	3
Was a Water		ched?					olume Impacting		course.			-
			Yes 🗵	No							>	
f a Waterco	urse was Im	pacted, Descr	ibe Fully.	•							7.	3
											5	
well pad. The same area as	e free stand another spi	ling fluid was ill reported on	picked up 2/8/12.	ken.*The released with a vacuum tr	uck and	the saturated	soil was scraped	, ft. area a up and sto	round the eckpiled o	pump, lease on-site. The s	road a	nd caliche ered the
The Site rem	ediation for	r the produced	water wi	Il follow the NMO e is true and comp	OCD gui	delines for le	aks and spills.	un donnten	d that aug	cuent to NM	OCD a	lee and
regulations a public health should their or the environ	or the envi operations in operations in	are required to ironment. The have failed to	acceptant adequatel OCD acce	ind/or file certain ice of a C-141 rep y investigate and ptance of a C-141	release n ort by th remediat	otifications a e NMOCD n e contaminat	and perform corre marked as "Final I ion that pose a the we the operator of	ctive action Report" do reat to gro responsib	ons for rel es not rel ound wate oility for c	eases which ieve the ope r, surface was compliance v	may en rator of ster, hur with any	danger liability nan health
		_	_		1		OIL CON	SERVA	ATION	DIVISIO)N	
Signature:	100	y Say	u.			Approved by	District Supervi	sor:		11		
	, ,	,						Sie	med Rv	alike	Ben	West-
Printed Nam	e: Tony Sa	voie			-		4 4					
Title: Waste	Mgmt.& R	emediation Sp	occialist			Approval Da	ate: JUL 11	2012 E	xpiration	Date:		
E-mail Add	ess: TASav	voic@BassPet	.com			Conditions	of Approval:			Attached		
Date: 6/24/1	2			Phone:432-556-4	8730							
Attach Add	itional She	eets If Neces	sary	Re	mediat	tion per O	CD Rules &			SAL	7-12	80
	12 1 1 12	1					MEDIATION					\neg
U V	WITH WINE	\$100 M				OT LATER				ECEI\		'\
SIVIE ENGIN. Le on Lini									1	JUN 2.6		
									NM	OCD AF	RTES	IA

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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 October 10, 2003

1													
			Rele	ase Notifica	ation	and Co	rrective A	ction					
WMT	1219352	653				OPERA				l Report	Final Rep		
lame of Co	mpany BOPC	O, L.P.				Contact Ton							
Address 522	W. Mermod,	Suite 704	Carlsba	id, N.M. 88220			No. 432-556-87	30					
acility Nan	ne: Indian Flat	s Bass Fed	deral #1	SWD		Facility Typ	e: E&P						
Surface Ow	ner Federal			Mineral O	wner F	ederal			Lease N	lo. LC 0671	44 ATIN		
rdion Flax	Is BAS Fed	#/		LOCA	TION	OF REI	FASE .	30-0	15- 3	4968			
Jnit Letter			Range	Feet from the		South Line	Feet from the	-	East/West Line County				
J		218	28E	r oct irom ale		Journ Dillo				Eddy			
			L	atitude_N 32.43	3905_	Longitue	de W 104.0554	25_					
				NAT	URE	OF REL	EASE						
	ase: Produced w						Release: 80 bbls			Recovered: 20			
ource of Re	lease: A salt wa	ter transfer	pump.				Hour of Occurren	ce	5/25/12 9	Hour of Disc	covery		
Vac Immedi	ate Notice Giver	n?				If YES, To	me unknown Whom?		3/23/12/	.00 4.111.			
ras miniculi	ate House Give		Yes [No Not Re	quired	Mike Brat							
y Whom? 7	Tony Savoie					Date and I	lour 5/25/12 11:4	10 a.m.					
	course Reached					If YES, V	olume Impacting	the Wate	rcourse.		- 57		
			Yes 🛭	No							7		
f a Waterco	urse was Impact	ed, Describ	e Fully.								77		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									-	-		
											75		
										_	15		
Describe Car	use of Problem	and Remedi	ial Actio	n Taken.* A gaug	e broke	on the pump	, water was spray	ed outsid	de the contr	ainment area	on the caliche page		
nd road at the	he facility. The	gauge was r	replaced.								7		
well pad. The rotary rig wa The Site rem I hereby cert	e free standing f is used to determ rediation for the cify that the infor	fluid was pi nine the ver produced v	icked up rtical extr water wil ven above	ten.*The released with a vacuum truent of the first rele I follow the NMO	ase. A r	release is in ig will be re- delines for le	the same location scheduled to deli-	n as prev	ious spills	of 2/8/12 and	road and caliche 5/23/12. An air		
gulations a	ui operators are	required to	report a	nd/or file certain r	elease n	he best of my	knowledge and and perform corre	ctive act	ions for rel	eases which	may endanger		
should their	or the environmoperations have onment. In addit	required to ment. The a failed to action, NMOC	report as acceptant dequately CD accep	nd/or file certain rece of a C-141 report investigate and retained of a C-141	elease no ort by the emediate	ne best of my otifications a NMOCD n e contaminat	knowledge and and perform corre- narked as "Final li tion that pose a th	ective act Report" of treat to g	ions for rel loes not rel round wate	leases which lieve the oper or, surface wa	may endanger ator of liability ter, human health		
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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

· State of New Mexico Energy Minerals and Natural Resources Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr.

220 S. St France	cis Dr., Santa	Fc, NM 87505	i	Sa	anta Fe,	NM 875	05				SIC	e or ion
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		OPCO, L.P.	_	26		Contact Tor						
Address 522	W Mem	nod Suite 70	14 Carlsh	ad, N.M. 88220	1 1	elephone 1	No. 432-556-87	30				
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indian E	lots Ba	ss Fed *	/	LOC	ATION	OF RE	LEASE	30)-0/	5-2	4968	7
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/W	Vest Line	County		
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Was Immedi	ate Notice	Given?				If YES, To						
]Yes [No 🛛 Not R	Required							
By Whom?						Date and						
Was a Water	rcourse Rea			_		If YES, Volume Impacting the Watercourse.						
			Yes [₫ No								
If a Waterco	urse was In	npacted, Desc	ribe Fully.	•								
										-5	2	
			~							5.5	148	
										-5	13	
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The Site ren	nediation fo	r the crude of	will follo	w the NMOCD g	guidelines	tor leaks an	d spills. y knowledge and	un decete	nd that nu	reugnt to NA	AOCD rule	s and
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Signature:	/ @	ey Day	40			Approved b	y District Supervi	ISOT:		elike d	K	_
Printed Nam	ne: Tony Sa	voie						Sign	ed By_Z	VIIV K	LANGUE	<u></u>
							LL 1 1 201		Expiration			
Title: Waste	Mgmt.& I	Remediation S	pecialist			Approval D	BC 1 1 201	4	Expiration	Date.		
		voie@BassPe	t.com			Conditions	of Approval:			Attache	ad 🗆	
Date: 6/24/		1631		Phone:432-556-	-8730	-				200	2 12 0	7
Attach Add	inional Sh	eets If Nece	ssary		Remed	iation per	OCD Rules &			ant	2-120	, ,
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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

2.33050

Form C-141 Revised October 10, 2003

		CONTRACTOR OF THE CONTRACTOR O	-			NIM 875					
T11			Rele	ase Notific				ction		I D	□ E:(B
MMLD	2353	28868		73404		OPERA'				al Report	Final R
Name of Co				60737		Contact Tor		20			
				ad, N.M. 88220			No. 432-556-87	30			
Facility Na	me: Indian	Flats Bass F	ederal #1	SWD		acility Typ	be: E&P				
Surface Ow	ner Federa	ıl		Mineral O	wner Fe	ederal			Lease 1	No. LC-06	7144
		2							API	#30-0	015-2490
						OF RE		- n		,	
Unit Letter J	Section 35	Township 21S	Range 28E	Feet from the	North/S	South Line	Feet from the	East/	West Line	County Eddy	
	-		L	atitude_N 32.43	33905	Longitu	de W 104.0554	125_			
				NAT	URE	OF REL	EASE				
Type of Release: Produced water						Volume of	f Release: 80 bbl:	S		Recovered:	
Source of Re	elease: A sal	t water transfe	er pump.							Hour of Di	scovery
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Was Immedi	iate Notice		Yes [No Not Re	equired		emergency #104				
By Whom?							Hour 11/27/12 2:			75.	
Was a Water	rcourse Rea			1.50		If YES, Volume Impacting the Watercourse RECEIVED					
			Yes 🗵	No						UECE	IVED
If a Waterco	urse was In	pacted, Descr	ibe Fully.	•						DEC 1	7 2012
		lem and Reme the facility. Th		n Taken.* A back as replaced.	pressure	valve broke	on the pump, wa	ater was			ARTESIA Intainment area or
well pad. The determine the location, san	ne free stand ne vertical ex nples were	ling fluid was xtent of the fir collected to de	picked up st release. etermine v	ken.*The released with a vacuum tru A rig was on loca ertical extent. A re I follow the NMO	ick. The tion 12/1 mediation	release is in 12/12 and ac on plan will	the same location ivanced 5 soil both be developed and	n as prev res at va	rious spills rious locati	. An air rota ions around	ary rig was used
I hereby cent regulations a public health should their or the environ	tify that the all operators h or the envious operations onment. In	information g are required ironment. The have failed to	iven above to report a e acceptan adequately OCD acce	e is true and comp nd/or file certain n ce of a C-141 repo y investigate and re otance of a C-141	lete to the elease no ort by the emediate	tifications as NMOCD notes contaminate	y knowledge and and perform corre narked as "Final tion that pose a the ve the operator o	ective ac Report" nreat to g f respons	tions for re does not re ground wate sibility for	eleases which elieve the op- er, surface we compliance	h may endanger erator of liability vater, human hea with any other
		_					OIL CON	ISER	VATION	DIVISI	ON
Signature:	1 on	Zan	nue			Approved by	y District Superv	isor:		9/1	Komerca
Printed Nam	ne: Tony Sa	voie						S	Signed By	101114	NAME OF COLUMN
		emediation S	pecialist			DA Approval D	C 1 8 2012	?	Expiration	n Date:	
E-mail Add	ress: TASav	voie@BassPet	.com			Conditions	of Approval:			Attache	ed 🗌
Date: 12/17	/12			Phone: 432-556-	8730	Par-	disting O	CD Bull	0		
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							L NOT LATER				
						Januar	4 18, 20	10	-		



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 3162.4 (NM-080) NMLC067144

May 13, 2013

NM Office of the State Engineer

Attn: Bill Duemling 1900 W. Second St. Roswell, NM 99201

RE: NMLC067144; Indian Flats Bass Federal #1 SWD

NWSE, Section 35, T21S-R28E

Latitude: 32.433816, Longitude: -104.055308

Eddy County, New Mexico

Gentlemen:

The above well location has had recent spill events related to oil and gas operation on the above well location. In order to fully delineate the impacted sites, a drilling unit will be needed to complete the delineation. The Bureau of Land Management (land owner) authorizes the use of a drilling unit to accomplish the full delineation of the site.

If there are any questions please call Jim Amos, Supervisory Environmental Protection Specialist, at (505) 234-5909.

Sincerely,

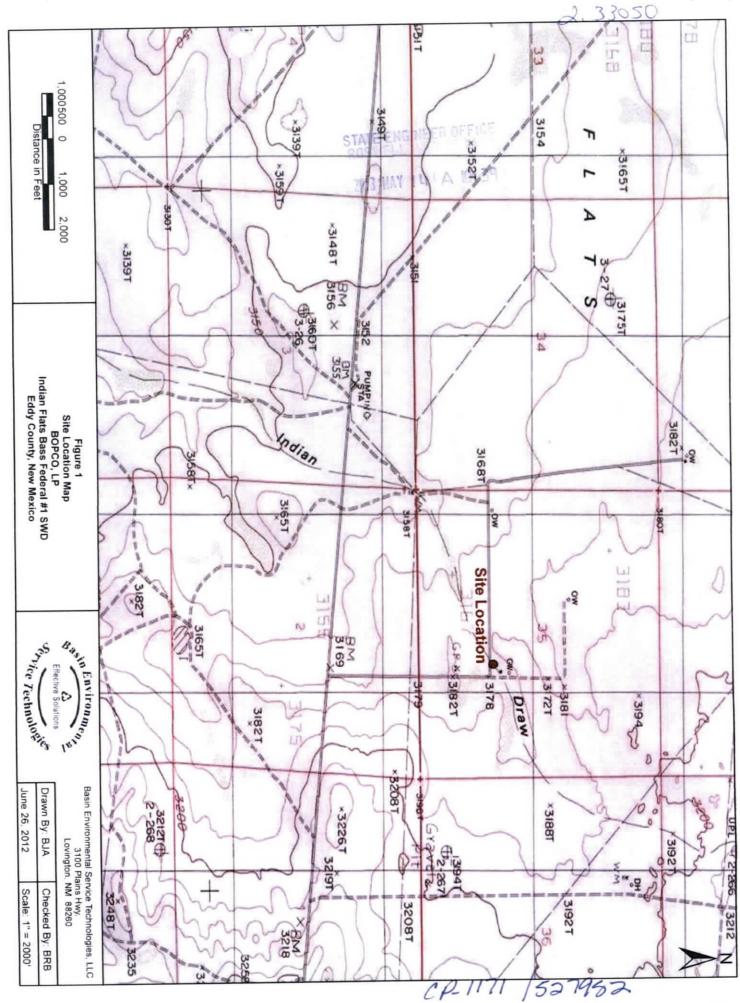
James A. Amos

Supervisory Environmental

mes Q. Como

Protection Specialist

CP-1171 /527952



xploratory:	Pollution Control and/or Recovery:	Construction	Mine De-Watering:
Include a	☐ Include a plan for pollution	De-Watering:	☐ Include a plan for pollution
lescription of	control/recovery, that includes the	☐ Include a description of the	control/recovery, that includes the following
ny proposed	following:	proposed dewatering	☐ A description of the need for mine
oump test, if	A description of the need for the	operation,	dewatering. The estimated maximum period of time
applicable.	pollution control or recovery operation.	☐ The estimated duration of	for completion of the operation.
	☐ The estimated maximum period of	the operation, The maximum amount of	The source(s) of the water to be diverte
	time for completion of the operation.	water to be diverted.	The geohydrologic characteristics of the
	☐ The annual diversion amount. ☐ The annual consumptive use	A description of the need	aquifer(s).
	amount.	for the dewatering operation,	☐The maximum amount of water to be
	The maximum amount of water to be	and.	diverted per annum.
	diverted and injected for the duration of	☐ A description of how the	☐The maximum amount of water to be
	the operation.	diverted water will be disposed	diverted for the duration of the operation.
	☐ The method and place of discharge.	of.	☐The quality of the water.
Monitoring:	☐ The method of measurement of	Geo-Thermal:	The method of measurement of water
Include the	water produced and discharged.	☐ Include a description of the	diverted.
reason for the	☐ The source of water to be injected.	geothermal heat exchange	The recharge of water to the aquifer.
monitoring	☐ The method of measurement of	project,	Description of the estimated area of
well, and,	water injected.	☐ The amount of water to be	hydrologic effect of the project. The method and place of discharge.
The	The characteristics of the aquifer.	diverted and re-injected for the	An estimation of the effects on surface
duration	☐ The method of determining the resulting annual consumptive use of	project, The time frame for	water rights and underground water rights
of the planned	water and depletion from any related	constructing the geothermal	from the mine dewatering project.
monitoring.	stream system.	heat exchange project, and,	A description of the methods employed
	Proof of any permit required from the	☐ The duration of the project.	estimate effects on surface water rights an
	New Mexico Environment Department.	Preliminary surveys, design	underground water rights.
	☐ An access agreement if the	data, and additional	☐Information on existing wells, rivers,
	applicant is not the owner of the land on	information shall be included to	springs, and wetlands within the area of
	which the pollution plume control or	provide all essential facts	hydrologic effect.
	recovery well is to be located.	relating to the request.	
181-1			
,	foregoing statements are true to the best of	rint Name(s) (my, our) knowledge and belief.	STATE
affirm that the f	foregoing statements are true to the best of	(my, our) knowledge and belief.	STATE OF
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affirm that the f	foregoing statements are true to the best of $5/13/13$	(my, our) knowledge and belief. Applicant Signatur	STAIF FILE OF
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affirm that the f	foregoing statements are true to the best of $\frac{5/13/13}{4}$	Applicant Signatur OF THE STATE ENGINEER This application is:	
Applicant Sign	foregoing statements are true to the best of $\frac{5/13/13}{4}$ approved	Applicant Signatur OF THE STATE ENGINEER This application is: □ partially approved	☐ denied
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Scott A. Verhines, P.E. State Engineer



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 527952 File Nbr: CP 01171

May. 22, 2013

BEN J ARGUIJO BOPCO LP 3100 PLAINS HWY LOVINGTON, NM 88260

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, and the well is to be plugged on or before 05/31/2014, unless a permit to use the water is acquired from this office.

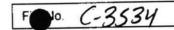
A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 05/31/2014.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Andy Morley (575) 622-6521

Enclosure







APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER



(check applicable box):

	For fees, see State Engineer web	site: http://www.ose.state.nm.us/					
Purpose:	Pollution Control And / Or Recovery	☐ Geo-Thermal					
Exploratory	☐ Construction Site De-Watering	Other (Describe):					
Monitoring	☐ Mineral De-Watering	TATE ENGROSWELL 2017 FEB					
A separate permit will	be required to apply water to beneficial use.	10					
	est - Requested Start Date: 2/1/12	Requested End Date: Who Known					
Plugging Plan of Ope	erations Submitted: Yes No	0. 38:					
1. APPLICANT(S)							
Name: Tonf Savois	BOPCO L.P.	Name: U.S. Dept. of Enterior Bum					
Contact or Agent: Contact: Tony		Contact or Agent: check here if Agent Tames A. Amis					
	W. Mermod, Suite 704	Mailing Address: 620 East Greene Street					
City: Carlsbad		City: Canslad					
State: NM	Zip Code: 88220	State: NM Zip Code: 88220 -6292					
Phone: 432-556-873		Phone: ☐ Home ☐ Cell Phone (Work): 575-284-5909					
Phone (Work): 575-8 E-mail (optional): tas	savoie@basspet.com	E-mail (optional): James & blm. 30V					
15070	OI V 01 833 2102 FOR OSE INTERN						
CO	STATE ENGINEER OFF	3534 Trn Number: "496111" (optional): Man For Well					

Trans Description (optional):

Sub-Basin: PCWLOG Due Date: Monitor Well

Page 1 of 3

2.	WELL(S)	Describe	the well(s)	applicable	to	this	application.
----	---------	----------	-------------	------------	----	------	--------------

MX State Plane (NAD83) (Feet)	Location Required: Coordin (Lat/Long - WGS84)	ate location must be	reported in NM S	tate Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude
Well Number (if known): X or Easting or Longitude: Y or Northing or Latitude: Northing Range); Hydrographic Survey Map & Tract; Lot, Block & Subdivision; OR Land Grant Name if known. SITE B TMW-1 POD 1 NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) NOTE: If more well locations are attached: Yes No If yes, how many. Other description relating well to common landmarks, streets, or other: U.L. P Section 3, Twms. 22S, Range 28E Well is on land owned by: Blm Well information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many. Approximate depth of well (feet): 147.88 Outside diameter of well casing (inches): 2.00 Driller Name: Straub The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 10ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.001. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point.	NM West ZoneNM East Zone		Zone 12N	1/10 th of second)
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 - POD Descriptions) Additional well descriptions are attached: Well is on land owned by: Bim Well information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many. Approximate depth of well (feet): 147.86 Outside diameter of well casing (inches): 2.00 Driller Name: Straub Driller Name: Straub Driller License Number: WD 1478 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information at a flow line spill area. The estimated depth for depth of water prior to drilling was between 150 to 180 feet below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/lg and BTEX was <.oo! The MNOCO would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point.				PLSS (Public Land Survey System, i.e. Quarters, Section, Township, Range); Hydrographic Survey Map & Tract; Lot, Block & Subdivision; OR Land Grant Name if known.
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: See No If yes, how many Other description relating well to common landmarks, streets, or other: U.L.P. Section 3, Twns. 22S, Range 28E Well is on land owned by: Blm Well information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many Approximate depth of well (feet): 147.86 Outside diameter of well casing (inches): 2.00 Driller Name: Straub Driller License Number: WD 1478 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.oo1. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point.	SITE B TMW-1			N 32* 24' 58.38" W 104* 4' 19.89"
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: See No If yes, how many Other description relating well to common landmarks, streets, or other: U.L.P. Section 3, Twns. 22S, Range 28E Well is on land owned by: Blm Well information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many Approximate depth of well (feet): 147.86 Outside diameter of well casing (inches): 2.00 Driller Name: Straub Driller License Number: WD 1478 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.oof. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point.	POD1			NNSESWSE,
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: See No If yes, how many Other description relating well to common landmarks, streets, or other: U.L.P. Section 3, Twns. 22S, Range 28E Well is on land owned by: Blm Well information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many Approximate depth of well (feet): 147.86 Outside diameter of well casing (inches): 2.00 Driller Name: Straub Driller License Number: WD 1478 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.oof. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point.				Section 03, T.205, R.28E
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: Yes No If yes, how many. Other description relating well to common landmarks, streets, or other: U.L. P Section 3, Twns. 22S, Range 28E Well is on land owned by: Blm Well information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many. Approximate depth of well (feet): 147.86 Outside diameter of well casing (inches): 2.00 Driller Name: Straub 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.001. The NMOCD would like for this well to be completed as sentry monitor well. 8E:01 V 0.1 833 ZIDZ BOX 234 W.S.R. 7.134/SO8				E E E
Additional well descriptions are attached: Yes No If yes, now many Other description relating well to common landmarks, streets, or other: U.L.P. Section 3, Twns. 22S, Range 28E Well is on land owned by: Blm Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? Yes No If yes, how many. Approximate depth of well (feet): 147.86 Outside diameter of well casing (inches): 2.00 Driller Name: Straub 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.oo1. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point.				
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Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? No If yes, how many	Other description relating we	Il to common landmar	ks, streets, or other	
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? No If yes, how many	Well is on land owned by: Bl	m		
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Driller Name: Straub Driller License Number: WD 1478 3. ADDITIONAL STATEMENTS OR EXPLANATIONS The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approximately 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.001. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point. 88:01 V 01 833 ZIDZ	,	eet): 147.86		Outside diameter of well casing (inches): 2.00
The temporary well was drilled to gather information on the estimated depth to ground water in relationship to 3 other soil bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approxiamtely 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.001. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point. 88:01 V 01833.1021				Driller License Number: WD 1478
bores that were advanced at the site for vertical delineation at a flow line spill area. The estimated depth to water prior to drilling was between 150 to 180 feet below ground surface. Water was encountered at a depth of approxiamtely 106 ft. below ground surface. A temporary well was set and water samples were collected for Chloride and BTEX analysis. The chloride concentration was <15 mg/kg and BTEX was <.001. The NMOCD would like for this well to be completed as sentry monitor well. It is not known how long we will be required to monitor the groundwater at this point. 8E:01 V 01 833 ZIIII	3. ADDITIONAL STATEMENT	S OR EXPLANATION	NS	
* BOSMETT: NEW MEXICO	bores that were advanced a drilling was between 150 to ground surface. A tempora	at the site for vertica 180 feet below grou ry well was set and v kg and BTEX was <.	I delineation at a fl ind surface. Water water samples wer oo1. The NMOCD	was encountered at a depth of approxiamtely 106 ft. below collected for Chloride and BTEX analysis. The chloride would like for this well to be completed as sentry monitor well.
BOSMELL. HEW MEXICO		8E :01 A 0:1	833 2102	
		NEW MEXICO	' ROSWELL.	

FOR OSE INTERNAL USE	Application for Permit, Form wi-07
File Number: (-3534	Trn Number: 495111
	Page 2 of 3

4. SPECIFIC REQ	UIREMENTS: The applicant must include the information has been included and/or a	he following, as applicable to each ttached to this application:	well type. Please check the appropriate
Exploratory: Include a description of any proposed pump test, if applicable.	Pollution Control and/or Recovery: Include a plan for pollution control/recovery, that includes the following: A description of the need for the pollution control or recovery operation. The estimated maximum period of time for completion of the operation. The annual diversion amount. The annual consumptive use amount. The maximum amount of water to be diverted and injected for the duration of the operation. The method and place of discharge.	Construction De-Watering: Include a description of the proposed dewatering operation, The estimated duration of the operation, The maximum amount of water to be diverted, A description of the need for the dewatering operation, and, A description of how the diverted water will be disposed of. Geo-Thermal:	Mine De-Watering: Include a plan for pollution control/recovery, that includes the following: A description of the need for mine dewatering. The estimated maximum period of time for completion of the operation. The source(s) of the water to be diverted. The geohydrologic characteristics of the aquifer(s). The maximum amount of water to be diverted per annum. The maximum amount of water to be diverted for the duration of the operation. The quality of the water. The method of measurement of water
Monitoring: Include the reason for the monitoring well, and, The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	Geo-Thermal:	in the method of measurement of water diverted. The recharge of water to the aquifer. Description of the estimated area of hydrologic effect of the project. The method and place of discharge. An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. A description of the methods employed to estimate effects on surface water rights and underground water rights. Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
	A	CKNOWLEDGEMENT	
I, We (name of	applicant(s)), John A. "Tony" Savoie	rint Name(s)	es A. Amos (BURCEO)
affirm that the fo	oregoing statements are true to the best of	(my, our) knowledge and belief.	STAT ROS
1	on Davis 2/10/12	Applicant/Signatur	1 d. Carrie 2-10-12
Applicant Signa	•	OF THE STATE ENGINEER	2 10 STATE
		This application is:	A OFF
provided it is a	Tapproved not exercised to the detriment of any others etrimental to the public welfare and further sections.	s having existing rights, and is not	contrary to the ednse vallon of water in New
,		20 ¹²	
Scott	A. Verhines, P.E.	, State Engineer	
By: By: Signature	& Dung	Bill 7 Duer Print	mling
Title: Ca	rlsbad Basin Supervisor		
	FOR C	OSE INTERNAL USE	Application for Permit, Form wr-07
	File No	umber: C -3534	Trn Number: 49511/

NEW MEXICO STATE ENGINEER OFFICE PERMIT TO MONITOR

SPECIFIC CONDITIONS OF APPROVAL

- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- Oriller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- LOG The Point of Diversion C 03534 POD1 must be completed and the Well Log filed on or before 02/28/2013.

NO WATER SHALL BE DIVERTED FROM THIS WELL EXCEPT FOR TESTING PURPOSES WHICH SHALL NOT EXCEED TEN (10) CUMULATIVE DAYS UNLESS A PERMIT TO USE WATER FROM THIS WELL IS ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

SHOULD THE PERMITTEE CHANGE THE PURPOSE OF USE TO OTHER THAN MONITORING PURPOSES, AN APPLICATION SHALL BE ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

THE WELL SHALL BE CONSTRUCTED, MAINTAINED AND OPERATED THAT EACH WATER SHALL BE CONFINED TO THE AQUIFER IN WHICH IT IS ENCOUNTERED.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: Date Rcvd. Corrected:
Formal Application Rcvd: 02/10/2012 Pub. of Notice Ordered:
Date Returned - Correction: Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 16 day of Feb A.D., 2012

Scott A. Verhines, P.E. , State Engineer

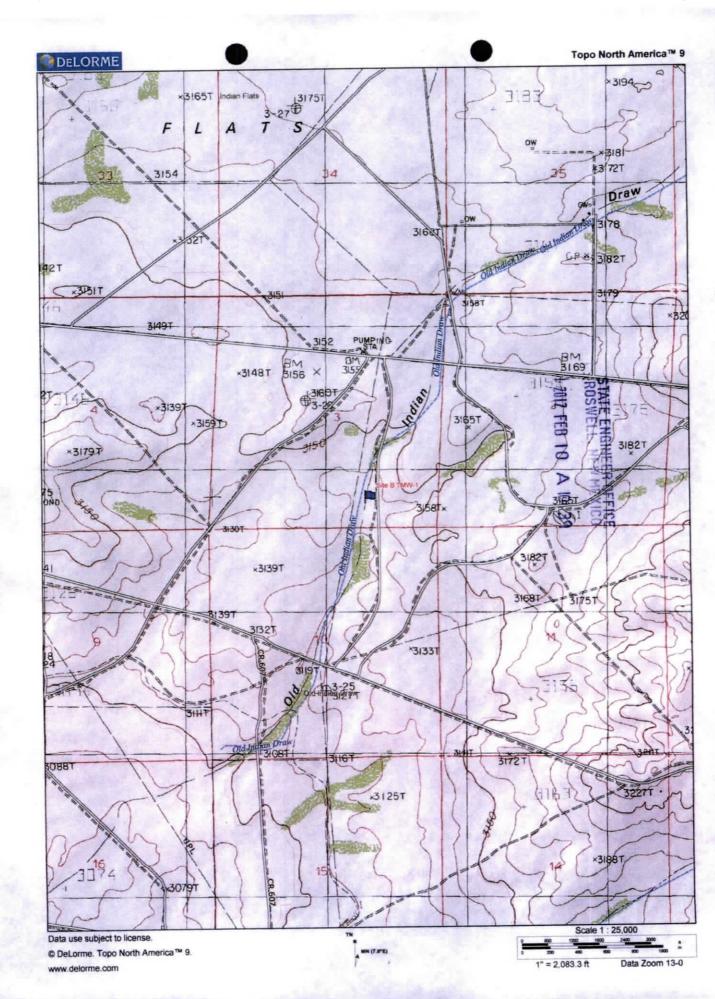
By: Bill Duemling, Bagin Supv.

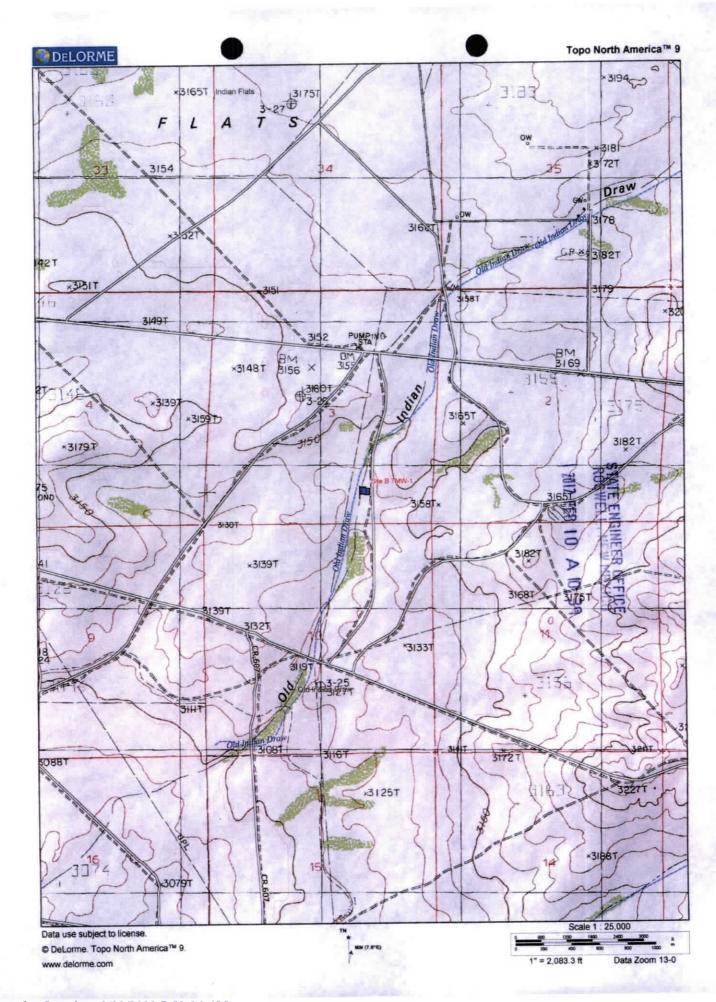
Trn Desc: C-03534-WATER QUALITY SAMPLING

File Number: C 03534

Trn Number: 495111

page: 1





Locator Tool Report

General Information:

Application ID:30

Date: 02-15-2012

Time: 16:59:09

WR File Number: C-03534-POD1

Purpose: POINT OF DIVERSION

Applicant First Name: BOPCO LLP
Applicant Last Name: MONITOR WELL

GW Basin: CARLSBAD County: EDDY

Critical Management Area Name(s): NONE Special Condition Area Name(s): NONE

Land Grant Name: NON GRANT

PLSS Description (New Mexico Principal Meridian):

NW 1/4 of SE 1/4 of SW 1/4 of SE 1/4 of Section 03, Township 22S, Range 28E.

Coordinate System Details:

Geographic Coordinates:

Latitude: Longitude: 32 Degrees 24 Minutes 58.4 Seconds N 104 Degrees 4 Minutes 19.9 Seconds W

Universal Transverse Mercator Zone: 13N

 NAD 1983(92) (Meters)
 N: 3,586,950
 E: 587,240

 NAD 1983(92) (Survey Feet)
 N: 11,768,186
 E: 1,926,636

 NAD 1927 (Meters)
 N: 3,586,748
 E: 587,289

 NAD 1927 (Survey Feet)
 N: 11,767,524
 E: 1,926,797

State Plane Coordinate System Zone: New Mexico East

 NAD 1983(92) (Meters)
 N: 157,048
 E: 189,562

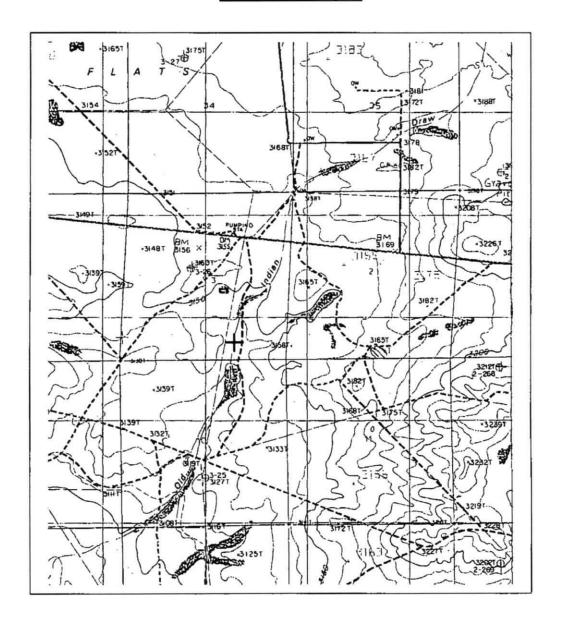
 NAD 1983(92) (Survey Feet)
 N: 515,249
 E: 621,921

 NAD 1927 (Meters)
 N: 157,030
 E: 177,010

 NAD 1927 (Survey Feet)
 N: 515,189
 E: 580,739

NEW MEXICO OFFICE OF STATE ENGINEER

Locator Tool Report





WR File Number: C-03534-POD1 Scale: 1:34,654

Northing/Easting: UTM83(92) (Meter): N: 3,586,950 E: 587,240

Northing/Easting: SPCS83(92) (Feet): N: 515,249 E: 621,921

GW Basin: Carlsbad

Page 2 of 2

Print Date: 02/15/2012



Scott A. Verhines, P.E. State Engineer

STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

Trn Nbr: 495111 File Nbr: C 03534

Feb. 16, 2012

JAMES AMOS U.S. DEPT. OF INTERIOR--BLM 620 EAST GREENE STREET CARLSBAD, NM 88220-6292

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, and the well is to be plugged on or before 02/28/2013, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 02/28/2013.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Bill Duemling (575)622-6521

Enclosure

explore

APPENDIX C VISUAL SAMPLING PLAN (VSP)

VSP Sample Design Report for Using Stratified Sampling to Estimate the Population Proportion

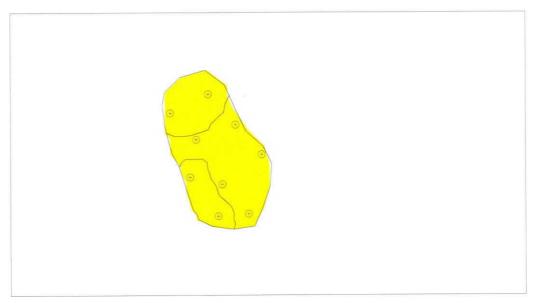
Summary

This report summarizes the stratified sampling design used, associated statistical assumptions, as well as general guidelines for conducting post-sampling data analysis. Sampling plan components presented here include how many sampling locations to choose and where within the sampling area to collect those samples. The type of medium to sample (i.e., soil, groundwater, etc.) and how to analyze the samples (in-situ, fixed laboratory, etc.) are addressed in other sections of the sampling plan. It is important to note that the decision for sample size calculation is determined for the combined strata, rather than any individual strata.

The following table summarizes the proportion stratified sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY	OF SAMPLING DESIGN
Primary Objective of Design	Estimate the population proportion of all strata combined
Criteria for Determining Total Number of Samples	Achieve pre-specified precision of the estimated proportion for specified stratum costs, but no restriction on total costs
Sample Placement (Location) in the Field	Simple random sampling within each stratum
Formula for calculating number of sampling locations	From Gilbert (1987, page 51)
Method for calculating number of sampling locations in each stratum	Optimal Allocation
Calculated total number of samples	5
Stratum 1	2
Total area of all strata	419.90 m ²
Total cost of sampling a	

^a Including measurement analyses and fixed overhead costs. See the Cost of Sampling section for an explanation of the costs presented here.



Area: Area 1

X Coord	Y Coord	Label	Value	Type	Historical	Sample Area
-11583597.1222	3819434.2286			Random		
-11583591.7557	3819426.7407			Random		

Area: Area 2								
X Coord	Y Coord	Label	Value	Type	Historical	Sample Area		
-11583593.7212	3819450.0337			Random				
-11583600.9426	3819446.4612			Random				

Area: Area 3							
X Coord	Y Coord	Label	Value	Type	Historical	Sample Area	
-11583590.9808	3819432.8999			Random			
-11583595.9951	3819441.4186			Random			
-11583585.9664	3819427.2208			Random			
-11583588.4736	3819444.2581			Random			
-11583583.4592	3819438.5790			Random			

Primary Sampling Objective

The primary purpose of sampling at this site is to estimate the proportion for the entire site, i.e., for all strata combined, such that the estimated proportion has the minimum possible standard deviation under the condition that the sampling and measurement costs cannot exceed a specified amount. Preexisting information was used to divide the site into 1 non-overlapping strata that were expected to be more homogeneous internally than for the entire site (all strata combined). The expected variability of values within each stratum was estimated or approximated, and the stratum weights, W_h , were determined so that the total number of samples could be allocated appropriately among the strata.

Number of Total Samples: Calculation Equation and Inputs

The total number of samples is computed to achieve the pre-specified precision of the estimated population proportion for specified stratum costs, but no restriction on total costs. Note that the calculation is for the total number of samples, i.e., for combined strata, rather than individual strata.

The formula used to calculate the total number of samples is:

$$n = \frac{\left(\sum_{h=1}^{L} W_{h} \sqrt{P_{h} (1 - P_{h})} \sqrt{C_{h}}\right) \sum_{h=1}^{L} \frac{W_{h} \sqrt{P_{h} (1 - P_{h})}}{\sqrt{C_{h}}}}{V + \frac{1}{N} \sum_{h=1}^{L} W_{h} P_{h} (1 - P_{h})}$$

where

L is the number of strata, h=1,2,...,L,

P_b is the estimated proportion of measurements in stratum h,

 $W_h = N_h / N$ is the weight associated with stratum h,

 N_h is the total number of possible sampling locations (units) in stratum h,

is the total number of possible units in all strata combined, $N = \sum_{i=1}^{L} N_i$

V is the pre-specified variance or precision, and

is the cost of collecting and measuring a sample in stratum h.

The values of these inputs that result in the calculated number of sampling locations are:

Parameter Stratum

	1
\mathbf{P}_{h}	0.2
C_h	
Wh	78.5391

Parameter	Input Value
V	1

Allocation of Samples to Strata

The total number of samples is allocated to the individual strata on an optimal basis using the formula:

$$n_h = n \frac{N_h \sqrt{P_h (1 - P_h)} / \sqrt{c_h}}{\sum_{h=1}^L N_h \sqrt{P_h (1 - P_h)} / \sqrt{c_h}}$$

where

 n_h is the number of samples allocated to stratum h,

is the number of strata,

 N_h is the total number of units in stratum h,

 P_h'' is the proportion in stratum h,

 c_h'' is the cost per population unit in stratum h.

 $n \qquad \text{is the total number of units sampled in all strata,} \qquad n = \sum_{h=1}^{L} n_h$

Using this formula, the number of samples allocated to each stratum is:

Stratum	Number of Samples
1	2
Total Samples	5

Method for Determining Sampling Locations

Five methods for determining sample locations are provided in VSP: 1) simple random sampling, 2) random sampling within grids, 3) systematic sampling with a random start, 4) systematic sampling with a fixed start and 5) adaptive grid sampling. One may use a different method for each stratum, based on the conceptual site model and decision to be made for a given stratum. For this site, sample locations were chosen using simple random sampling in each stratum.

Locating the sample points randomly within each stratum provides sampling locations that can, due to the random selection process, leave some areas of the stratum that are not well represented in the samples collected. This potential problem is not expected to result in inappropriate data for estimating the strata proportions or the entire site proportion if the population values in each stratum do not vary greatly among different portions of the stratum. If major spatial patterns of population values are expected to occur within a stratum, then systematic grid sampling is usually a better choice for that stratum.

Statistical Assumptions

The assumptions associated with the formulas for computing the number of samples are:

- The estimated stratum proportions, P_h, are reasonable and representative of the stratum populations being sampled.
- The sampling locations are selected using simple random sampling.
- 3. The stratum costs, C_h , and the fixed cost C_0 , are accurate.

The first and third assumptions will be assessed in a post data collection analysis. The second assumption is valid because simple random sampling is used.

Cost of Sampling

The total cost of the completed sampling program depends on several cost inputs, some of which are fixed, and others that are based on the number of samples collected and measured. Based on the numbers of samples determined above, the estimated total cost of sampling and analysis at this site is \$5,500.00, which averages out to a per sample cost of \$1,100.00. The following table summarizes the inputs and resulting cost estimates.

		COST INFORMATION	ON	
Stratum	Samples	Collection Cost Per Sample	Analytic Cost Per Sample	Total Cost
1	2			
2	2			
3	5			
Total Samples:	9		Subtotal:	
			Fixed Startup Cost:	
			Grand Total:	

Recommended Data Analysis Activities

Post data collection activities generally follow those outlined in EPA's Guidance for Data Quality Assessment (EPA, 2000). The data analysts will become familiar with the context of the problem and goals for data collection and assessment. The data will be verified and validated before being subjected to statistical or other analyses. Graphical and analytical tools will be used to verify to the extent possible the assumptions of any statistical analyses that are performed as well as to achieve a general understanding of the data. The data will be assessed to determine whether they are adequate in both quality and quantity to support the primary objective of sampling.

Estimates for the proportion of the population values will be calculated using the formulas appropriate for stratified sampling; these formulas are found in EPA QA/G-5S (EPA, 2001). Results of the exploratory and quantitative assessments of the data will be reported, along with conclusions that may be supported by them.

This report was automatically produced* by Visual Sample Plan (VSP) software version 7.12a.

This design was last modified 7/2/2020 9:48:15 AM.

Software and documentation available at http://vsp.pnnl.gov

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* - The report contents may have been modified or reformatted by end-user of software.

APPENDIX D 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

April 20, 2020

Ashley Maxwell Souder, Miller & Associates 201 S Halagueno Carlsbad, NM 88221

TEL: FAX:

RE: Ford State 001 OrderNo.: 2004515

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 23 sample(s) on 4/10/2020 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S1-2'

 Project:
 Ford State 001
 Collection Date: 4/8/2020 10:58:00 AM

 Lab ID:
 2004515-001
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	: TOM
Diesel Range Organics (DRO)	5800	96		mg/Kg	10	4/13/2020 10:34:57 AM	51740
Motor Oil Range Organics (MRO)	2300	480		mg/Kg	10	4/13/2020 10:34:57 AM	51740
Surr: DNOP	0	55.1-146	S	%Rec	10	4/13/2020 10:34:57 AM	51740
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	490	99		mg/Kg	20	4/14/2020 3:11:34 PM	51735
Surr: BFB	220	66.6-105	S	%Rec	20	4/14/2020 3:11:34 PM	51735

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

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

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 Limit

Page 1 of 30

Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-002

Client Sample ID: S1-4'

Collection Date: 4/8/2020 11:02:00 AM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS					Analyst	том
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	1500 590 0	100 500 55.1-146	S	mg/Kg mg/Kg %Rec	10 10 10		51740 51740 51740
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO) Surr: BFB	110 212	25 66.6-105	S	mg/Kg %Rec	5 5	4/14/2020 3:34:53 PM 4/14/2020 3:34:53 PM	51735 51735

Matrix: SOIL

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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- 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 Limit

Page 2 of 30

Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S1-6'

 Project:
 Ford State 001
 Collection Date: 4/8/2020 11:08:00 AM

 Lab ID:
 2004515-003
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	том
Diesel Range Organics (DRO)	280	10		mg/Kg	1	4/13/2020 11:23:01 AM	51740
Motor Oil Range Organics (MRO)	150	50		mg/Kg	1	4/13/2020 11:23:01 AM	51740
Surr: DNOP	86.8	55.1-146		%Rec	1	4/13/2020 11:23:01 AM	51740
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2020 3:58:14 PM	51735
Surr: BFB	135	66.6-105	S	%Rec	1	4/14/2020 3:58:14 PM	51735

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S1-11'

 Project:
 Ford State 001
 Collection Date: 4/8/2020 11:40:00 AM

 Lab ID:
 2004515-004
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual 1	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analyst	том
Diesel Range Organics (DRO)	51	9.5		mg/Kg	1	4/13/2020 4:52:21 AM	51740
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/13/2020 4:52:21 AM	51740
Surr: DNOP	92.4	55.1-146	9	%Rec	1	4/13/2020 4:52:21 AM	51740
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2020 4:21:37 PM	51735
Surr: BFB	98.8	66.6-105		%Rec	1	4/14/2020 4:21:37 PM	51735

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

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S2-2'

 Project:
 Ford State 001
 Collection Date: 4/8/2020 11:52:00 AM

 Lab ID:
 2004515-005
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analyst	: ТОМ
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/13/2020 5:16:28 AM	51740
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/13/2020 5:16:28 AM	51740
Surr: DNOP	78.7	55.1-146		%Rec	1	4/13/2020 5:16:28 AM	51740
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/14/2020 4:45:08 PM	51735
Surr: BFB	96.9	66.6-105		%Rec	1	4/14/2020 4:45:08 PM	51735

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

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

PQL Practical Quantitative Limit
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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Ford State 001

Lab ID: 2004515-006

Project:

Client Sample ID: S2-4'

Collection Date: 4/8/2020 11:56:00 AM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RI.	Oual Units	DF	Date Analyzed	Batch
Allalyses	Result	, KL	Quai Cints	-	Dute Hangeeu	2
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	TOM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/13/2020 5:40:30 AM	51740
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/13/2020 5:40:30 AM	51740
Surr: DNOP	87.0	55.1-146	%Rec	1	4/13/2020 5:40:30 AM	51740
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/14/2020 5:08:39 PM	51735
Surr: BFB	97.3	66.6-105	%Rec	1	4/14/2020 5:08:39 PM	51735

Matrix: SOIL

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Ford State 001

Lab ID: 2004515-007

Client Sample ID: S2-5'

Collection Date: 4/8/2020 12:00:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	том
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/13/2020 6:04:56 AM	51740
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/13/2020 6:04:56 AM	51740
Surr: DNOP	83.9	55.1-146		%Rec	1	4/13/2020 6:04:56 AM	51740
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2020 5:32:03 PM	51735
Surr: BFB	99.0	66.6-105		%Rec	1	4/14/2020 5:32:03 PM	51735

Matrix: SOIL

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

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

PQL Practical Quantitative Limit

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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-008

Client Sample ID: S3-2'

Collection Date: 4/8/2020 12:13:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	CLP
Diesel Range Organics (DRO)	65	9.4		mg/Kg	1	4/13/2020 5:44:59 AM	51742
Motor Oil Range Organics (MRO)	170	47		mg/Kg	1	4/13/2020 5:44:59 AM	51742
Surr: DNOP	91.4	55.1-146		%Rec	1	4/13/2020 5:44:59 AM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/14/2020 5:55:24 PM	51738
Surr: BFB	97.5	66.6-105		%Rec	1	4/14/2020 5:55:24 PM	51738

Matrix: SOIL

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S3-3'

 Project:
 Ford State 001
 Collection Date: 4/8/2020 12:19:00 PM

 Lab ID:
 2004515-009
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst	: JME
Diesel Range Organics (DRO)	25	9.3	mg/Kg	1	4/15/2020 1:29:03 PM	51742
Motor Oil Range Organics (MRO)	59	46	mg/Kg	1	4/15/2020 1:29:03 PM	51742
Surr: DNOP	110	55.1-146	%Rec	1	4/15/2020 1:29:03 PM	51742
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/14/2020 6:18:47 PM	51738
Surr: BFB	98.1	66.6-105	%Rec	1	4/14/2020 6:18:47 PM	51738

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

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

PQL Practical Quantitative Limit

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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-010

Client Sample ID: S3-4'

Collection Date: 4/8/2020 12:20:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	CLP
Diesel Range Organics (DRO)	10	9.5	mg/Kg	1	4/13/2020 7:19:58 AM	51742
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/13/2020 7:19:58 AM	51742
Surr: DNOP	84.2	55.1-146	%Rec	1	4/13/2020 7:19:58 AM	51742
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/14/2020 8:39:46 PM	51738
Surr: BFB	98.4	66.6-105	%Rec	1	4/14/2020 8:39:46 PM	51738

Matrix: SOIL

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

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Ford State 001

Lab ID: 2004515-011

Project:

Client Sample ID: S5-2'

Collection Date: 4/8/2020 10:38:00 AM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	CLP
Diesel Range Organics (DRO)	2400	190		mg/Kg	20	4/13/2020 7:43:39 AM	51742
Motor Oil Range Organics (MRO)	1300	950		mg/Kg	20	4/13/2020 7:43:39 AM	51742
Surr: DNOP	0	55.1-146	S	%Rec	20	4/13/2020 7:43:39 AM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	100	50		mg/Kg	10	4/14/2020 9:03:21 PM	51738
Surr: BFB	159	66.6-105	S	%Rec	10	4/14/2020 9:03:21 PM	51738

Matrix: SOIL

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

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

POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S5-3'

 Project:
 Ford State 001
 Collection Date: 4/8/2020 10:45:00 AM

 Lab ID:
 2004515-012
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	CLP
Diesel Range Organics (DRO)	1300	99		mg/Kg	10	4/13/2020 8:07:15 AM	51742
Motor Oil Range Organics (MRO)	790	500		mg/Kg	10	4/13/2020 8:07:15 AM	51742
Surr: DNOP	0	55.1-146	S	%Rec	10	4/13/2020 8:07:15 AM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	52	25		mg/Kg	5	4/14/2020 9:26:54 PM	51738
Surr: BFB	168	66.6-105	S	%Rec	5	4/14/2020 9:26:54 PM	51738

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

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-013

Client Sample ID: S5-4'

Collection Date: 4/8/2020 10:47:00 AM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	CLP
Diesel Range Organics (DRO)	730	93		mg/Kg	10	4/13/2020 8:54:31 AM	51742
Motor Oil Range Organics (MRO)	480	470		mg/Kg	10	4/13/2020 8:54:31 AM	51742
Surr: DNOP	0	55.1-146	S	%Rec	10	4/13/2020 8:54:31 AM	51742
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	: NSB
Gasoline Range Organics (GRO)	30	25		mg/Kg	5	4/14/2020 9:50:20 PM	51738
Surr: BFB	136	66.6-105	S	%Rec	5	4/14/2020 9:50:20 PM	51738

Matrix: SOIL

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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-014

Client Sample ID: S6-1'

Collection Date: 4/8/2020 12:43:00 PM

Received Date: 4/10/2020 8:25:00 AM

Result	RL	Qual Uni	its D	F Date Analyzed	Bat	itch
RGANICS				Ar	nalyst: CL	-P
ND	10	mg	Kg 1	4/13/2020 10:05:	16 AM 517	742
ND	50	mg	Kg 1	4/13/2020 10:05:	16 AM 517	742
90.4	55.1-146	%R	ec 1	4/13/2020 10:05:	16 AM 517	742
				Ar	nalyst: NS	SB
ND	5.0	mg	Kg -	4/14/2020 10:13:	50 PM 517	738
94.7	66.6-105	%R	ec 1	4/14/2020 10:13:	50 PM 517	738
	RGANICS ND ND 90.4	RGANICS ND 10 ND 50 90.4 55.1-146 ND 5.0	RGANICS ND 10 mg/ ND 50 mg/ 90.4 55.1-146 %R ND 5.0 mg/	RGANICS ND 10 mg/Kg 1 ND 50 mg/Kg 1 90.4 55.1-146 %Rec 1 ND 5.0 mg/Kg 1	RGANICS ND 10 mg/Kg 1 4/13/2020 10:05: ND 50 mg/Kg 1 4/13/2020 10:05: 90.4 55.1-146 %Rec 1 4/13/2020 10:05: An ND 5.0 mg/Kg 1 4/14/2020 10:13:	RGANICS ND 10 mg/Kg 1 4/13/2020 10:05:16 AM 51 ND 50 mg/Kg 1 4/13/2020 10:05:16 AM 51 90.4 55.1-146 %Rec 1 4/13/2020 10:05:16 AM 51 Analyst: NS ND 5.0 mg/Kg 1 4/14/2020 10:13:50 PM 51

Matrix: SOIL

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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-015

Client Sample ID: S6-2'

Collection Date: 4/8/2020 12:45:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual Ur	nits	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	CLP
Diesel Range Organics (DRO)	ND	9.5	mg	g/Kg	1	4/13/2020 10:28:46 AM	51742
Motor Oil Range Organics (MRO)	ND	48	mg	g/Kg	1	4/13/2020 10:28:46 AM	51742
Surr: DNOP	99.0	55.1-146	%1	Rec	1	4/13/2020 10:28:46 AM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	5.0	mg	g/Kg	1	4/14/2020 10:37:16 PM	51738
Surr: BFB	95.5	66.6-105	%1	Rec	1	4/14/2020 10:37:16 PM	51738

Matrix: SOIL

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

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-016

Client Sample ID: S6-4'

Collection Date: 4/8/2020 12:53:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual U	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst:	CLP
Diesel Range Organics (DRO)	ND	9.8	1	mg/Kg	1	4/13/2020 10:52:17 AM	51742
Motor Oil Range Organics (MRO)	ND	49	1	mg/Kg	1	4/13/2020 10:52:17 AM	51742
Surr: DNOP	88.0	55.1-146		%Rec	1	4/13/2020 10:52:17 AM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	1	mg/Kg	1	4/14/2020 11:00:46 PM	51738
Surr: BFB	93.0	66.6-105		%Rec	1	4/14/2020 11:00:46 PM	51738

Matrix: SOIL

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-017

Client Sample ID: S7-1'

Collection Date: 4/8/2020 12:30:00 PM

Received Date: 4/10/2020 8:25:00 AM

Result	RL	Qual 1	Units	DF	Date Analyzed	Batch
ORGANICS					Analyst	: JME
23	9.5		mg/Kg	1	4/15/2020 1:53:05 PM	51742
ND	47)	mg/Kg	1	4/15/2020 1:53:05 PM	51742
77.6	55.1-146	9	%Rec	1	4/15/2020 1:53:05 PM	51742
					Analyst	: NSB
ND	4.9	1	mg/Kg	1	4/14/2020 11:24:18 PM	51738
95.8	66.6-105		%Rec	1	4/14/2020 11:24:18 PM	51738
	ORGANICS 23 ND 77.6	ORGANICS 23 9.5 ND 47 77.6 55.1-146 ND 4.9	ORGANICS 23 9.5 ND 47 77.6 55.1-146 E ND 4.9	ORGANICS 23 9.5 mg/Kg	ORGANICS 23 9.5 mg/Kg 1 ND 47 mg/Kg 1 77.6 55.1-146 %Rec 1 ND 4.9 mg/Kg 1	ORGANICS 23 9.5 mg/Kg 1 4/15/2020 1:53:05 PM ND 47 mg/Kg 1 4/15/2020 1:53:05 PM 77.6 55.1-146 %Rec 1 4/15/2020 1:53:05 PM Analyst ND 4.9 mg/Kg 1 4/14/2020 11:24:18 PM

Matrix: SOIL

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

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-018 Client Sample ID: S7-2'

Collection Date: 4/8/2020 12:30:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst:	CLP
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/13/2020 11:39:18 AM	51742
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/13/2020 11:39:18 AM	51742
Surr: DNOP	82.0	55.1-146		%Rec	1	4/13/2020 11:39:18 AM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/14/2020 11:47:44 PM	51738
Surr: BFB	95.6	66.6-105		%Rec	1	4/14/2020 11:47:44 PM	51738

Matrix: SOIL

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded

H ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

2004515-019 Lab ID:

Client Sample ID: S7-4'

Collection Date: 4/8/2020 12:35:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst	CLP
Diesel Range Organics (DRO)	11	9.7	mg/Kg	1	4/13/2020 12:02:48 PM	51742
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/13/2020 12:02:48 PM	51742
Surr: DNOP	78.9	55.1-146	%Rec	1	4/13/2020 12:02:48 PM	51742
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/15/2020 12:11:10 AM	51738
Surr: BFB	97.6	66.6-105	%Rec	1	4/15/2020 12:11:10 AM	51738

Matrix: SOIL

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

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Page 19 of 30 RL Reporting Limit

Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Ford State 001
 Collection Date: 4/8/2020 1:22:00 PM

 Lab ID:
 2004515-020
 Matrix: SOIL
 Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual Uni	s DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/l	Kg 20	4/14/2020 5:08:24 PM	51782
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: JME
Diesel Range Organics (DRO)	ND	8.9	mg/	Kg 1	4/16/2020 8:33:36 AM	51849
Motor Oil Range Organics (MRO)	ND	45	mg/	(g 1	4/16/2020 8:33:36 AM	51849
Surr: DNOP	89.5	55.1-146	%Re	ec 1	4/16/2020 8:33:36 AM	51849
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/	(g 1	4/15/2020 12:34:34 AM	A 51738
Surr: BFB	97.0	66.6-105	%Re	ec 1	4/15/2020 12:34:34 AM	A 51738
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.025	mg/	Kg 1	4/15/2020 12:34:34 AM	A 51738
Toluene	ND	0.049	mg/	Kg 1	4/15/2020 12:34:34 AM	A 51738
Ethylbenzene	ND	0.049	mg/	Kg 1	4/15/2020 12:34:34 AM	M 51738
Xylenes, Total	ND	0.099	mg/	Kg 1	4/15/2020 12:34:34 AM	M 51738
Surr: 4-Bromofluorobenzene	99.5	80-120	%R	ec 1	4/15/2020 12:34:34 AM	M 51738

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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-021

Client Sample ID: SW 2

Collection Date: 4/8/2020 1:27:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	JMT
Chloride	ND	60		mg/Kg	20	4/14/2020 5:20:49 PM	51782
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analyst:	CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/13/2020 12:49:50 PM	51742
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/13/2020 12:49:50 PM	51742
Surr: DNOP	65.0	55.1-146		%Rec	1	4/13/2020 12:49:50 PM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/15/2020 12:57:58 AM	51738
Surr: BFB	93.2	66.6-105		%Rec	1	4/15/2020 12:57:58 AM	51738
EPA METHOD 8021B: VOLATILES						Analyst:	NSB
Benzene	ND	0.025		mg/Kg	1	4/15/2020 12:57:58 AM	51738
Toluene	ND	0.049		mg/Kg	1	4/15/2020 12:57:58 AM	51738
Ethylbenzene	ND	0.049		mg/Kg	1	4/15/2020 12:57:58 AM	51738
Xylenes, Total	ND	0.099		mg/Kg	1	4/15/2020 12:57:58 AM	51738
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	4/15/2020 12:57:58 AM	51738

Matrix: SOIL

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

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
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-022

Client Sample ID: SW 3

Collection Date: 4/8/2020 1:31:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: ЈМТ
Chloride	150	60		mg/Kg	20	4/14/2020 5:33:13 PM	51782
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	CLP
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/13/2020 1:13:28 PM	51742
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/13/2020 1:13:28 PM	51742
Surr: DNOP	66.8	55.1-146		%Rec	1	4/13/2020 1:13:28 PM	51742
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	25	D	mg/Kg	5	4/15/2020 1:21:21 AM	51738
Surr: BFB	95.6	66.6-105	D	%Rec	5	4/15/2020 1:21:21 AM	51738
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12	D	mg/Kg	5	4/15/2020 1:21:21 AM	51738
Toluene	ND	0.25	D	mg/Kg	5	4/15/2020 1:21:21 AM	51738
Ethylbenzene	ND	0.25	D	mg/Kg	5	4/15/2020 1:21:21 AM	51738
Xylenes, Total	ND	0.49	D	mg/Kg	5	4/15/2020 1:21:21 AM	51738
Surr: 4-Bromofluorobenzene	97.9	80-120	D	%Rec	5	4/15/2020 1:21:21 AM	51738

Matrix: SOIL

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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- 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 Limit

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Lab Order 2004515

Date Reported: 4/20/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2004515-023

Client Sample ID: SW 4

Collection Date: 4/8/2020 1:36:00 PM

Received Date: 4/10/2020 8:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: JMT
Chloride	ND	60		mg/Kg	20	4/14/2020 6:10:27 PM	51782
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst	: JME
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	4/16/2020 8:57:16 AM	51849
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/16/2020 8:57:16 AM	51849
Surr: DNOP	82.9	55.1-146		%Rec	1	4/16/2020 8:57:16 AM	51849
EPA METHOD 8015D: GASOLINE RANGE						Analyst	t: NSB
Gasoline Range Organics (GRO)	ND	25	D	mg/Kg	5	4/15/2020 1:44:43 AM	51738
Surr: BFB	92.8	66.6-105	D	%Rec	5	4/15/2020 1:44:43 AM	51738
EPA METHOD 8021B: VOLATILES						Analyst	t: NSB
Benzene	ND	0.12	D	mg/Kg	5	4/15/2020 1:44:43 AM	51738
Toluene	ND	0.25	D	mg/Kg	5	4/15/2020 1:44:43 AM	51738
Ethylbenzene	ND	0.25	D	mg/Kg	5	4/15/2020 1:44:43 AM	51738
Xylenes, Total	ND	0.50	D	mg/Kg	5	4/15/2020 1:44:43 AM	51738
Surr: 4-Bromofluorobenzene	97.5	80-120	D	%Rec	5	4/15/2020 1:44:43 AM	51738

Matrix: SOIL

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#:

2004515 20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: MB-51782

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 51782

RunNo: 68129

Units: mg/Kg

Prep Date: 4/14/2020

Analysis Date: 4/14/2020

SeqNo: 2355256

HighLimit

RPDLimit Qual

Analyte Chloride

Result

ND 1.5

SampType: Ics

TestCode: EPA Method 300.0: Anions

SPK value SPK Ref Val %REC LowLimit

SPK value SPK Ref Val %REC LowLimit

0

Client ID: LCSS

Batch ID: 51782

RunNo: 68129

Prep Date: 4/14/2020

Sample ID: LCS-51782

Analysis Date: 4/14/2020

SeqNo: 2355257

Units: mg/Kg HighLimit

Analyte

RPDLimit Qual

PQL Result

15.00

94.2

110

%RPD

%RPD

Chloride

1.5

14

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits Sample pH Not In Range

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Hall Environmental Analysis Laboratory, Inc.

WO#:

2004515

20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: LCS-51740	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID: LCSS	Batch	n ID: 51	740	R	RunNo: 6	8050								
Prep Date: 4/11/2020	Analysis D	Analysis Date: 4/12/2020			SeqNo: 2352100 Units:				Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range Organics (DRO)	47	10	50.00	0	94.2	70	130							
Surr: DNOP	4.0		5.000		79.6	55.1	146							

Sample ID: MB-51740	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch	ID: 51	740	F	RunNo: 68	3050					
Prep Date: 4/11/2020	Analysis Date: 4/12/2020			8	SeqNo: 23	352102	Units: mg/K	g/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	5.9		10.00		59.3	55.1	146				

Sample ID: MB-51742	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch	1D: 51	742	F	RunNo: 6	8052					
Prep Date: 4/11/2020	Analysis D	ate: 4/	13/2020	5	SeqNo: 2	352273	Units: mg/K	(g			
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	8.2		10.00		81.7	55.1	146				

Sample ID: LCS-51742	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch	n ID: 51	742	F	RunNo: 6	8052					
Prep Date: 4/11/2020	Analysis Date: 4/13/2020			S	SeqNo: 2	352274	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	49	10	50.00	0	97.6	70	130				
Surr: DNOP	4.8		5.000		96.4	55.1	146				

Sample ID: 2004515-008AMS	SampT	ype: M S	3	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: \$3-2' Batch ID: 51742				F	RunNo: 6	8052						
Prep Date: 4/11/2020	Analysis Date: 4/13/2020			SeqNo: 2352276			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	110	10	49.95	64.98	97.9	47.4	136					
Surr: DNOP	5.3		4.995		107	55.1	146					

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- F Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 25 of 30

Hall Environmental Analysis Laboratory, Inc.

WO#: 2004515

20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: 2004515-008AMS	D SampT	ype: MS	SD.	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: S3-2'	Batch	ID: 51	742	F	RunNo: 6	8052					
Prep Date: 4/11/2020	Analysis D	ate: 4/	13/2020	8	SeqNo: 2	352277	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	110	9.8	48.78	64.98	95.4	47.4	136	2.11	43.4		
Surr: DNOP	5.4		4.878		110	55.1	146	0	0		
Sample ID: MB-51849	SampT	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics			

Sample ID: MB-51849	SampT	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	n ID: 51	849	F	RunNo: 68131						
Prep Date: 4/16/2020	Analysis D	Date: 4/	16/2020	8	SeqNo: 2	356515	Units: mg/K	g			
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	8.7		10.00		86.8	55.1	146				

Sample ID: LCS-51849	SampT	ype: LC	S	Tes	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch	n ID: 51	849	F	RunNo: 6	8131							
Prep Date: 4/16/2020	Analysis D	Analysis Date: 4/16/2020			SeqNo: 2356517			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	46	10	50.00	0	92.5	70	130						
Surr: DNOP	4.3		5.000		85.7	55.1	146						

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
- PQL Practical Quanitative Limit
 - S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- F. Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 26 of 30

Hall Environmental Analysis Laboratory, Inc.

WO#: 2004515

20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: mb-51735	SampT	уре: МЕ	BLK	TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch	1D: 51	735	F	RunNo: 6	8118					
Prep Date: 4/11/2020	Analysis D	ate: 4/	14/2020	S	SeqNo: 2	354646	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	970		1000		96.6	66.6	105				
Sample ID: Ics-51735	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e		

The state of the s										
Client ID: LCSS	Batch	ID: 51	735	F	RunNo: 6	8118				
Prep Date: 4/11/2020	Analysis D	ate: 4/	14/2020	8	SeqNo: 2	354647	Units: mg/K			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.6	80	120			
Surr: BFB	1000		1000		104	66.6	105			

Sample ID: mb-51738	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	1D: 51	738	F	RunNo: 6	8118				
Prep Date: 4/11/2020	Analysis D	ate: 4/	14/2020	S	SeqNo: 2	354670	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.3	66.6	105			

Sample ID: Ics-51738	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch	ID: 51	738	F	RunNo: 6	B118				
Prep Date: 4/11/2020	Analysis D	ate: 4/	14/2020	S	SeqNo: 2	354671	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.8	80	120			
Surr: BFB	1100		1000		106	66.6	105			S

Sample ID: 2004515-009ams	SampT	ype: MS	i	Tes	Code: El	A Method	8015D: Gaso	line Rang	е	
Client ID: S3-3'	Batch	ID: 51	738	F	lunNo: 6	8118				
Prep Date: 4/11/2020	Analysis D	ate: 4/	14/2020	S	eqNo: 2	354674	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.98	0	89.0	69.1	142			
Surr: BFB	1100		999.0		109	66.6	105			S

Sample ID: 2004515-009amsd	SampTy	pe: MS	SD	Tes	tCode: I	EPA Method	8015D: Gaso	line Rang	е	
Client ID: S3-3'	Batch	D: 51	738	R	RunNo:	68118				
Prep Date: 4/11/2020	Analysis Da	te: 4	/14/2020	S	eqNo:	2354675	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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
- PQL Practical Quantitative Limit
- 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 Lim

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Hall Environmental Analysis Laboratory, Inc.

WO#: 2004515

20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: 2004515-009amsd	SampT	ype: MS	D	Tes	Code: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: S3-3'	Batch	ID: 517	738	R	RunNo: 68	8118				
Prep Date: 4/11/2020	Analysis D	ate: 4/	14/2020	S	SeqNo: 2	354675	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.73	0	82.0	69.1	142	9.22	20	
Surr: BFB	1100		989.1		108	66.6	105	0	0	S

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
- PQL Practical Quantitative Limit
- 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 Lim

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Hall Environmental Analysis Laboratory, Inc.

WO#:

2004515 20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID:	mb-51735	
Client ID:	DDC	

SampType: MBLK

TestCode: EPA Method 8021B: Volatiles

Batch ID: 51735 Client ID:

RunNo: 68086

Units: %Rec

Prep Date: 4/11/2020 Analyte

Analysis Date: 4/13/2020

SeqNo: 2353636

%RPD

%RPD

Result PQL 0.99

SPK value SPK Ref Val %REC 99.0

HighLimit LowLimit

RPDLimit Qual

Surr: 4-Bromofluorobenzene

SampType: LCS

TestCode: EPA Method 8021B: Volatiles

80

Sample ID: LCS-51735 Client ID: LCSS

Batch ID: 51735

RunNo: 68086

Prep Date: 4/11/2020 Analysis Date: 4/13/2020

SeqNo: 2353637

Units: %Rec

Analyte

1.0

0.98

Result

2.8

0.99

0.88

0.90

0.93

1.000

1.000

Qual

Result POL

SPK value SPK Ref Val %REC LowLimit

HighLimit 120 **RPDLimit**

Surr: 4-Bromofluorobenzene

Sample ID: mb-51738

SampType: MBLK

RunNo: 68086

TestCode: EPA Method 8021B: Volatiles

Client ID: PBS

Prep Date: 4/11/2020

Batch ID: 51738 Analysis Date: 4/13/2020

SeqNo: 2353660

100

Units: mg/Kg

Analyte Benzene

POI Result 0.025 ND

SPK value SPK Ref Val

3.000

1.000

0.9833

0.9833

0.9833

%REC LowLimit

HighLimit

%RPD **RPDLimit** Qual

0.050 Toluene ND 0.050 ND Ethylbenzene ND 0.10 Xylenes, Total

Surr: 4-Bromofluorobenzene

1.000

TestCode: EPA Method 8021B: Volatiles

120

Sample ID: LCS-51738 LCSS Client ID:

SampType: LCS Batch ID: 51738

RunNo: 68086

98.3

80

120

Prep Date: 4/11/2020 Analyte

Analysis Date: 4/13/2020 SPK value SPK Ref Val

PQL

0.10

SeqNo: 2353661

%REC

Units: mg/Kg

%RPD **RPDLimit** Qual HighLimit

Benzene Toluene Ethylbenzene Xylenes, Total

Surr: 4-Bromofluorobenzene

1.000 0.89 0.025 1.000 0.91 0.050 1.000 0.94 0.050

0 89.0 0 91.4 0 94.3

80 120 120 80 0 94.0 80 120 120 80

LowLimit

80

Sample ID: 2004515-008ams Client ID: \$3-2'

SampType: MS

TestCode: EPA Method 8021B: Volatiles RunNo: 68086

Analyte

Prep Date: 4/11/2020

Batch ID: 51738 Analysis Date: 4/13/2020

21.6

78.5

75.7

74.3

Units: mg/Kg

180

119

123

126

Qual

Benzene Toluene

Methyl tert-butyl ether (MTBE)

SPK value SPK Ref Val POL Result 0.098 0.9833 0.97

0.025

0.049

0.049

%REC

99.1

89.4

90.2

94.2

SeqNo: 2353663 LowLimit

HighLimit

%RPD **RPDLimit**

Ethylbenzene

Qualifiers:

Value exceeds Maximum Contaminant Level

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND Practical Quanitative Limit POL

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range Analyte detected below quantitation limits

Sample pH Not In Range RL

0

0

0

0.01325

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Hall Environmental Analysis Laboratory, Inc.

WO#:

2004515

20-Apr-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: 2004515-008ams

SampType: MS

PQL

0.098

TestCode: EPA Method 8021B: Volatiles

LowLimit

80

Client ID: S3-2'

Batch ID: 51738

RunNo: 68086

Units: mg/Kg

120

%RPD

Prep Date: 4/11/2020 Analyte

Analysis Date: 4/13/2020 Result

2.8

0.98

2.950

0.9833

SegNo: 2353663

93.4

99.6

HighLimit

RPDLimit Qual

0

Qual

Xylenes, Total Surr: 4-Bromofluorobenzene

SampType: MSD

TestCode: EPA Method 8021B: Volatiles

Sample ID: 2004515-008amsd S3-2'

Batch ID: 51738

RunNo: 68086

Client ID:

Prep Date: 4/11/2020

Analysis Date: 4/13/2020

SeqNo: 2353664

Units: mg/Kg

SPK value SPK Ref Val %REC

0.01909

%RPD %REC LowLimit HighLimit **RPDLimit** SPK value SPK Ref Val PQL Analyte 2.15 20 0.025 0.9911 90.6 78.5 119 0.90 Benzene 91.9 75.7 123 2.62 20 0.050 0.9911 0.01325 0.92 Toluene 74.3 126 2.03 20 0.050 95.4 0.9911 0 Ethylbenzene 0.95 20 130 2.56 2.8 0.099 2.973 0.01909 95.1 72.9 Xylenes, Total 120 0.9911 99.4 0.98 Surr: 4-Bromofluorobenzene

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Page 30 of 30



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	SMA-CARLSBAD	Work Order Number	2004	4515		RcptNo	p: 1
Received By:	Isaiah Ortiz	4/10/2020 B:25:00 AM			エ、C	4	
Completed By:	Desiree Dominguez	4/10/2020 9:45:10 AM			100		
Reviewed By:	LB.	4/10/20					
Chain of Cus	stody						
	ustody sufficiently complete?		Yes	v	No 🗌	Not Present	
2. How was the	sample delivered?		Cou	rier			
t a se to							
Log In 3 Was an atten	npt made to cool the samples	2	Yes	~	No 🗆	NA 🗆	
or read an accom	inprimade to coor the dampies		103				
4. Were all sam	ples received at a temperature	e of >0° C to 6.0°C	Yes	V	No 🗌	NA 🗆	
5. Sample(s) in	proper container(s)?		Yes	V	No 🗔		
6. Sufficient sam	nple volume for indicated test((s)?	Yes	~	No 🗌		
	(except VOA and ONG) prope		Yes	-	No 🗌		
	ative added to bottles?		Yes		No 🗸	NA 🗆	
9. Received at le	east 1 vial with headspace <1.	4" for AQ VOA?	Yes		No 🗌	NA 🗸	
10. Were any sar	mple containers received brok	en?	Yes		No 🗸	# of preserved	
11.5					No. 🗆	bottles checked	
	ork match bottle labels? ancies on chain of custody)		Yes	V	No 🗆	for pH: (<2.0	or >12 unless noted)
	correctly identified on Chain of	f Custody?	Yes	v	No 🗌	Adjusted?	
	it analyses were requested?		Yes	v	No 🗆		
	ing times able to be met?		Yes	v	No 🗌	Checked by:	JR 4/10/20
(If no, notify c	sustomer for authorization.)						
Special Hand	ling (if applicable)						
15. Was client no	otified of all discrepancies with	this order?	Yes		No 🗌	NA 🗸	
Person	Notified:	Date:					
By Wh	om:	Via: [eM	ail	Phone Fax	In Person	
Regard	ling:						
Client I	nstructions:						
16. Additional re	emarks:						
17. Cooler Info Cooler No		Seal Intact Seal No S	Seal D	ate	Signed By		
1		ot Present			5.g00 bj		

Page 1 of 1

ਹ	nain-	of-Cu	Chain-of-Custody Record	Turn-Around	Turn-Around Time: $5~dlpha y$	A.			A	=	Z	ĪR	NO	HALL ENVIRONMENTAL	
Client:	SMA	7		☑ Standard	□ Rush			Г	Z	A	SIS	3	BOR	ANALYSIS LABORATORY	
				Project Name:	·oi				W	www.hallenvironmental.com	Inviron	nenta	L.com		
Mailing Address:	ddress			Ford S	tate #	# 00 f	49	01 Hav	vkins N	IE - A	Ibuqu	erque,	4901 Hawkins NE - Albuquerque, NM 87109	6	
				Project #:			Ĭ	Tel. 505	505-345-3975	375	Fax	505-3	505-345-4107		
Phone #:										Ana	Analysis Request	Requ	est		1
email or Fax#:	Fax#:			Project Manager:	ager:					08	400		(tue		
QA/QC Package: Standard	ackage: ard		☐ Level 4 (Full Validation)	Ashlew	V Moxwel	llac	S08) s's	bcB,a	SWIS0	, PO₄, S	140 11		əsdA\tn		
Accreditation:	ation:	□ Az Coi	☐ Az Compliance	Sampler:	_					Oi	701		əsə		
□ NELAC	O	□ Other		On Ice:	S Yes	ON □				_	. 10		14)		
□ EDD (Type)	Type)			# of Coolers:	1000				_	_) NO ²		шл		
				Cooler Temp(including CF):	(including CF): 4,7	40,1 Kelux (°C)				_			olilo		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.		q 1808	N) BO3	ARORA PL E	85e0 (/	8) 0728	O lstoT		
9		-1.5%	51-3,	704	Cool	100-	X								
-	11:02		14-15			200-									
_	80:11		19-15			200 -									
	01-11		111-15			h00 -									
	11:52		52-21			- 005									
	11.56		14-RS			100 -									
	12:00		52-51			F 000 -									
	12:13		53-21			-008									
	61:71		53-31			- 004									
	12:20		14-25			-010									
-	10:38		55-21			110-									\Box
7	54:01	7	55-31	7	7	710-	7								
Date: T	Time:	Relinquished by	, id ba	Received by:	Via:	Date Time	Remarks: Judad	S:							
2	Time:	Relinquished by:	ed by:	Received by	Via:	Date Time									
0/0/2	000	A		1-0	Con in	4/10/10 0828	ı								
3	necessary	samples sub	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.	ocontracted to other	accredited laboratori	es. This serves as notice of thi	possibility.	Any sub-	contracte	data wi	be clear	ly notate	d on the analy	tical report.	

4

Chair	-ot-C	Chain-of-Custody Record	I urn-Around	Time: 5 day	JE.	ō		I		Z		202	M	HALL ENVIRONMENTAL	
Client: SMA	14		Z Standard	□ Rush				4	¥	YS	S	AB	ORA	ANALYSIS LABORATORY	7
			Project Name:	ä			*	>	ww.ha	lenviro	nmen	www.hallenvironmental.com	_		ii N
Mailing Address:	i.i.		Ford	State	# 001		4901	4901 Hawkins NE -	NE	Albu	nerqu	e, NM	Albuquerque, NM 87109		
			Project #:				Tel. 5	505-345-3975	-3975	Fax	× 505	505-345-4107	107		
Phone #:									1	Analysis Request	s Rec	lnest			
email or Fax#:			Project Manager:	ger:			(0)			[†] O [‡]		(ţu			
QA/QC Package:	***								SIVIS	S '*O		əsq∀ı			
☑ Standard		□ Level 4 (Full Validation)	Alshley	NICHXWDI	ell				20/	d '2		дue			
Accreditation:	□ Az Cc	☐ Az Compliance	Sampler:	8				(r.4	79.	ON	(1				
□ NELAC	□ Other		On Ice:	Sa Yes	oN a			709		١٤,	AO				
□ EDD (Type)			# of Coolers:	4.3-401/	20 70			ро							
			Cooler Temp(including CF).	(including CF):	(o.)			Neth	150.000						
Date Time	Matrix	Sample Name	Container Type and #	Preservative Type	ACCUSIS	X3T8)8:H9T 9 1808	EDB (v	PAHs I	CDE,) 0328 3) 0728	Total C			
97		14-55	462	Cool	-013		~								
	-	1-08			h)0-		~								
54:21		56-21			> 015	<i>/</i>	_								
12:53		14-95			-016		~								
12.30		57-11			-017		×								
12:30		57-21			910-		~								
12:35		14-72			-019		\times								
1.23		SWI			020 -	×	~			\times					
1:37		5W2			120-	×	~			\times					
1:31		SW3			720 -	×	~			×					
130	H	5W.T	4	-	-023	×	X			×	\perp				
	odei collecti	od hu	Poroivod hw	Via	Date Time	Domorke:	<u>ا</u> خ		4		\dashv				
(9/4) 1262		Mind Bones	N	i	o	r r	Judal -	,							
_	Relinquished by:	hed by:	Received by:	Via:	F										
7920 40	10		1	1	20020	_									



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

March 10, 2020

Ashley Maxwell Souder, Miller & Associates 201 S Halagueno Carlsbad, NM 88221 TEL: (575) 689-8801

FAX

RE: Ford State 001

OrderNo.: 2002D03

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/29/2020 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 2002D03

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2002D03-001

Client Sample ID: Comp (1)-1'

Collection Date: 2/28/2020 3:40:00 PM

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	CAS
Chloride	74	60		mg/Kg	20	3/4/2020 10:54:39 PM	50887
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst:	BRM
Diesel Range Organics (DRO)	2300	190		mg/Kg	20	3/9/2020 12:07:42 PM	50842
Motor Oil Range Organics (MRO)	2400	970		mg/Kg	20	3/9/2020 12:07:42 PM	50842
Surr: DNOP	0	55.1-146	S	%Rec	20	3/9/2020 12:07:42 PM	50842
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	69	23	D	mg/Kg	5	3/6/2020 12:07:54 PM	50833
Surr: BFB	170	66.6-105	SD	%Rec	5	3/6/2020 12:07:54 PM	50833
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.12	D	mg/Kg	5	3/6/2020 12:07:54 PM	50833
Toluene	ND	0.23	D	mg/Kg	5	3/6/2020 12:07:54 PM	50833
Ethylbenzene	ND	0.23	D	mg/Kg	5	3/6/2020 12:07:54 PM	50833
Xylenes, Total	0.59	0.46	D	mg/Kg	5	3/6/2020 12:07:54 PM	50833
Surr: 4-Bromofluorobenzene	94.4	80-120	D	%Rec	5	3/6/2020 12:07:54 PM	50833

Matrix: SOIL

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

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
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 10

Lab Order 2002D03

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2002D03-002

Client Sample ID: Comp (2)-1'

Collection Date: 2/28/2020 3:50:00 PM

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	CAS
Chloride	78	60		mg/Kg	20	3/4/2020 11:07:00 PM	50887
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	BRM
Diesel Range Organics (DRO)	60	9.7		mg/Kg	1	3/9/2020 12:47:20 PM	50842
Motor Oil Range Organics (MRO)	110	49		mg/Kg	1	3/9/2020 12:47:20 PM	50842
Surr: DNOP	89.4	55.1-146		%Rec	1	3/9/2020 12:47:20 PM	50842
EPA METHOD 8015D: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/6/2020 12:31:33 PM	50833
Surr: BFB	83.5	66.6-105		%Rec	1	3/6/2020 12:31:33 PM	50833
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	ND	0.023		mg/Kg	1	3/6/2020 12:31:33 PM	50833
Toluene	ND	0.046		mg/Kg	1	3/6/2020 12:31:33 PM	50833
Ethylbenzene	ND	0.046		mg/Kg	1	3/6/2020 12:31:33 PM	50833
Xylenes, Total	ND	0.093		mg/Kg	1	3/6/2020 12:31:33 PM	50833
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	3/6/2020 12:31:33 PM	50833

Matrix: SOIL

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
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
 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 Limit

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Analytical Report
Lab Order 2002D03

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID:

2002D03-003

03 Matrix: SOIL

Client Sample ID: S2-1'

Collection Date: 2/28/2020 1:35:00 PM

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	CAS
Chloride	130	60		mg/Kg	20	3/4/2020 11:19:21 PM	50887
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst:	BRM
Diesel Range Organics (DRO)	3000	200		mg/Kg	20	3/9/2020 1:09:23 PM	50842
Motor Oil Range Organics (MRO)	3200	980		mg/Kg	20	3/9/2020 1:09:23 PM	50842
Surr: DNOP	0	55.1-146	S	%Rec	20	3/9/2020 1:09:23 PM	50842
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	ND	24	D	mg/Kg	5	3/6/2020 12:55:10 PM	50833
Surr: BFB	110	66.6-105	SD	%Rec	5	3/6/2020 12:55:10 PM	50833
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.12	D	mg/Kg	5	3/6/2020 12:55:10 PM	50833
Toluene	ND	0.24	D	mg/Kg	5	3/6/2020 12:55:10 PM	50833
Ethylbenzene	ND	0.24	D	mg/Kg	5	3/6/2020 12:55:10 PM	50833
Xylenes, Total	ND	0.48	D	mg/Kg	5	3/6/2020 12:55:10 PM	50833
Surr: 4-Bromofluorobenzene	86.5	80-120	D	%Rec	5	3/6/2020 12:55:10 PM	50833

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order 2002D03

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S4-1'

 Project:
 Ford State 001
 Collection Date: 2/28/2020 1:40:00 PM

 Lab ID:
 2002D03-004
 Matrix: SOIL
 Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	CAS
Chloride	ND	60	mg/Kg	20	3/4/2020 11:31:43 PM	50887
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	3/4/2020 9:27:35 PM	50842
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/4/2020 9:27:35 PM	50842
Surr: DNOP	87.9	55.1-146	%Rec	1	3/4/2020 9:27:35 PM	50842
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	3/6/2020 1:18:43 PM	50833
Surr: BFB	80.9	66.6-105	%Rec	1	3/6/2020 1:18:43 PM	50833
EPA METHOD 8021B: VOLATILES					Analyst:	RAA
Benzene	ND	0.023	mg/Kg	1	3/6/2020 1:18:43 PM	50833
Toluene	ND	0.046	mg/Kg	1	3/6/2020 1:18:43 PM	50833
Ethylbenzene	ND	0.046	mg/Kg	1	3/6/2020 1:18:43 PM	50833
Xylenes, Total	ND	0.092	mg/Kg	1	3/6/2020 1:18:43 PM	50833
Surr: 4-Bromofluorobenzene	90.2	80-120	%Rec	1	3/6/2020 1:18:43 PM	50833

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Lab Order 2002D03

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: S5-1

 Project:
 Ford State 001
 Collection Date: 2/28/2020 2:00:00 PM

 Lab ID:
 2002D03-005
 Matrix: SOIL
 Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	CAS
Chloride	200	59		mg/Kg	20	3/4/2020 11:44:04 PM	50887
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst:	BRM
Diesel Range Organics (DRO)	69	9.8		mg/Kg	1	3/9/2020 1:53:39 PM	50842
Motor Oil Range Organics (MRO)	200	49		mg/Kg	1	3/9/2020 1:53:39 PM	50842
Surr: DNOP	89.0	55.1-146		%Rec	1	3/9/2020 1:53:39 PM	50842
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	ND	24	D	mg/Kg	5	3/6/2020 1:42:05 PM	50833
Surr: BFB	78.3	66.6-105	D	%Rec	5	3/6/2020 1:42:05 PM	50833
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.12	D	mg/Kg	5	3/6/2020 1:42:05 PM	50833
Toluene	ND	0.24	D	mg/Kg	5	3/6/2020 1:42:05 PM	50833
Ethylbenzene	ND	0.24	D	mg/Kg	5	3/6/2020 1:42:05 PM	50833
Xylenes, Total	ND	0.48	D	mg/Kg	5	3/6/2020 1:42:05 PM	50833
Surr: 4-Bromofluorobenzene	87.1	80-120	D	%Rec	5	3/6/2020 1:42:05 PM	50833

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

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

PQL Practical Quanitative Limit

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 Limit

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Lab Order 2002D03

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State 001

Lab ID: 2002D03-006

Client Sample ID: S8-1'

Collection Date: 2/28/2020 2:38:00 PM

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	CAS
Chloride	140	60		mg/Kg	20	3/4/2020 11:56:26 PM	50887
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/4/2020 9:45:46 PM	50842
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 9:45:46 PM	50842
Surr: DNOP	99.3	55.1-146		%Rec	1	3/4/2020 9:45:46 PM	50842
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/6/2020 2:05:27 PM	50833
Surr: BFB	80.1	66.6-105		%Rec	1	3/6/2020 2:05:27 PM	50833
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.024		mg/Kg	1	3/6/2020 2:05:27 PM	50833
Toluene	ND	0.048		mg/Kg	1	3/6/2020 2:05:27 PM	50833
Ethylbenzene	ND	0.048		mg/Kg	1	3/6/2020 2:05:27 PM	50833
Xylenes, Total	ND	0.096		mg/Kg	1	3/6/2020 2:05:27 PM	50833
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	3/6/2020 2:05:27 PM	50833

Matrix: SOIL

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

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
- PQL Practical Quantitative Limit
- 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 Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: 2002D03

10-Mar-20

Client:

Souder, Miller & Associates

Result

ND

Project:

Ford State 001

Sample ID: MB-50887

SampType: mblk

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 50887

RunNo: 67015

Units: mg/Kg

Analyte

Prep Date: 3/4/2020

Analysis Date: 3/4/2020

PQL

1.5

SeqNo: 2307606 SPK value SPK Ref Val %REC LowLimit

HighLimit

RPDLimit %RPD

Qual

Chloride

Sample ID: LCS-50887

SampType: Ics

RunNo: 67015

Client ID: LCSS

Batch ID: 50887

SeqNo: 2307607

Analyte

Prep Date: 3/4/2020

Analysis Date: 3/4/2020

SPK value SPK Ref Val %REC LowLimit

Units: mg/Kg HighLimit

%RPD **RPDLimit** Qual

Result

15.00

91.1

Chloride

PQL 1.5

14

0

Qualifiers:

Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND PQL Practical Quantitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

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Hall Environmental Analysis Laboratory, Inc.

WO#: **2002D03** *10-Mar-20*

Client: Souder, Miller & Associates

Project: Ford State 001

Sample ID: LCS-50842	SampT	ype: LC	S	Test	tCode: EF	PA Method	8015M/D: Die	esel Range	Organics					
Client ID: LCSS	Batch	ID: 508	342	R	RunNo: 6	7011								
Prep Date: 3/3/2020	Analysis D	ate: 3/4	4/2020	S	SeqNo: 2	306911	Units: mg/K	(g						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Diesel Range Organics (DRO)	42	10	50.00	0	84.8	70	130							
Surr: DNOP	4.6		5.000		92.2	55.1	146							

Sample ID: MB-50842	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	n ID: 50	842	F	RunNo: 6	7011				
Prep Date: 3/3/2020	Analysis D	Date: 3/	4/2020	5	SeqNo: 2	306913	Units: mg/K	g		
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	11		10.00		105	55.1	146			

Sample ID: LCS-50931	SampType	: LCS	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID	50931	F	RunNo: 67	7107				
Prep Date: 3/6/2020	Analysis Date	3/9/2020	8	SeqNo: 23	312091	Units: %Red	3		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3	5.000		85.8	55.1	146			

Sample ID: MB-50931	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 50	931	F	RunNo: 6	7107				
Prep Date: 3/6/2020	Analysis D	ate: 3/	9/2020	S	SeqNo: 2	312093	Units: %Red	С		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		91.5	55.1	146			

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
- PQL Practical Quantitative Limit
- 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 Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: 2002D03

10-Mar-20

Client:

Souder, Miller & Associates

Project:

Prep Date:

Ford State 001

Sample ID: mb-50833 Client ID: PBS

SampType: MBLK Batch ID: 50833

Analysis Date: 3/6/2020

PQL

5.0

TestCode: EPA Method 8015D: Gasoline Range

RunNo: 67050

SPK value SPK Ref Val %REC LowLimit

0

SeqNo: 2307829

Units: mg/Kg

%RPD

RPDLimit Qual

Analyte Gasoline Range Organics (GRO) Surr: BFB

ND 840

Result

1000

83.5

66.6 TestCode: EPA Method 8015D: Gasoline Range

105

HighLimit

Sample ID: Ics-50833

LCSS

SampType: LCS Batch ID: 50833

RunNo: 67050

%REC

Prep Date: 3/3/2020

Analysis Date: 3/6/2020

SeqNo: 2307830

LowLimit

80

66.6

Units: mg/Kg %RPD **RPDLimit** Qual HighLimit

Analyte Gasoline Range Organics (GRO) Surr: BFB

Client ID:

SPK value SPK Ref Val PQL 25.00 21 880 1000

82.2 87.8

120 105

Qualifiers:

Value exceeds Maximum Contaminant Level

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit Practical Quanitative Limit PQL

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: 2002D03

10-Mar-20

Client:

Souder, Miller & Associates

Project:

Ford State 001

Sample ID: mb-50833	SampT	уре: МЕ	BLK	Tes	Code: EF	A Method	8021B: Volat	iles				
Client ID: PBS	Batcl	Batch ID: 50833 RunNo: 67050				7050						
Prep Date: 3/3/2020	Analysis D	Date: 3/	6/2020	8	SeqNo: 23	307876	Units: mg/K	g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	0.025										
Toluene	ND	0.050										
Ethylbenzene	ND	0.050										
Xylenes, Total	ND	0.10										
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	80	120					
Sample ID: LCS-50833	Samp	SampType: LCS TestCode: EPA Method 8021B: Volatiles										

Sample ID: LCS-50833	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles			
Client ID: LCSS	Batch	n ID: 50	833	F	RunNo: 6	7050					
Prep Date: 3/3/2020	Analysis D	ate: 3/	6/2020	. 5	SeqNo: 2	307877	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.97	0.025	1.000	0	97.3	80	120				
Toluene	1.0	0.050	1.000	0	100	80	120				
Ethylbenzene	1.0	0.050	1.000	0	102	80	120				
Xylenes, Total	3.1	0.10	3.000	0	102	80	120				
Surr: 4-Bromofluorobenzene	0.96		1.000		95.7	80	120				

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- 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 Limit

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

Sample Log-In Check List

LABORATORY	Website: www	.hallenvironmenta	l.com		
Client Name: SMA-CARLSBAD	Work Order Numb	per: 2002D03		RcptNo:	1
Received By: Erin Melendrez Completed By: Erin Melendrez	2/29/2020 8:00:00 / 2/29/2020 11:29:12	**************************************	W MA	7	
Reviewed By: ENH	3/2/20				
Chain of Custody					
1. Is Chain of Custody sufficiently complet	e?	Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
Log In		_			
Was an attempt made to cool the samp	les?	Yes 🗹	No 🗆	NA 🗌	
4. Were all samples received at a tempera	ture of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated to	est(s)?	Yes 🗸	No 🗆		
7. Are samples (except VOA and ONG) pro	operly preserved?	Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. Received at least 1 vial with headspace	<1/4" for AQ VOA?	Yes 🗌	No 🗆	NA 🗸	
10. Were any sample containers received b	roken?	Yes	No 🗹	# of preserved	
11. Does paperwork match bottle labels?		Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custody	The second control of			Adjusted?	42 unless noted)
12. Are matrices correctly identified on Chai		Yes 🗹	No □	,	
13, Is it clear what analyses were requested	17	Yes 🗹	No 🗆	Checked by: D	AD 3/2/20
14. Were all holding times able to be met? (If no, notify customer for authorization.)	(Yes 🗹	NO L		113 312/20
Special Handling (if applicable)					
15. Was client notified of all discrepancies	with this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	_ eMail _	Phone Fax	☐ In Person	
Regarding: Client Instructions:	The state of the s				
16. Additional remarks:		AND THE PARTY OF T			
17. Cooler Information					
Cooler No Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By	T CONTROL OF THE CONT	
1 3.8 Good					
2 1.4 Good	1				

Page 1 of 1

4=	me	HALL ENVIRONMENTAL
SMH - Carlsbad	✓ Standard □ Kush	ANALYSIS LABORATORY
	Project Name:	www.hallenvironmental.com
Mailing Address: 201 S. Halagyeno St.	Food State #001	4901 Hawkins NE - Albuquerque, NM 87109
Carlsburk NIM BAZZO	Project #:	Tel. 505-345-3975 Fax 505-345-4107
Phone #:		Analysis Request
email or Fax#: ashley maxive! @ sadermiller. Project Manager:	Project Manager:	†OS
QA/QC Package:		MS WS S,8's
/ Standard □ Level 4 (Full Validation)	Ashley Maxwell) os
:UC	181	TME(80827)
□ NELAC □ Other	On Ice: W. Kes.	(O) (S) (S) (S) (S)
□ EDD (Type)	#of Coolers: 2	cid ood 31(G NC //
	Cooler Temponauding cn. (4, 1-0,3(P)=3.8 (°C).)15[(Methory 8 8 M 8 M 8 M 8 M 8 M
	Container Preservative HEAL No.	91 P8 (N) 89 P8 (N) 89 P8 P9
Date Time Matrix Sample Name	4 Type 2002D	17P 808 Aq 10D RC 10D 828
1 - (1) COMD 1:05 OH 2 OH 24	(0)	×
3.50		
52-	-003	
	hW-	
	<u> </u>	
7:38 1 58-1	9W-	->->
Date: Time: Relinquished by: 7	Received by Wila Tell Mater Time	Remarks:
(Relinquisher by	Received by: Via: Courter Date Time 0800	
If necessary, samples submitted to Hall Environmental may be su	ubcontracted to other accredited laboratories. This serves as notice of thi	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.



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

June 23, 2020

Ashley Maxwell Souder, Miller & Associates 201 S Halagueno Carlsbad, NM 88221

TEL: (575) 689-8801 FAX: (505) 327-1496

RE: Ford State #1 OrderNo.: 2006854

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/17/2020 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 #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

anded

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 2006854

Date Reported: 6/23/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Project: Ford State #1

Lab ID: 2006854-001

Client Sample ID: S5-5'

Collection Date: 6/15/2020 10:30:00 AM

Received Date: 6/17/2020 9:10:00 AM

Analyses	Result	RL	Qual Uni	ts D	F D	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	CAS
Chloride	ND	60	mg/	Kg 2	0 6	6/21/2020 11:52:40 PM	53209
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.1	mg/	Kg 1	(6/19/2020 10:21:15 PM	53169
Motor Oil Range Organics (MRO)	ND	46	mg/	Kg 1	(6/19/2020 10:21:15 PM	53169
Surr: DNOP	90.0	55.1-146	%R	ec 1	(6/19/2020 10:21:15 PM	53169
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/	Kg 1	(6/20/2020 1:33:50 AM	53137
Surr: BFB	81.0	66.6-105	%R	ec 1		6/20/2020 1:33:50 AM	53137
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.024	mg/	Kg 1	(6/20/2020 1:33:50 AM	53137
Toluene	ND	0.048	mg/	Kg 1	(6/20/2020 1:33:50 AM	53137
Ethylbenzene	ND	0.048	mg/	Kg 1	(6/20/2020 1:33:50 AM	53137
Xylenes, Total	ND	0.097	mg/	Kg 1	(6/20/2020 1:33:50 AM	53137
Surr: 4-Bromofluorobenzene	105	80-120	%R	ec 1	(6/20/2020 1:33:50 AM	53137

Matrix: SOIL

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

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 1 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006854 23-Jun-20

Client:

Souder, Miller & Associates

Project:

Ford State #1

Sample ID: MB-53209

SampType: mblk

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Prep Date:

6/21/2020

Batch ID: 53209 Analysis Date: 6/21/2020 RunNo: 69792

SeqNo: 2423510

Units: mg/Kg

Qual

Analyte Chloride

SPK value SPK Ref Val %REC LowLimit 1.5

HighLimit

%RPD **RPDLimit**

ND

Sample ID: LCS-53209

SampType: Ics

TestCode: EPA Method 300.0: Anions RunNo: 69792

Client ID: LCSS

Prep Date: 6/21/2020

Batch ID: 53209

PQL

SeqNo: 2423511

Units: mg/Kg

Analyte

Analysis Date: 6/21/2020

SPK value SPK Ref Val %REC LowLimit

0

HighLimit

RPDLimit %RPD

Qual

Chloride

Result 14

15.00

94.3

1.5

Qualifiers:

H

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND POL Practical Quantitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

Page 2 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: 2006854 23-Jun-20

Client:

Souder, Miller & Associates

Project:

Ford State #1

Sample ID: LCS-53169		ype: LC					8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	1D: 53	169		RunNo: 6					
Prep Date: 6/19/2020	Analysis D	ate: 6/	19/2020	5	SeqNo: 2	421977	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	4.4		5.000		88.0	55.1	146			
Sample ID: MB-53169	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	

Sample ID. IND-33103	our.p.	Jpo. III						•		
Client ID: PBS	Batch	ID: 53	169	F	RunNo: 6	9757				
Prep Date: 6/19/2020	Analysis D	ate: 6/	19/2020	S	SeqNo: 2	421979	Units: mg/K	g		
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	9.6		10.00		95.6	55.1	146			

Sample ID: LCS-53187	SampTyp	e: LCS	Tes	tCode: ER	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch II	D: 53187	R	RunNo: 69	9768				
Prep Date: 6/19/2020	Analysis Date	e: 6/20/2020	S	SeqNo: 2	422440	Units: %Red			
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.5	5.000		131	55.1	146			

Sample ID: MB-53187	SampType	e: MBLK	Test	Code: E	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID	53187	R	unNo: 6	9768				
Prep Date: 6/19/2020	Analysis Date	6/20/2020	S	eqNo: 2	422443	Units: %Rec	:		
Analyte	Result F	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12	10.00		115	55.1	146			

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 3 of 5

Hall Environmental Analysis Laboratory, Inc.

910

WO#: 200

2006854 23-Jun-20

Client:

Souder, Miller & Associates

Project:

Surr: BFB

Ford State #1

Sample ID: Ics-53137	Sampl	ype: LC	s	Tes	Code: E	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batc	n ID: 53	137	F	tunNo: 6	9769				
Prep Date: 6/17/2020	Analysis E	Date: 6/	19/2020	S	eqNo: 2	422183	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	80	120			

1000

Sample ID: mb-53137	Samp	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batc	n ID: 53	137	F	RunNo: 6	9769				
Prep Date: 6/17/2020	Analysis D	Date: 6/	19/2020	S	SeqNo: 2	422184	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	830		1000		83.2	66.6	105			

90.9

66.6

105

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
- PQL Practical Quantitative Limit
- 8 % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- F. Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#:

2006854

23-Jun-20

Client:

Souder, Miller & Associates

Project:

Ford State #1

Sample ID: LCS-53137	SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batcl	n ID: 53	137	F	RunNo: 6	9769				
Prep Date: 6/17/2020	Analysis D	ate: 6/	19/2020	8	SeqNo: 2	422214	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.6	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.8	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: mb-53137	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	n ID: 53	137	F	RunNo: 6	9769				
Prep Date: 6/17/2020	Analysis D	Date: 6/	19/2020	5	SeqNo: 2	422215	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

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
- PQL Practical Quanitative Limit
- 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 Limit

Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Sample Log-In Check List Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Client N	ame:	Souder, Mille Associates	er &	Work	Order Number	r: 20068	354			RcptNo:	1
Received	d By:	Emily Moch	10	6/17/202	0 9:10:00 AM	1					
Complete	ed By:	Juan Rojas		6/17/202	0 9:58:23 AM	1		Hans	8		
Reviewe	d By:	Em 6	117/20								
Chain o	of Cust	tody									
1. Is Cha	ain of Cu	stody comple	te?			Yes	~	No		Not Present	
2. How v	was the s	sample delive	red?			Couri	er				
Log In											
		pt made to co	ol the samples	?		Yes	✓	No [NA 🗌	
4. Were	all samp	les received a	at a temperatur	e of >0°C to	6.0°C	Yes	✓	No [NA 🗆	
5. Samp	le(s) in p	roper contain	er(s)?			Yes	✓	No [
6. Suffici	ent sam	ple volume for	r indicated test	(s)?		Yes	V	No 🗆			
7. Are sa	imples (e	except VOA a	nd ONG) prope	erly preserve	d?	Yes	V	No [
8. Was p	reservat	ive added to b	oottles?			Yes		No 🔽	1	NA 🗌	
9. Receiv	ved at lea	ast 1 vial with	headspace <1	/4" for AQ V	DA?	Yes		No [NA 🗸	70
10. Were	any sam	ple container	s received brok	ten?		Yes		No 5	1	# of preserved	1/12/20
The second second second second		rk match bottl ncies on chai				Yes	~	No [bottles checked for pH:	>12 unless noted)
			fied on Chain o	f Custody?		Yes	~	No [Adjusted?	
		analyses wer				Yes	~	No [
14. Were	all holdin	ng times able	to be met?			Yes	~	No [Checked by:	
(If no,	notify cu	istomer for au	thorization.)								
Special	Handli	ing (if appl	icable)								
15. Was	client no	tified of all dis	crepancies with	n this order?		Yes		No		NA 🗹	
	Person	Notified:			Date			-	-		
	By Who	m: [Via:	еМа	il 🗌	Phone E	Fax	In Person	
	Regardi	ng:									
	Client In	structions:									
16. Addit	tional rer	marks:									
17. Cool	ler Infor	mation									
	ooler No	Temp ℃		Seal Intact	Seal No	Seal Da	ite	Signed By	y		
1		3.4	Good								

Matrix Sample Name Type and # Type Soil SS - S I - 4e2 Cool Received by: Via:
Date: Time: Relinquished by: Received by: Via: Date Time



BG: Background sample

Table 3: Sample Results

Judah Oil Ford State #2

		Danth of Cample	Artion	Metho	Method 8021B		Method 8015	1 8015D		300.0
Sample ID	Sample ID Sample Date	(feet bgs)	Taken	втех	Benzene	GRO	DRO	MRO	Total TPH	우
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMO	OCD Reclamati	NMOCD Reclamation Requirement (0-4 ft)	4 ft)	50	10	1	-	-	100	600
	NMOCD Clos	NMOCD Closure Criteria (>4 ft)		50	10					
		2'		<0.300	<0.050	<10.0	28.1	<10.0	28.1	592
		ω		<0.300	<0.050	<10.0	12.9	<10.0	12.9	912
2		4'			3	,				1,090
SI	1/15/2020	6			į	ï		1	ī	2,130
		ωį		810	1	·	E	¢		3,640
		10'			×			,		2,320
	1/15/2020	2'		<0.300	<0.050	19.9	301	47.1	368	1,330
	0202/CT/T	3'		<0.300	<0.050	10.6	178	24.6	213.2	1,330
	00000	4'		,	1	<4.9	<9.1	<45	<59	1,360
S2	4/8/2020	2		or:	1	<4.9	<10	<50	<64.9	ı
		6'		1	į	3	1			1,360
	1/15/2020	ωį		E E	ī			37		1,200
		10'		,			-	•	r	1,310
		2'		<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	3,160
		ıΩ		<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1,970
3	1/15/2020	4'			ī	*	1	7	1	2,320
22	1/15/2020	6'		110	1	•77	т.		ı	864
		8		1	3		,		Т	960
		10'		E	ŧ					624
SW1		Surface		<0.224	<0.025	<5.0	<9.3	<47	<61.3	200
SW2	10/2020	Surface		<0.224	<0.025	<5.0	<10	<50	<65	<60
SW3	4/8/2020	Surface		<0.224	<0.025	<5.0	<9.6	<48	<62.6	<60
SW4		Surface		<0.224	<0.025	<5.0	<8.9	<44	<57.9	390
BG1	5/6/2020	4'				-		-		1940

High CI levels justified by background sample.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 9198

CONDITIONS

Operator:	OGRID:
JUDAH OIL LLC	245872
PO Box 568	Action Number:
Artesia, NM 88211	9198
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	File was uploaded with the name "Ford St 1 closure". NMOCD did not review this report as a closure report but has been reviewed as a remediation plan. Closure has not been approved for this incident number.	2/28/2023
bhall	Base and side wall samples must be representative of no more than 200 square feet.	2/28/2023
bhall	Confirmation samples must be analyzed for all constituents in Table I.	2/28/2023
bhall	Based on the data included on Table 3, a liner may not be necessary as contamination appears to meet the closure criteria of Table I for soils below 4 feet where groundwater is greater than 100 feet below ground surface.	2/28/2023
bhall	2RP-634 has been closed. Refer to incident #nKMW1106735785 in all future communication.	2/28/2023
bhall	Submit a complete closure report per 19.15.29.12 NMAC through the OCD Permitting website by 5/28/2023.	2/28/2023