



Souder, Miller & Associates ♦ 201 S. Halagueno St. ♦ Carlsbad, NM 88220
(575) 689-8801

August 21, 2020

#5E29133-BG26

NMOCD District 2
Ms. Victoria Venega
811 S. First St., Artesia, NM 88210

SUBJECT: Remediation Closure Report for the Ragin Cajun 12 Federal 1H (NRM2017055850), Lea County, New Mexico

Dear Ms. Venegas:

On behalf of Devon Energy Production Company, Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report that describes the remediation of a release of liquids related to oil and gas production activities at the Ragin Cajun 12 Federal 1H. The site is in Unit O, Section 12, Township 26S, Range 34E, Lea County, New Mexico, on Federal land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

Table 1: Release Information and Closure Criteria			
Name	Ragin Cajun 12 Federal 1H	Company	Devon Energy Company
API Number	30-025-41188	Location	32.0505981, -103.4205627
Incident Number	NRM2017055850		
Estimated Date of Release	6/2/2020	Date Reported to NMOCD	6/18/2020
Land Owner	Federal	Reported To	NMOCD, BLM, NMSLO
Source of Release	Release was caused by a buried flowline at the wellhead.		
Released Volume	9.72 BBLS	Released Material	Crude Oil
Recovered Volume	8 BBLS	Net Release	1.7 BBLS
NMOCD Closure Criteria	<50 feet to groundwater		
SMA Response Dates	7/1/2020, 7/31/2020, 8/14/2020		

1.0 Background

On June 2, 2018, a release was discovered at the Ragin Cajun 12 Federal 1H site due to a failure in a buried flowline located near the base of the wellhead. Initial response activities were conducted by Devon personnel, which included source elimination and site containment activities, which recovered approximately 8 barrels of crude oil. Figure 1 illustrates the vicinity and site location; Figure 2 illustrates the release location. The C-141 form is included in Appendix A.

2.0 Site Information and Closure Criteria

The Ragin Cajun 12 Federal 1H is located approximately 14 miles from Jal, New Mexico on Federal (BLM) land at an elevation of approximately 3,281 feet above mean sea level (amsl).

Based upon OSE well data (Appendix B), depth to groundwater in the area is estimated to be less than 50 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 8/13/2020). The nearest significant watercourse is an unnamed draw, located approximately 8,123 feet to the south west. 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.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of less than 50 feet bgs. Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

3.0 Release Characterization and Remediation Activities

On July 1, 2020, SMA personnel arrived on site in response to the release associated with the Ragin Cajun 12 Federal 1H. SMA performed site delineation activities by collecting soil samples around the release site, based on figures provided by Devon 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 lamp.

A total of ten (10) sample locations (L1-L5 & SW1- SW4 & a background sample) were investigated using a hand-auger. A total of twenty (20) samples were collected for laboratory analysis for 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.

As summarized in Table 3, results indicated that a pooling area approximately 18 feet by 29 feet by 0.5 feet deep along with an elongated section measuring 78 feet by 7 feet by 1 foot deep had been impacted.

On July 31, and August 14, 2020, SMA returned to the site to guide the excavation of contaminated soil. SMA guided the excavation activities by collecting soil samples for field screening, using the methods above. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on July 29, and August 11, 2020 that closure samples were expected to be collected in two (2) business days.

On July 31, and August 14, 2020 SMA conducted confirmation sampling of the walls and base of the excavation, which measured approximately 20 feet by 30 feet along the pooling area and 80 feet by 8 feet along the elongated portion of the contaminated area. The area around sample location L1 and L2 was excavated to a depth of 0.5 feet, the areas around L4 and L5 were excavated to a depth of one (1) foot, and the areas around L3 and in between L4 and L5 were excavated to a depth of 1.5 feet bgs.

Confirmation samples were comprised of five-point composites of the base (CS1-CS6) and walls (SW1-SW5).

A total of thirteen (13) 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. 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).

Figure 3 shows the extent of the excavation and sample locations. All laboratory results are summarized in Table 3. Laboratory reports are included in Appendix D.

Contaminated soils were removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil was transported and disposed of at Northern Delaware Basin Landfill near Jal, NM, an NMOCD permitted disposal facility.

4.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either 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

Ragin Cajun 12 Federal 1H Remediation Closure Report (NRM2017055850)
August 13, 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

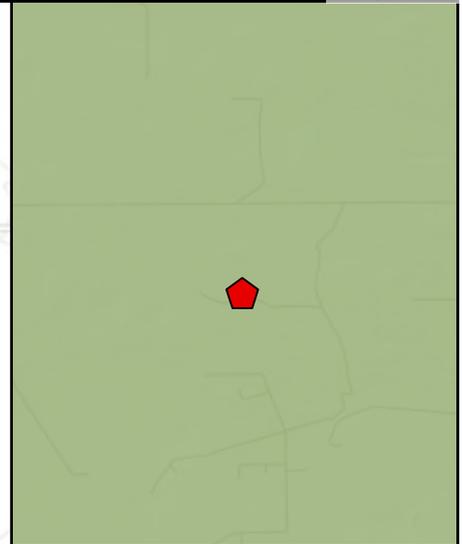
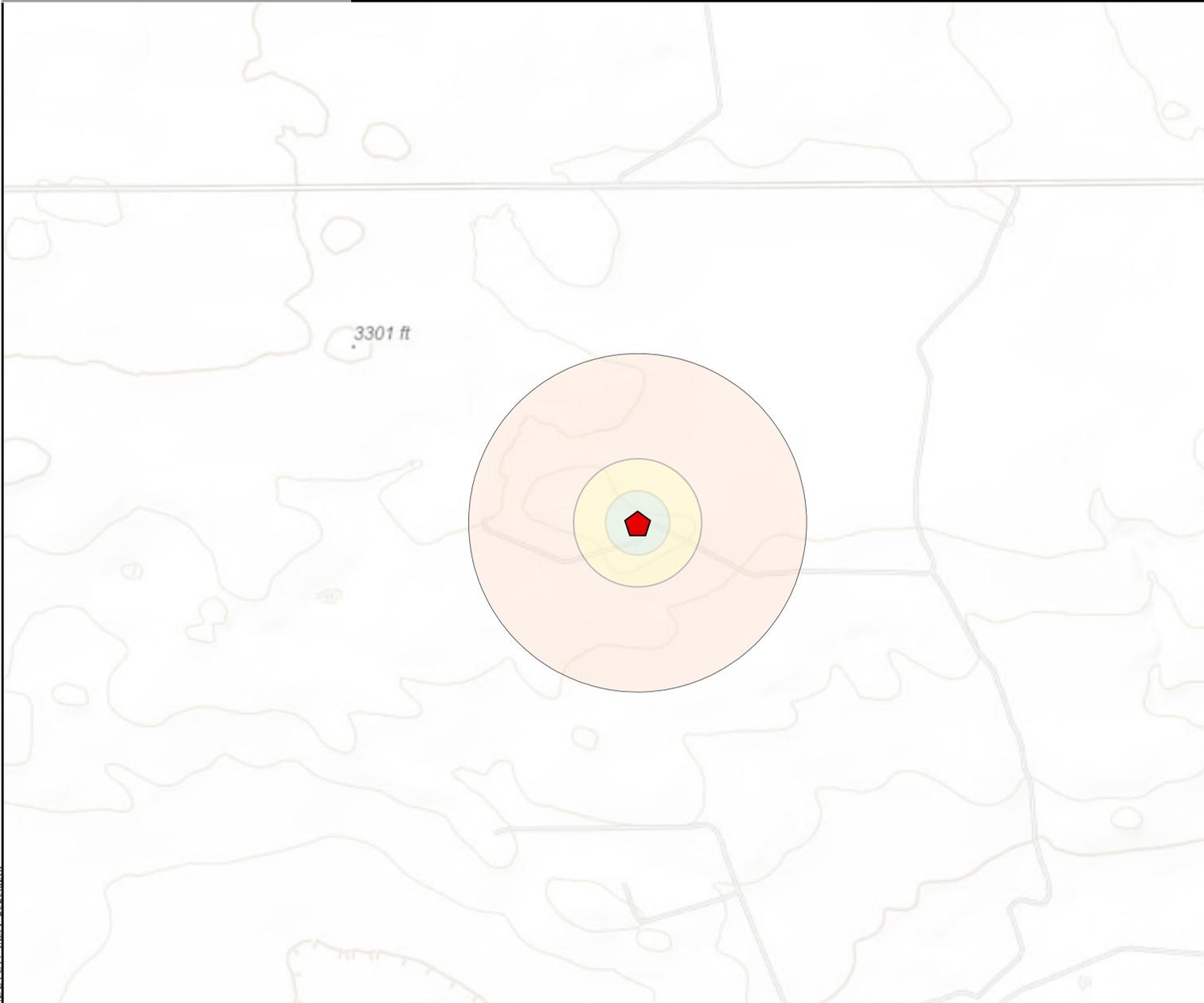
Appendix B: NMOSE Wells Report

Appendix C: Sampling Protocol

Appendix D: Laboratory Analytical Reports

Appendix E: Photo Log

FIGURES



Buffer Distance

-  .5 Mile
-  1000 Feet
-  500 Feet

Legend

-  OSE Depth to GW
-  USGS GW Well
-  Point of Release

Karst Potential

-  Critical
-  High
-  Medium
-  Low

Scale

0 500 1,000 2,000 3,000
Feet

North Arrow

N

Site Map
 Ragin Cajun 12 Federal 1H- Devon Energy
 32.0505981, -103.4205627, Lea County, New Mexico

Figure 1

P:\5-Devon\MSA 2020\65E29133\GIS\DEVON_MSA_2020.aprx

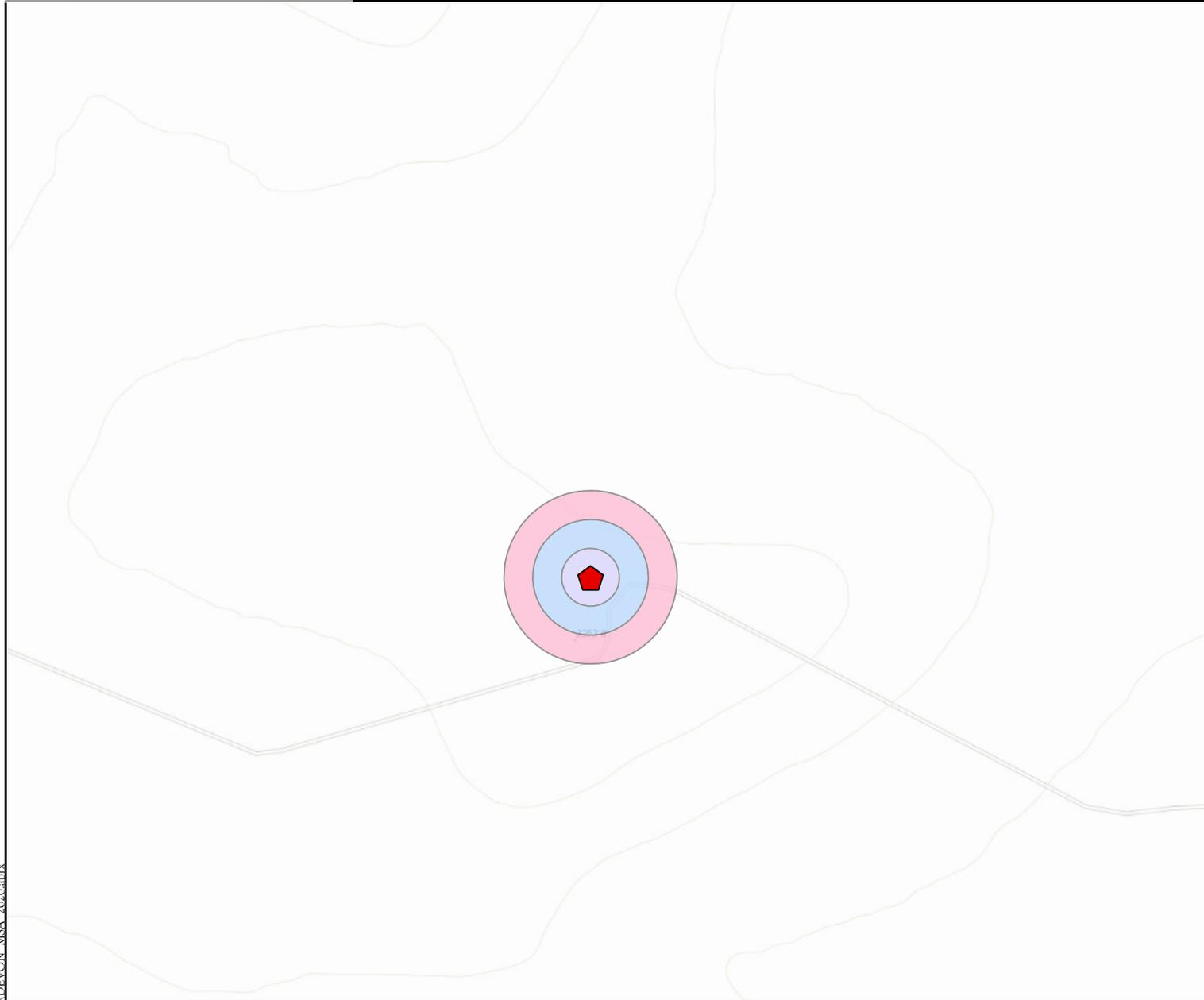
Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____

© Souder, Miller & Associates, 2020, All Rights Reserved

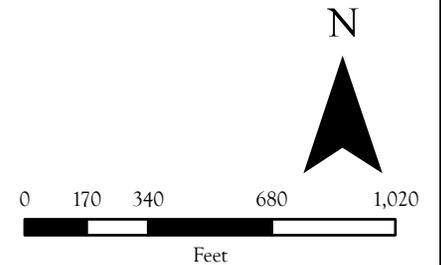
Drawn	Sebastian Orozco
Date	8/21/2020
Checked	_____
Approved	_____



201 South Halaguena Street
 Carlsbad, New Mexico 88221
 (575) 689-7040
 Serving the Southwest & Rocky Mountains



- Buffer Distance**
- 300 Feet
 - 200 Feet
 - 100 Feet
 - Springs & Seeps
 - Streams & Canals
 - Rivers
 - Flowlines SENM
 - NM Wetlands
 - Lakes & Playas
 - FEMA Flood Zones 2011
 - Point of Release



Surface Water Protection Map
 Ragin Cajun 12 Federal 1H- Devon Energy
 32.0505981, -103.4205627 Lea County, New Mexico

Figure 2

P:\5\Devon.MSA 2020\GIS\201313\GIS\DEVON_MSA_2020.aprx

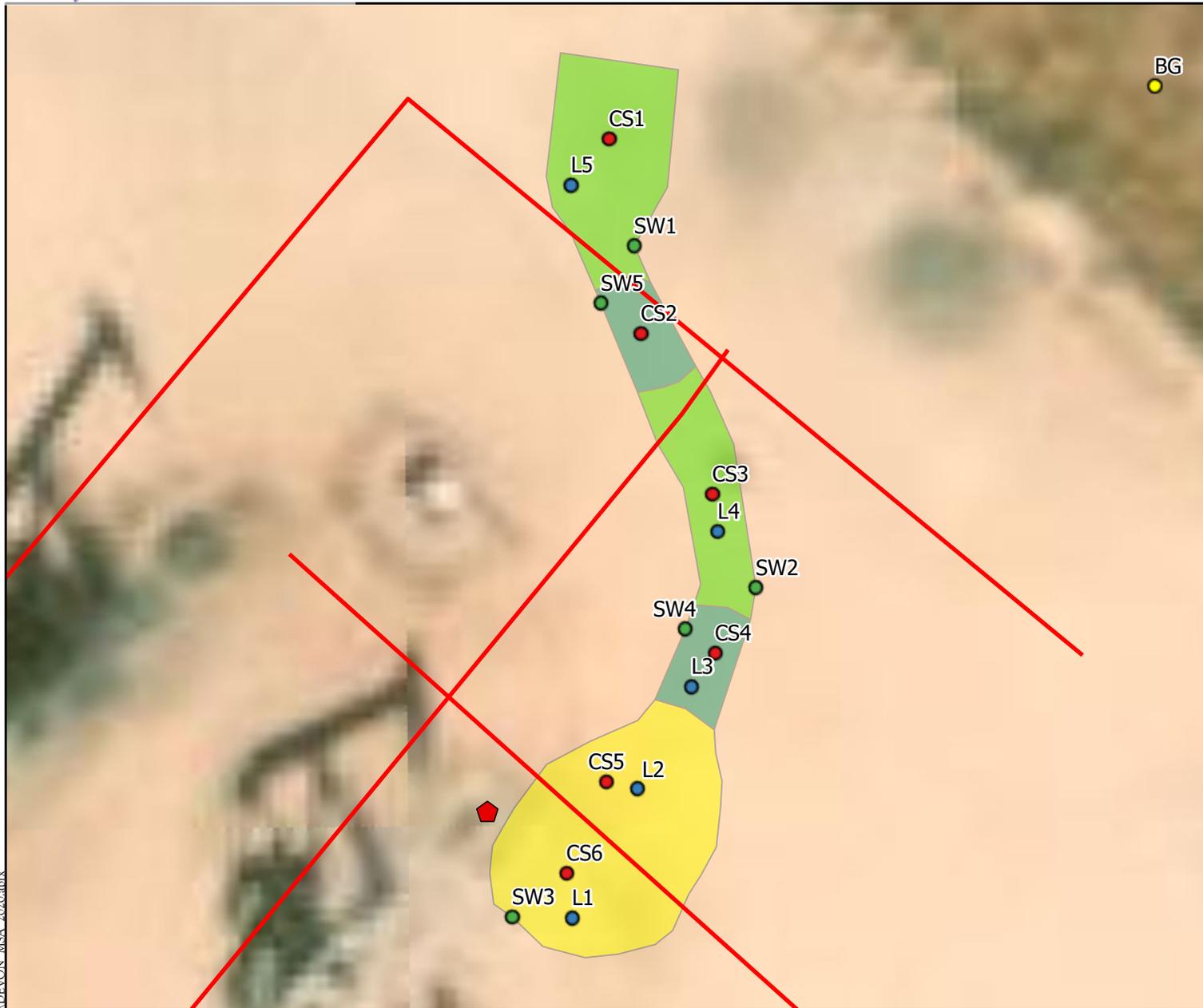
Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____

© Souder, Miller & Associates, 2020, All Rights Reserved

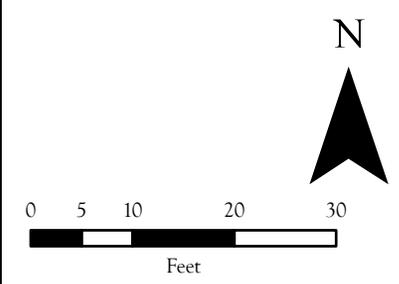
Drawn	Sebastian Orozco
Date	8/21/2020
Checked	_____
Approved	_____



201 South Halaguena Street
 Carlsbad, New Mexico 88221
 (575) 689-7040
 Serving the Southwest & Rocky Mountains



- Pipelines
 - 0.5' Excavation
 - 1' Excavation
 - 1.5' Excavation
- Sample Points**
- Bottom Hole Closure Samples
 - Side Wall Closure Samples
 - Initial Soil Samples
 - Background Samples
 - ⬠ Point of Release



Site and Sample Location Map
 Raging Cajun 12 Federal 1H - Devon Energy
 32.0505981, -103.4205627 Lea County, New Mexico

Figure 3

P:\5 Devon.MSA 2020\5E29131\GIS\DEVON_MSA_2020.mxd

Revisions		
By: _____	Date: _____	Descr: _____
By: _____	Date: _____	Descr: _____

© Souder, Miller & Associates, 2020, All Rights Reserved

Drawn	Sebastian Orozco
Date	8/13/2020
Checked	_____
Approved	_____



201 South Halaguena Street
 Carlsbad, New Mexico 88221
 (575) 689-7040
 Serving the Southwest & Rocky Mountains

TABLES

Table 2:
NMOCD Closure Criteria

Devon Energy
Ragin Cajun 12 Federal 1H (NRM2017055850)

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	<50	Office of the State Engineer (OSE)
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	N/A	Office of the State Engineer (OSE)
Horizontal Distance to Nearest Significant Watercourse (ft)	8,123	United States Geological Society (USGS)

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride <small>*numerical limit or background, whichever is greater</small>	TPH	GRO + DRO	BTEX	Benzene
< 50' BGS	X	600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'		20000	2500	1000	50	10
Surface Water		if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<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					
Human and Other Areas						
<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					
within area overlying a subsurface mine	No					
within an unstable area?	No					
within a 100-year floodplain?	No					

Table 3:
Summary of Sample Results

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	GRO + DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- mg/Kg
NMOCD Closure Criteria				50	10					100	600
Initial Samples											
L1	7/1/2020	Surface	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
		1	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
		2	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
L2		Surface	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
		1	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
		2	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
L3		Surface	Excavate	<0.300	<0.050	<10.0	5,840	5,840	1,730	7,570	-
		1	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
		2	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
L4		Surface	Excavate	<0.300	<0.050	<10.0	3100	3100	821	3921	-
		1	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
		2	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
L5	Surface	Excavate	<0.300	<0.050	<10.0	7060	7060	2380	9440	-	
	1	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-	
	2	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-	
SW1		Surface	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
SW2		Surface	In-Situ	<0.300	<0.050	<10.0	22.2	22	<10.0	22.2	-
SW3		Surface	In-Situ	<0.300	<0.050	<10.0	37.1	37.1	22.6	59.7	-
SW4		Surface	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
BG		Surface	In-Situ	<0.300	<0.050	<10.0	<10.0	<20.0	<10.0	<30.0	-
Closure Samples											
CS1	7/31/2020	1	In-Situ	<0.212	<0.024	<4.7	<9.4	<14.1	<47	<61.1	<60
CS2	7/31/2020	1	Excavate	<0.217	<0.024	<4.8	<9.3	<14.1	<46	<60.1	620
	8/14/2020	1.5	In-Situ	<0.1	<0.025	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
CS3	7/31/2020	1	In-Situ	<0.216	<0.024	<4.8	<9.3	<14.1	<47	<61.1	<60
CS4	7/31/2020	1	Excavate	<0.221	<0.025	<4.9	<8.9	<13.8	<45	<67.7	760
	8/14/2020	1.5	In-Situ	<0.1	<0.025	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
CS5	7/31/2020	0.5	In-Situ	<0.224	<0.025	<5.0	<9.7	<14.7	<48	<62.7	250
CS6		0.5	In-Situ	<0.219	<0.024	<4.9	<9.9	<14.8	<50	<64.8	390
SW1		0-1	In-Situ	<0.207	<0.023	<4.6	<9.6	<14.2	<48	<62.2	130
SW2		0-1	In-Situ	<0.216	<0.024	<4.8	<8.9	<13.7	<44	<57.7	150
SW3		0-0.5	In-Situ	<0.213	<0.024	<4.7	<9.3	<14	<46	<60	94
SW4		0-1	In-Situ	<0.216	<0.024	<4.8	<10	<14.8	<50	<64.8	170
SW5		0-1	In-Situ	<0.210	<0.023	<4.7	<8.8	<13.5	<44	<57.5	170

"-" = Not Analyzed

APPENDIX A

FORM C141

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2017055850
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

State of New Mexico
Oil Conservation Division

Incident ID	NRM2017055850
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
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: _____ Signature: <u>Kendra DeHoyos</u> Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>6/18/2020</u>

Incident ID	NRM2017055850
District RP	
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?	≤50 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

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 wells.
- Field data
- 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.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NRM2017055850
District RP	
Facility ID	
Application ID	

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: Lupe Carrasco Title: EHS Professional

Signature: *Lupe Carrasco* Date: 8/26/20

email: Lupe.Carrasco@dvn.com Telephone: 575-748-0165

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2017055850
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Lupe Carrasco Title: EHS Professional

Signature: *Lupe Carrasco* Date: 8/26/20

email: Lupe.Carrasco@dvn.com Telephone: 575-748-0165

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Spill Volume(Bbls) Calculator	
<i>Inputs in blue, Outputs in red</i>	
Contaminated Soil measurement	
Area (square feet)	Depth(inches)
<u>2593</u>	<u>0.350</u>
Cubic Feet of Soil Impacted	<u>75.629</u>
Barrels of Soil Impacted	<u>13.48</u>
Soil Type	Clay/Sand
Barrels of Oil Assuming 100% Saturation	<u>2.02</u>
Saturation	Fluid present with shovel/backhoe
Estimated Barrels of Oil Released	<u>2.02</u>
Free Standing Fluid Only	
Area (square feet)	Depth(inches)
<u>2593</u>	<u>0.200</u>
Standing fluid	<u>7.704</u>
<u>Total fluids spilled</u>	<u>9.726</u>

APPENDIX B

NMOSE WELLS REPORT



New Mexico Office of the State Engineer **Water Column/Average Depth to Water**

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 649112.59

Northing (Y): 3547134.95

Radius: 805

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

8/13/20 3:13 PM

WATER COLUMN/ AVERAGE
DEPTH TO WATER

APPENDIX C

SAMPLING PROTOCOL



Sampling Protocol

The soil samples were collected in laboratory supplied containers in accordance with this sampling protocol, immediately placed on ice and sent under standard chain-of-custody protocols to Cardinal Analytical Laboratory in Hobbs, New Mexico, Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico and Envirotech Environmental Analysis Laboratories in Farmington, New Mexico. A total of thirty-three (33) 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.

Sampling Analysis Field Quality Assurance Procedures

A unique sample numbering was used to identify each sample collected and designated for on-site and off-site laboratory analysis. The purpose of this numbering scheme was to provide a tracking system for the retrieval of analytical and field data on each sample. Sample identification numbers were recorded on sample labels or tags, field notes, chain-of-custody records (COC) and all other applicable documentation used during the project. Sample labels were affixed to all sample containers during sampling activities. Information was recorded on each sample container label at the time of sample collection. The information recorded on the labels were as follows: sample identification number; sample type (discrete or composite); site name and area/location number; analysis to be performed; type of chemical preservative present in container; date and time of sample collection; and sample collector's name and initials. All samples were packed in ice in an approved rigid body container, custody sealed signed and shipped to the appropriate laboratory via insured courier service.

COC procedures implemented for the project provided documentation of the handling of each sample from the time of collection until completion of laboratory analysis. A COC form serves as a legal record of possession of the sample. A sample is considered to be under custody if one or more of the following criteria are met: the sample is in the sampler's possession; the sample is in the sampler's view after being in possession; the sample was in the sampler's possession and then was placed into a locked area to prevent tampering; and/or the sample is in a designated secure area. Custody was documented throughout the project field sampling activities by a chain-of custody form initiated each day during which samples are collected. Container custody seals placed on either individual samples or on the rigid body container were used to ensure that no sample tampering occurs between the time the samples are placed into the containers and the time the containers are opened for analysis at the laboratory. Container custody seals were signed and dated by the individual responsible for completing the COC form contained within the container.

APPENDIX D
LABORATORY ANALYTICAL
REPORTS



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 07, 2020

ASHLEY MAXWELL
SOUDER MILLER AND ASSOCIATES
201 S. HALAGUENO
CARLSBAD, NM 88220

RE: RAGING CAJUN 12 FED 1H

Enclosed are the results of analyses for samples received by the laboratory on 07/01/20 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 1 - SURFACE (H001734-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99	
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	208	104	200	1.20	
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	218	109	200	1.17	
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 63.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 66.1 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 1 - 1' (H001734-02)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 78.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 81.8 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 1 - 2' (H001734-03)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 84.2 % 44.3-144

Surrogate: 1-Chlorooctadecane 88.2 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 2 - SURFACE (H001734-04)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 66.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 69.0 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 2 - 1' (H001734-05)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 83.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 86.2 % 42.2-156

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 2 - 2' (H001734-06)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 86.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 89.3 % 42.2-156

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 3 - SURFACE (H001734-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99	
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
DRO >C10-C28*	5840	10.0	07/02/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	1730	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 86.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 353 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 3 - 1' (H001734-08)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 66.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 69.5 % 42.2-156

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 3 - 2' (H001734-09)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	208	104	200	1.20		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	218	109	200	1.17		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 82.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 85.5 % 42.2-156

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 4 - SURFACE (H001734-10)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99	
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	3100	10.0	07/02/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	821	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 85.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 218 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 4 - 1' (H001734-11)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 74.1 % 44.3-144

Surrogate: 1-Chlorooctadecane 76.1 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 4 - 2' (H001734-12)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 88.0 % 44.3-144

Surrogate: 1-Chlorooctadecane 94.6 % 42.2-156

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 5 - SURFACE (H001734-13)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99	
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.7 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	7060	10.0	07/02/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	2380	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 80.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 450 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 5 - 1' (H001734-14)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.7 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 77.3 % 44.3-144

Surrogate: 1-Chlorooctadecane 78.6 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: L 5 - 2' (H001734-15)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 85.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 93.8 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: SW 1 (H001734-16)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99	
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79	
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68	
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49	
Total BTEX	<0.300	0.300	07/02/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.6 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	174	86.8	200	0.287	
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	169	84.5	200	2.06	
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND					

Surrogate: 1-Chlorooctane 62.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 66.4 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: SW 2 (H001734-17)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	22.2	10.0	07/06/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 69.8 % 44.3-144

Surrogate: 1-Chlorooctadecane 74.2 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: SW 3 (H001734-18)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	37.1	10.0	07/06/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	22.6	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 62.5 % 44.3-144

Surrogate: 1-Chlorooctadecane 65.9 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: SW 4 (H001734-19)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.2 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/06/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	<10.0	10.0	07/06/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/06/2020	ND						

Surrogate: 1-Chlorooctane 61.7 % 44.3-144

Surrogate: 1-Chlorooctadecane 64.8 % 42.2-156

Cardinal Laboratories

* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
 ASHLEY MAXWELL
 201 S. HALAGUENO
 CARLSBAD NM, 88220
 Fax To: NONE

Received:	07/01/2020	Sampling Date:	07/01/2020
Reported:	07/07/2020	Sampling Type:	Soil
Project Name:	RAGING CAJUN 12 FED 1H	Sampling Condition:	** (See Notes)
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	DEVON		

Sample ID: BACKGROUND (H001734-20)

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2020	ND	1.89	94.4	2.00	4.99		
Toluene*	<0.050	0.050	07/02/2020	ND	1.91	95.4	2.00	4.79		
Ethylbenzene*	<0.050	0.050	07/02/2020	ND	1.94	97.2	2.00	4.68		
Total Xylenes*	<0.150	0.150	07/02/2020	ND	5.65	94.2	6.00	4.49		
Total BTEX	<0.300	0.300	07/02/2020	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.9 % 73.3-129

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/02/2020	ND	174	86.8	200	0.287		
DRO >C10-C28*	<10.0	10.0	07/02/2020	ND	169	84.5	200	2.06		
EXT DRO >C28-C36	<10.0	10.0	07/02/2020	ND						

Surrogate: 1-Chlorooctane 90.9 % 44.3-144

Surrogate: 1-Chlorooctadecane 95.5 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

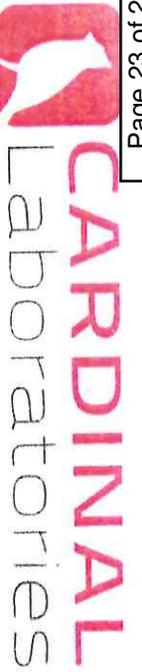
Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: <u>Snyder Miller & Assoc.</u>		P.O. #:	
Project Manager: <u>Ashtley Maxwell</u>		Company:	
Address: <u>201 S. Holoyueno,</u>		Attn:	
City: <u>Consbard</u> State: <u>NM</u> Zip: <u>88220</u>		Address:	
Phone #: <u>619 721 483</u> Fax #: _____		City:	
Project #: _____ Project Owner: _____		State:	
Project Name: <u>Rayne Cajon 12 Fed 1H</u>		Zip:	
Project Location: _____		Phone #:	
Sampler Name: <u>Sebastian O. / Alicia A. Lopez</u>		Fax #:	
FOR LAB USE ONLY		MATRIX	PRESERV
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS
		GROUNDWATER	WASTEWATER
		SOIL	OIL
		SLUDGE	OTHER :
		ACID/BASE:	ICE / COOL
		OTHER :	DATE
			TIME

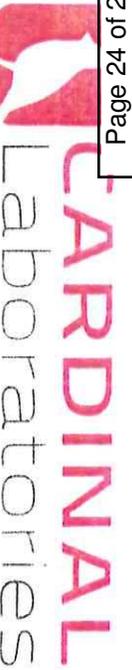
PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising under this contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including without limitation business interruptions, loss of use or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: _____ Date: _____
 Received By: _____ Date: _____

Relinquished By: Michael Berry Date: 9/1/20
 Received By: Devon Date: 8/26/20

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other: _____
 Sample Condition: Cool Intact
 Yes No

REMARKS: Bill Devon WOH 20873768
Samples taken & brought directly to lab. GA



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

BILL TO

ANALYSIS REQUEST

Company Name: Souder Miller & Assoc. P.O. #: _____
 Project Manager: Ashley Maxwell Company: _____
 Address: 201 S. Holagayeno St Attn: _____
 City: Consbond State: NM Zip: 88220 Address: _____
 Phone #: 509 721 4813 Fax #: _____ City: _____
 Project #: _____ Project Owner: _____ State: _____ Zip: _____
 Project Name: Raging Cajon LZ Fed 14 Phone #: _____
 Project Location: _____ Fax #: _____
 Sampler Name: Sebastian C. / Alicia L.

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	1208	80108
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :				
HDD1734													
11	L4-1'	G	1			X				7/1/20	11:48		
12	L4-2'										12:02		
13	LS-Surface										12:09		
14	LS-1'										12:12		
15	LS-2'										12:15		
16	SW1										12:58		
17	SW2										1:10		
18	SW3										1:15		
19	SW4										1:20		
20	Redairmind										12:23		

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: _____ Date: 7/1/20 Received By: _____
 Relinquished By: [Signature] Time: 15:20 Received By: [Signature]
 Date: _____ Time: _____

Delivered By: (Circle One) _____
 Sampler - UPS - Bus - Other: _____
 Sample Condition: Intact Broken
 Cool Yes No
 Checked By: [Signature]
 Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____
 REMARKS: Bill Devon WD# 2082368 AHL 20873768



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

August 10, 2020

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

RE: Regin Cajan 12 Federel 1H

OrderNo.: 2008035

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 11 sample(s) on 8/4/2020 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS1

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:00:00 AM

Lab ID: 2008035-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/7/2020 3:49:53 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2020 2:57:08 AM	54146
Surr: BFB	104	70-130		%Rec	1	8/6/2020 2:57:08 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/6/2020 12:21:00 AM	54160
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 12:21:00 AM	54160
Surr: DNOP	90.3	30.4-154		%Rec	1	8/6/2020 12:21:00 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 2:57:08 AM	54146
Toluene	ND	0.047		mg/Kg	1	8/6/2020 2:57:08 AM	54146
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2020 2:57:08 AM	54146
Xylenes, Total	ND	0.094		mg/Kg	1	8/6/2020 2:57:08 AM	54146
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	8/6/2020 2:57:08 AM	54146
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	8/6/2020 2:57:08 AM	54146
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/6/2020 2:57:08 AM	54146
Surr: Toluene-d8	100	70-130		%Rec	1	8/6/2020 2:57:08 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS2

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:15:00 AM

Lab ID: 2008035-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	620	60		mg/Kg	20	8/7/2020 4:51:36 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 3:26:26 AM	54146
Surr: BFB	104	70-130		%Rec	1	8/6/2020 3:26:26 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/6/2020 12:31:02 AM	54160
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/6/2020 12:31:02 AM	54160
Surr: DNOP	94.1	30.4-154		%Rec	1	8/6/2020 12:31:02 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 3:26:26 AM	54146
Toluene	ND	0.048		mg/Kg	1	8/6/2020 3:26:26 AM	54146
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 3:26:26 AM	54146
Xylenes, Total	ND	0.097		mg/Kg	1	8/6/2020 3:26:26 AM	54146
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	8/6/2020 3:26:26 AM	54146
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	8/6/2020 3:26:26 AM	54146
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/6/2020 3:26:26 AM	54146
Surr: Toluene-d8	101	70-130		%Rec	1	8/6/2020 3:26:26 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS3

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:22:00 AM

Lab ID: 2008035-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	8/7/2020 5:03:56 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 3:56:06 AM	54146
Surr: BFB	103	70-130		%Rec	1	8/6/2020 3:56:06 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/6/2020 12:41:03 AM	54160
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 12:41:03 AM	54160
Surr: DNOP	97.5	30.4-154		%Rec	1	8/6/2020 12:41:03 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 3:56:06 AM	54146
Toluene	ND	0.048		mg/Kg	1	8/6/2020 3:56:06 AM	54146
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 3:56:06 AM	54146
Xylenes, Total	ND	0.096		mg/Kg	1	8/6/2020 3:56:06 AM	54146
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	8/6/2020 3:56:06 AM	54146
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	8/6/2020 3:56:06 AM	54146
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/6/2020 3:56:06 AM	54146
Surr: Toluene-d8	98.9	70-130		%Rec	1	8/6/2020 3:56:06 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS4

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:30:00 AM

Lab ID: 2008035-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	760	60		mg/Kg	20	8/7/2020 5:16:16 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 4:25:28 AM	54146
Surr: BFB	104	70-130		%Rec	1	8/6/2020 4:25:28 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/6/2020 12:50:58 AM	54160
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 12:50:58 AM	54160
Surr: DNOP	92.6	30.4-154		%Rec	1	8/6/2020 12:50:58 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/6/2020 4:25:28 AM	54146
Toluene	ND	0.049		mg/Kg	1	8/6/2020 4:25:28 AM	54146
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 4:25:28 AM	54146
Xylenes, Total	ND	0.098		mg/Kg	1	8/6/2020 4:25:28 AM	54146
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	8/6/2020 4:25:28 AM	54146
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	8/6/2020 4:25:28 AM	54146
Surr: Dibromofluoromethane	110	70-130		%Rec	1	8/6/2020 4:25:28 AM	54146
Surr: Toluene-d8	99.1	70-130		%Rec	1	8/6/2020 4:25:28 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS5

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:35:00 AM

Lab ID: 2008035-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	250	60		mg/Kg	20	8/7/2020 5:28:37 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/6/2020 4:55:06 AM	54146
Surr: BFB	106	70-130		%Rec	1	8/6/2020 4:55:06 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/6/2020 1:00:54 AM	54160
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 1:00:54 AM	54160
Surr: DNOP	114	30.4-154		%Rec	1	8/6/2020 1:00:54 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	8/6/2020 4:55:06 AM	54146
Toluene	ND	0.050		mg/Kg	1	8/6/2020 4:55:06 AM	54146
Ethylbenzene	ND	0.050		mg/Kg	1	8/6/2020 4:55:06 AM	54146
Xylenes, Total	ND	0.099		mg/Kg	1	8/6/2020 4:55:06 AM	54146
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	8/6/2020 4:55:06 AM	54146
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	8/6/2020 4:55:06 AM	54146
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/6/2020 4:55:06 AM	54146
Surr: Toluene-d8	100	70-130		%Rec	1	8/6/2020 4:55:06 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS6

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:42:00 AM

Lab ID: 2008035-006

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	390	60		mg/Kg	20	8/7/2020 5:40:57 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 5:25:21 AM	54146
Surr: BFB	103	70-130		%Rec	1	8/6/2020 5:25:21 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/6/2020 1:10:43 AM	54160
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 1:10:43 AM	54160
Surr: DNOP	95.7	30.4-154		%Rec	1	8/6/2020 1:10:43 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 5:25:21 AM	54146
Toluene	ND	0.049		mg/Kg	1	8/6/2020 5:25:21 AM	54146
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 5:25:21 AM	54146
Xylenes, Total	ND	0.097		mg/Kg	1	8/6/2020 5:25:21 AM	54146
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	8/6/2020 5:25:21 AM	54146
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	8/6/2020 5:25:21 AM	54146
Surr: Dibromofluoromethane	102	70-130		%Rec	1	8/6/2020 5:25:21 AM	54146
Surr: Toluene-d8	96.6	70-130		%Rec	1	8/6/2020 5:25:21 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:50:00 AM

Lab ID: 2008035-007

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	130	60		mg/Kg	20	8/7/2020 5:53:18 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/6/2020 5:54:56 AM	54146
Surr: BFB	103	70-130		%Rec	1	8/6/2020 5:54:56 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/6/2020 1:20:37 AM	54160
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2020 1:20:37 AM	54160
Surr: DNOP	111	30.4-154		%Rec	1	8/6/2020 1:20:37 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	8/6/2020 5:54:56 AM	54146
Toluene	ND	0.046		mg/Kg	1	8/6/2020 5:54:56 AM	54146
Ethylbenzene	ND	0.046		mg/Kg	1	8/6/2020 5:54:56 AM	54146
Xylenes, Total	ND	0.092		mg/Kg	1	8/6/2020 5:54:56 AM	54146
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%Rec	1	8/6/2020 5:54:56 AM	54146
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	8/6/2020 5:54:56 AM	54146
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/6/2020 5:54:56 AM	54146
Surr: Toluene-d8	99.3	70-130		%Rec	1	8/6/2020 5:54:56 AM	54146

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 9:58:00 AM

Lab ID: 2008035-008

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	150	59		mg/Kg	20	8/7/2020 6:05:38 AM	54233
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 6:24:38 AM	54146
Surr: BFB	107	70-130		%Rec	1	8/6/2020 6:24:38 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/6/2020 1:30:32 AM	54160
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/6/2020 1:30:32 AM	54160
Surr: DNOP	122	30.4-154		%Rec	1	8/6/2020 1:30:32 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 6:24:38 AM	54146
Toluene	ND	0.048		mg/Kg	1	8/6/2020 6:24:38 AM	54146
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 6:24:38 AM	54146
Xylenes, Total	ND	0.096		mg/Kg	1	8/6/2020 6:24:38 AM	54146
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	8/6/2020 6:24:38 AM	54146
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	8/6/2020 6:24:38 AM	54146
Surr: Dibromofluoromethane	105	70-130		%Rec	1	8/6/2020 6:24:38 AM	54146
Surr: Toluene-d8	99.2	70-130		%Rec	1	8/6/2020 6:24:38 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order **2008035**

Date Reported: **8/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW3

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 10:08:00 AM

Lab ID: 2008035-009

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	94	60		mg/Kg	20	8/7/2020 11:52:03 AM	54256
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2020 6:53:57 AM	54146
Surr: BFB	108	70-130		%Rec	1	8/6/2020 6:53:57 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/6/2020 1:40:28 AM	54160
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/6/2020 1:40:28 AM	54160
Surr: DNOP	106	30.4-154		%Rec	1	8/6/2020 1:40:28 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 6:53:57 AM	54146
Toluene	ND	0.047		mg/Kg	1	8/6/2020 6:53:57 AM	54146
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2020 6:53:57 AM	54146
Xylenes, Total	ND	0.095		mg/Kg	1	8/6/2020 6:53:57 AM	54146
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	8/6/2020 6:53:57 AM	54146
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	8/6/2020 6:53:57 AM	54146
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/6/2020 6:53:57 AM	54146
Surr: Toluene-d8	98.9	70-130		%Rec	1	8/6/2020 6:53:57 AM	54146

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of range due to dilution or matrix	

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 10:17:00 AM

Lab ID: 2008035-010

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	170	60		mg/Kg	20	8/7/2020 12:29:05 PM	54256
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 7:23:30 AM	54146
Surr: BFB	105	70-130		%Rec	1	8/6/2020 7:23:30 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/6/2020 1:50:42 AM	54160
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 1:50:42 AM	54160
Surr: DNOP	114	30.4-154		%Rec	1	8/6/2020 1:50:42 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	8/6/2020 7:23:30 AM	54146
Toluene	ND	0.048		mg/Kg	1	8/6/2020 7:23:30 AM	54146
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 7:23:30 AM	54146
Xylenes, Total	ND	0.096		mg/Kg	1	8/6/2020 7:23:30 AM	54146
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/6/2020 7:23:30 AM	54146
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	8/6/2020 7:23:30 AM	54146
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/6/2020 7:23:30 AM	54146
Surr: Toluene-d8	100	70-130		%Rec	1	8/6/2020 7:23:30 AM	54146

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2008035

Date Reported: 8/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW5

Project: Regin Cajan 12 Federel 1H

Collection Date: 7/31/2020 10:25:00 AM

Lab ID: 2008035-011

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	170	60		mg/Kg	20	8/7/2020 1:06:07 PM	54256
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2020 7:53:03 AM	54146
Surr: BFB	105	70-130		%Rec	1	8/6/2020 7:53:03 AM	54146
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	8/6/2020 2:00:42 AM	54160
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/6/2020 2:00:42 AM	54160
Surr: DNOP	95.8	30.4-154		%Rec	1	8/6/2020 2:00:42 AM	54160
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: JMR
Benzene	ND	0.023		mg/Kg	1	8/6/2020 7:53:03 AM	54146
Toluene	ND	0.047		mg/Kg	1	8/6/2020 7:53:03 AM	54146
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2020 7:53:03 AM	54146
Xylenes, Total	ND	0.093		mg/Kg	1	8/6/2020 7:53:03 AM	54146
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	8/6/2020 7:53:03 AM	54146
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	8/6/2020 7:53:03 AM	54146
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/6/2020 7:53:03 AM	54146
Surr: Toluene-d8	99.7	70-130		%Rec	1	8/6/2020 7:53:03 AM	54146

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of range due to dilution or matrix	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008035

10-Aug-20

Client: Souder, Miller & Associates

Project: Regin Cajan 12 Federal 1H

Sample ID: MB-54233	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54233	RunNo: 70878								
Prep Date: 8/6/2020	Analysis Date: 8/7/2020	SeqNo: 2468703	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54233	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54233	RunNo: 70878								
Prep Date: 8/6/2020	Analysis Date: 8/7/2020	SeqNo: 2468704	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

Sample ID: MB-54256	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 54256	RunNo: 70901								
Prep Date: 8/7/2020	Analysis Date: 8/7/2020	SeqNo: 2470133	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54256	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 54256	RunNo: 70901								
Prep Date: 8/7/2020	Analysis Date: 8/7/2020	SeqNo: 2470135	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008035

10-Aug-20

Client: Souder, Miller & Associates

Project: Regin Cajan 12 Federal 1H

Sample ID: LCS-54160	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 54160		RunNo: 70860							
Prep Date: 8/4/2020	Analysis Date: 8/5/2020		SeqNo: 2467392		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	70	130			
Surr: DNOP	4.8		5.000		95.1	30.4	154			

Sample ID: MB-54160	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 54160		RunNo: 70860							
Prep Date: 8/4/2020	Analysis Date: 8/5/2020		SeqNo: 2467396		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		109	30.4	154			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008035

10-Aug-20

Client: Souder, Miller & Associates

Project: Regin Cajan 12 Federal 1H

Sample ID: ics-54146	SampType: LCS4		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: BatchQC	Batch ID: 54146		RunNo: 70866							
Prep Date: 8/4/2020	Analysis Date: 8/5/2020		SeqNo: 2467903		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	106	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	109	80	120			
Xylenes, Total	3.2	0.10	3.000	0	107	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.8	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.5	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID: mb-54146	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBS	Batch ID: 54146		RunNo: 70866							
Prep Date: 8/4/2020	Analysis Date: 8/5/2020		SeqNo: 2467904		Units: mg/Kg					
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: 1,2-Dichloroethane-d4	0.48		0.5000		95.9	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.7	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		101	70	130			
Surr: Toluene-d8	0.49		0.5000		98.7	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008035

10-Aug-20

Client: Souder, Miller & Associates

Project: Regin Cajan 12 Federal 1H

Sample ID: ics-54146	SampType: LCS		TestCode: EPA Method 8015D Mod: Gasoline Range							
Client ID: LCSS	Batch ID: 54146		RunNo: 70866							
Prep Date: 8/4/2020	Analysis Date: 8/5/2020		SeqNo: 2467929				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	90.0	70	130			
Surr: BFB	520		500.0		104	70	130			

Sample ID: mb-54146	SampType: MBLK		TestCode: EPA Method 8015D Mod: Gasoline Range							
Client ID: PBS	Batch ID: 54146		RunNo: 70866							
Prep Date: 8/4/2020	Analysis Date: 8/5/2020		SeqNo: 2467930				Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	550		500.0		109	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: **Souder, Miller & Associat** Work Order Number: **2008035** RcptNo: 1

Received By: **Emily Mocho** 8/4/2020 8:00:00 AM

Completed By: **Isaiah Ortiz** 8/4/2020 8:40:37 AM

Reviewed By: **DAD 8/4/20**

ILOX

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes No NA
4. Were all samples received at a temperature 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 test(s)? Yes No
7. Are samples (except VOA and ONG) properly 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 broken? Yes No
11. Does paperwork match bottle labels?
 (Note discrepancies on chain of custody) Yes No
12. Are matrices correctly identified on Chain of Custody? Yes No
13. Is it clear what analyses were requested? Yes No
14. Were all holding times able to be met?
 (If no, notify customer for authorization.) Yes No

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)

Adjusted? _____

Checked by: *SPA 8.4.20*

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Not Present			

Chain-of-Custody Record

Client: SMA

Mailing Address: ZOI S.

Helageno

Phone #:

email or Fax#:

QA/QC Package:

Standard Level 4 (Full Validation)

Accreditation: Az Compliance

NELAC Other

EDD (Type)

Turn-Around Time: 5 days

Standard Rush

Project Name:

Regis Cabin 12 Federal IH

Project #:

Project Manager:

Ashley Maxwell

Sampler:

On Ice: Yes No

of Coolers: 1

Cooler Temp (including CF): 1-4 + 0.2 = 1.4 (°C)

Container Type and # 4oz Preservative Type Cool HEAL No. Z008035

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
7/31	9:00	Soil	CS1	4oz	Cool	001
	9:15		CS2			002
	9:22		CS3			003
	9:30		CS4			004
	9:35		CS5			005
	9:42		CS6			006
	9:50		Sw1			007
	9:58		Sw2			008
	10:08		Sw3			009
	10:17		Sw4			010
	10:25		Sw5			011

Date	Time	Relinquished by:	Date	Time	Received by:	Date	Time
8/3/20	0930	<i>[Signature]</i>	8/3/20	0930	<i>[Signature]</i>	8/3/20	0930
8/3/20	1900	<i>[Signature]</i>	8/4/20	8:00	Edm Courier	8/4/20	8:00

Analysis Request

<input checked="" type="checkbox"/> (BTEX) MTBE / TMB's (8021)	<input checked="" type="checkbox"/>
TPH:8015D(GRO / DRO / MRO)	<input checked="" type="checkbox"/>
8081 Pesticides/8082 PCB's	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
<input checked="" type="checkbox"/> Cl ⁻ , Br ⁻ , NO ₃ ⁻ , NO ₂ ⁻ , PO ₄ ⁻ , SO ₄ ⁻	<input checked="" type="checkbox"/>
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: Bill Devon
call Lynn Acosta For WO #



Analytical Report

Report Summary

Client: Souder Miller Associates - Carlsbad

Samples Received: 8/19/2020

Job Number: 01058-0007

Work Order: P008056

Project Name/Location: Ragin Cajun 12 Fed 1H

Report Reviewed By:

A handwritten signature in black ink that reads 'Walter Hinchman'.

Date: 8/21/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNi unless footnoted otherwise.
 Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
 Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
 Envirotech, Inc, holds the Utah TNi certification NM009792018-1 for the data reported.
 Envirotech, Inc, holds the Texas TNi certification T104704557-19-2 for the data reported.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	------------------------------------

Sample Summary

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS2	P008056-01A	Solid	08/14/20	08/19/20	Glass Jar, 4 oz.
CS4	P008056-02A	Solid	08/14/20	08/19/20	Glass Jar, 4 oz.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	-----------------------------

CS2
P008056-01 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						Batch: 2034019
	mg/kg	mg/kg				
Benzene	ND	0.0250	1	08/20/20	08/21/20	
Toluene	ND	0.0250	1	08/20/20	08/21/20	
Ethylbenzene	ND	0.0250	1	08/20/20	08/21/20	
p,m-Xylene	ND	0.0500	1	08/20/20	08/21/20	
o-Xylene	ND	0.0250	1	08/20/20	08/21/20	
Total Xylenes	ND	0.0250	1	08/20/20	08/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						Batch: 2034019
	mg/kg	mg/kg				
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/20/20	08/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		89.3 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						Batch: 2034022
	mg/kg	mg/kg				
Diesel Range Organics (C10-C28)	ND	25.0	1	08/20/20	08/20/20	
Oil Range Organics (C28-C40)	ND	50.0	1	08/20/20	08/20/20	
<i>Surrogate: n-Nonane</i>		94.3 %	50-200	08/20/20	08/20/20	
Anions by EPA 300.0/9056A						Batch: 2034021
	mg/kg	mg/kg				
Chloride	ND	20.0	1	08/20/20	08/20/20	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	-----------------------------

CS4
P008056-02 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						Batch: 2034019
	mg/kg	mg/kg				
Benzene	ND	0.0250	1	08/20/20	08/21/20	
Toluene	ND	0.0250	1	08/20/20	08/21/20	
Ethylbenzene	ND	0.0250	1	08/20/20	08/21/20	
p,m-Xylene	ND	0.0500	1	08/20/20	08/21/20	
o-Xylene	ND	0.0250	1	08/20/20	08/21/20	
Total Xylenes	ND	0.0250	1	08/20/20	08/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - GRO						Batch: 2034019
	mg/kg	mg/kg				
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/20/20	08/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		88.5 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						Batch: 2034022
	mg/kg	mg/kg				
Diesel Range Organics (C10-C28)	ND	25.0	1	08/20/20	08/20/20	
Oil Range Organics (C28-C40)	ND	50.0	1	08/20/20	08/20/20	
<i>Surrogate: n-Nonane</i>		97.2 %	50-200	08/20/20	08/20/20	
Anions by EPA 300.0/9056A						Batch: 2034021
	mg/kg	mg/kg				
Chloride	ND	20.0	1	08/20/20	08/20/20	

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





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

Project Name: Ragin Cajun 12 Fed 1H
Project Number: 01058-0007
Project Manager: Ashley Maxwell

Reported:
08/21/20 14:53

Volatile Organics by EPA 8021B - Quality Control

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source		REC Limits %	REC Limits %	RPD Limit %	Notes
				Result mg/kg	REC %				

Blank (2034019-BLK1)

Prepared & Analyzed: 08/20/20 1

Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.07		8.00		101		50-150		

LCS (2034019-BS1)

Prepared: 08/20/20 1 Analyzed: 08/20/20 2

Benzene	5.22	0.0250	5.00		104		70-130		
Toluene	5.22	0.0250	5.00		104		70-130		
Ethylbenzene	5.19	0.0250	5.00		104		70-130		
p,m-Xylene	10.4	0.0500	10.0		104		70-130		
o-Xylene	5.23	0.0250	5.00		105		70-130		
Total Xylenes	15.6	0.0250	15.0		104		70-130		
Surrogate: 4-Bromochlorobenzene-PID	8.31		8.00		104		50-150		

Matrix Spike (2034019-MS1)

Source: P008049-01

Prepared: 08/20/20 1 Analyzed: 08/20/20 2

Benzene	5.26	0.0250	5.00	ND	105		54-133		
Toluene	5.26	0.0250	5.00	ND	105		61-130		
Ethylbenzene	5.24	0.0250	5.00	ND	105		61-133		
p,m-Xylene	10.5	0.0500	10.0	ND	105		63-131		
o-Xylene	5.25	0.0250	5.00	ND	105		63-131		
Total Xylenes	15.7	0.0250	15.0	ND	105		63-131		
Surrogate: 4-Bromochlorobenzene-PID	8.11		8.00		101		50-150		

Matrix Spike Dup (2034019-MSD1)

Source: P008049-01

Prepared: 08/20/20 1 Analyzed: 08/20/20 2

Benzene	5.38	0.0250	5.00	ND	108		54-133	2.22	20
Toluene	5.36	0.0250	5.00	ND	107		61-130	1.98	20
Ethylbenzene	5.35	0.0250	5.00	ND	107		61-133	2.03	20
p,m-Xylene	10.7	0.0500	10.0	ND	107		63-131	2.06	20
o-Xylene	5.35	0.0250	5.00	ND	107		63-131	1.85	20
Total Xylenes	16.1	0.0250	15.0	ND	107		63-131	1.99	20
Surrogate: 4-Bromochlorobenzene-PID	8.23		8.00		103		50-150		

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	-----------------------------

Nonhalogenated Organics by EPA 8015D - GRO - Quality Control

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	REC %	REC Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2034019-BLK1)

Prepared & Analyzed: 08/20/20 1

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.40		8.00		92.5	50-150			

LCS (2034019-BS2)

Prepared: 08/20/20 1 Analyzed: 08/20/20 2

Gasoline Range Organics (C6-C10)	45.2	20.0	50.0		90.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.46		8.00		93.3	50-150			

Matrix Spike (2034019-MS2)

Source: P008049-01

Prepared: 08/20/20 1 Analyzed: 08/20/20 2

Gasoline Range Organics (C6-C10)	50.0	20.0	50.0	ND	100	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.13		8.00		89.2	50-150			

Matrix Spike Dup (2034019-MSD2)

Source: P008049-01

Prepared: 08/20/20 1 Analyzed: 08/20/20 2

Gasoline Range Organics (C6-C10)	49.4	20.0	50.0	ND	98.8	70-130	1.30	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.27		8.00		90.9	50-150			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	-----------------------------

Nonhalogenated Organics by EPA 8015D - DRO/ORO - Quality Control

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	REC %	REC Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2034022-BLK1) Prepared & Analyzed: 08/20/20 1

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C40)	ND	50.0							
Surrogate: n-Nonane	53.7		50.0		107	50-200			

LCS (2034022-BS1) Prepared & Analyzed: 08/20/20 1

Diesel Range Organics (C10-C28)	442	25.0	500		88.3	38-132			
Surrogate: n-Nonane	51.0		50.0		102	50-200			

Matrix Spike (2034022-MS1) Source: P008049-01 Prepared: 08/20/20 1 Analyzed: 08/21/20 0

Diesel Range Organics (C10-C28)	1110	250	500	920	38.6	38-132			
Surrogate: n-Nonane	60.4		50.0		121	50-200			

Matrix Spike Dup (2034022-MSD1) Source: P008049-01 Prepared: 08/20/20 1 Analyzed: 08/21/20 0

Diesel Range Organics (C10-C28)	964	250	500	920	8.89	38-132	14.3	20	M2
Surrogate: n-Nonane	58.4		50.0		117	50-200			

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	-----------------------------

Anions by EPA 300.0/9056A - Quality Control

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	REC %	REC Limits %	RPD %	RPD Limit %	Notes
Blank (2034021-BLK1)									
Chloride	ND	20.0							Prepared & Analyzed: 08/20/20 1
LCS (2034021-BS1)									
Chloride	247	20.0	250		98.6	90-110			Prepared & Analyzed: 08/20/20 1
Matrix Spike (2034021-MS1)									
Chloride	264	20.0	250	ND	106	80-120			Source: P008049-01 Prepared & Analyzed: 08/20/20 1
Matrix Spike Dup (2034021-MSD1)									
Chloride	261	20.0	250	ND	104	80-120	1.18	20	Source: P008049-01 Prepared & Analyzed: 08/20/20 1

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.





Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Ragin Cajun 12 Fed 1H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:53
--	--	------------------------------------

Notes and Definitions

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

** Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.



0105B-0007 PL 8/19/20

Client: <u>SMA</u>		Bill To		Lab Use Only		TAT		EPA Program							
Project: <u>Ragin Cajun 12 Feet 1H</u>				Lab WO#	Job Number	1D	3D	RCRA	CWA	SDWA					
Project Manager: <u>Ashley Maxwell</u>		Attention:		<u>P008656</u>		<u>19026-0001</u>									
Address: <u>201 S. Halcyon St.</u>		Address:		Analysis and Method							State				
City, State, Zip: <u>Carlsbad NM</u>		City, State, Zip:		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	BGDOC - TX	NM	CO	UT	AZ
Phone: <u>(609) 721-4813</u>		Phone:										TX	OK		
Email:		Email:										Remarks			
Report due by: <u>8-21</u>															

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	BGDOC - TX	Remarks
9:20	8/14/20	Soil	1-4oz	CS2	1	X	X	X		X				
9:28	L	L	L	CS4	2	L	L	L		L				

Additional Instructions: Bill Devon

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: _____

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>8/17/20</u>	Time <u>2:00pm</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>8-17-2020</u>	Time <u>1400</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>8-18-2020</u>	Time <u>16:45</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>8/19/20</u>	Time <u>10:40</u>	
Relinquished by: (Signature) _____	Date _____	Time _____	Received by: (Signature) _____	Date _____	Time _____	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Received by: OCD: 8/26/2020 3:30:32 PM Page 10 of 10 Page 75 of 82

APPENDIX E PHOTO LOG



☉ 44°NE (T) ● 32°3'1"N, 103°25'13"W ±9ft ▲ 3286ft



180 210 240 270 300 330

☀ 265°W (T) ● 32°3'2"N, 103°25'13"W ±13ft ▲ 3284ft





☀ 12°N (T) ● 32°3'2"N, 103°25'13"W ±13ft ▲ 3283ft



0

30

60

90

☀ 44°NE (T) ● 32°3'2"N, 103°25'13"W ±13ft ▲ 3283ft



30 Jul 2020, 14:50:12

120

150

180

210

2

☀ 168°S (T) ● 32°3'2"N, 103°25'13"W ±13ft ▲ 3283ft



150

180

210

240

270

300

330

☉ 242°SW (T) ☉ 32°3'2"N, 103°25'13"W ±13ft ▲ 3284ft

