



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

December 8, 2020

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

5E29133-BG21

SUBJECT: Remediation Closure Report for the Fighting Okra 18 CTB 4 Release (NRM2013964055),  
Carlsbad, 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 Fighting Okra 18 CTB 4 site. The site is in Unit C, Section 18, 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	Fighting Okra 18 CTB 4	Company	Devon Energy Production Company
API Number	N/A	Location	32.048002, -103.509601
Incident Number	NRM2013964055		
Estimated Date of Release	5/7/2020	Date Reported to NMOCD	5/15/2020
Landowner	Federal	Reported To	NMOCD, BLM
Source of Release	Fluid released from a broken sight glass.		
Released Volume	2 bbls 4 bbls	Released Material	Crude Oil & Produced Water
Recovered Volume	2 bbls 3 bbls	Net Release	1 bbls
NMOCD Closure Criteria	<50 feet to groundwater		
SMA Response Dates	6/4/2020, 6/15/2020, 9/18/2020, 11/16/2020		

## **1.0 Background**

On May 7, 2020, a release was discovered at the Fighting Okra 18 CTB 4 site resulting from a broken sight glass releasing a mixture of produced water and crude oil. These contaminants remained on the developed portion of the pad. Initial response was conducted by Devon personnel, which included source elimination and containment activities, also a vacuum truck was on location which recovered approximately five (5) barrels of fluid, that was hauled off to and properly disposed of at North Delaware Basin Landfill near Jal, New Mexico. 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 Fighting Okra 18 CTB 4 is located approximately 20 miles to the south west of Jal, New Mexico on Federal (BLM) land at an elevation of approximately 3,364 feet above mean sea level (amsl).

Based upon water well data (Appendix B), depth to groundwater in the area is estimated to be 196 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/](https://gis.ose.state.nm.us/gisapps/ose_pod_locations/); accessed 10/30/2020). The nearest significant watercourse is a manmade pond, located approximately 3700 feet to the north 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.

Due to lack of supportable groundwater depth information, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of less than 50 feet bgs. To the extent possible, the site has been restored to meet the standards of Table I of 19.15.29.12 NMAC.

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 June 4, 15 and September 18, 2020 SMA performed site delineation activities by collecting soil samples around the release site and throughout the visibly stained area. 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 eight (8) sample locations (L1-L5 and SW1-SW3) were investigated using a hand auger, to depth of three feet bgs. A total of twenty-four (24) 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.

As summarized in Table 3, results indicated that an area approximately 35 feet by 45 feet by 1 foot in depth had been impacted.

On November 16, 2020 SMA returned to the site to guide the excavation activities of the contaminated soil. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on November 12, 2020 that closure samples were expected to be collected in the referenced four (4) business days.

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Confirmation samples were comprised of five-point composites of the base (CS1 - CS5) at a depth of two feet bgs, and of the walls (SW1-SW3), and represents approximately every 200 ft<sup>2</sup> of excavated area. A total of eight (8) samples were collected for laboratory analysis. 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 Analytical Laboratories, located in Albuquerque, New Mexico (Appendix D), and by the methods described above.

Figures 3a and 3b shows the initial and final sample locations, as well as the extent of the excavation. Laboratory results are summarized in Tables 3a and 3b.

#### **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.

SMA recommends no further action and requests closure of the Incident Number NRM2013964055.

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



Ashley Maxwell  
Project Manager

Reviewed by:



Shawna Chubbuck  
Senior Scientist

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## **ATTACHMENTS:**

### **Figures:**

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Surface Water Radius Map

Figure 3a: Initial Site and Sample Location Map

Figure 3b: Final Site and Closure Sample Location Map

### **Tables:**

Table 2: NMOCD Closure Criteria Justification

Table 3a: Summary of Initial Sample Results

Table 3b: Summary of Closure Sample Results

### **Appendices:**

Appendix A: Form C141

Appendix B: NMOSE Wells Report

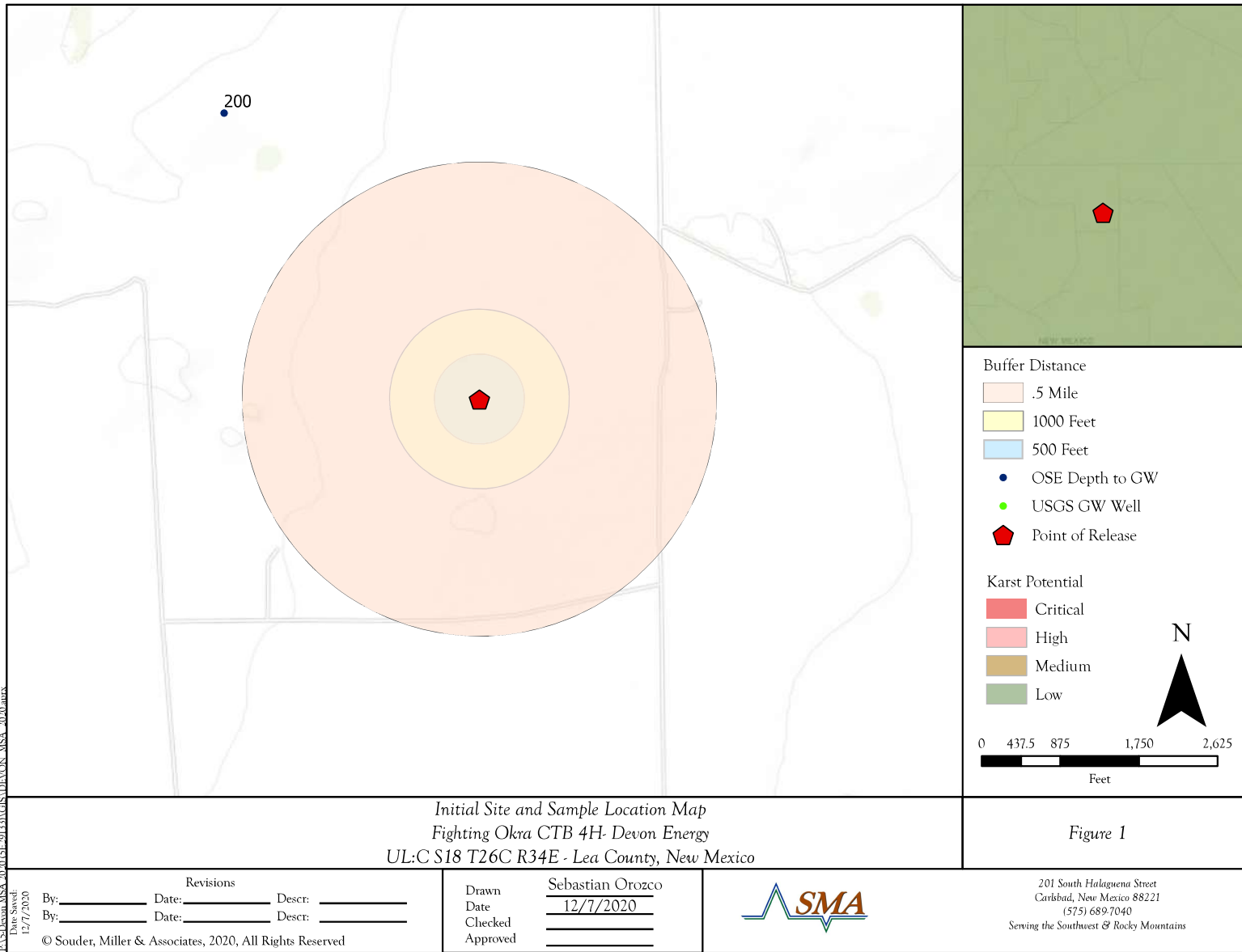
Appendix C: Sampling Protocol and Field Notes

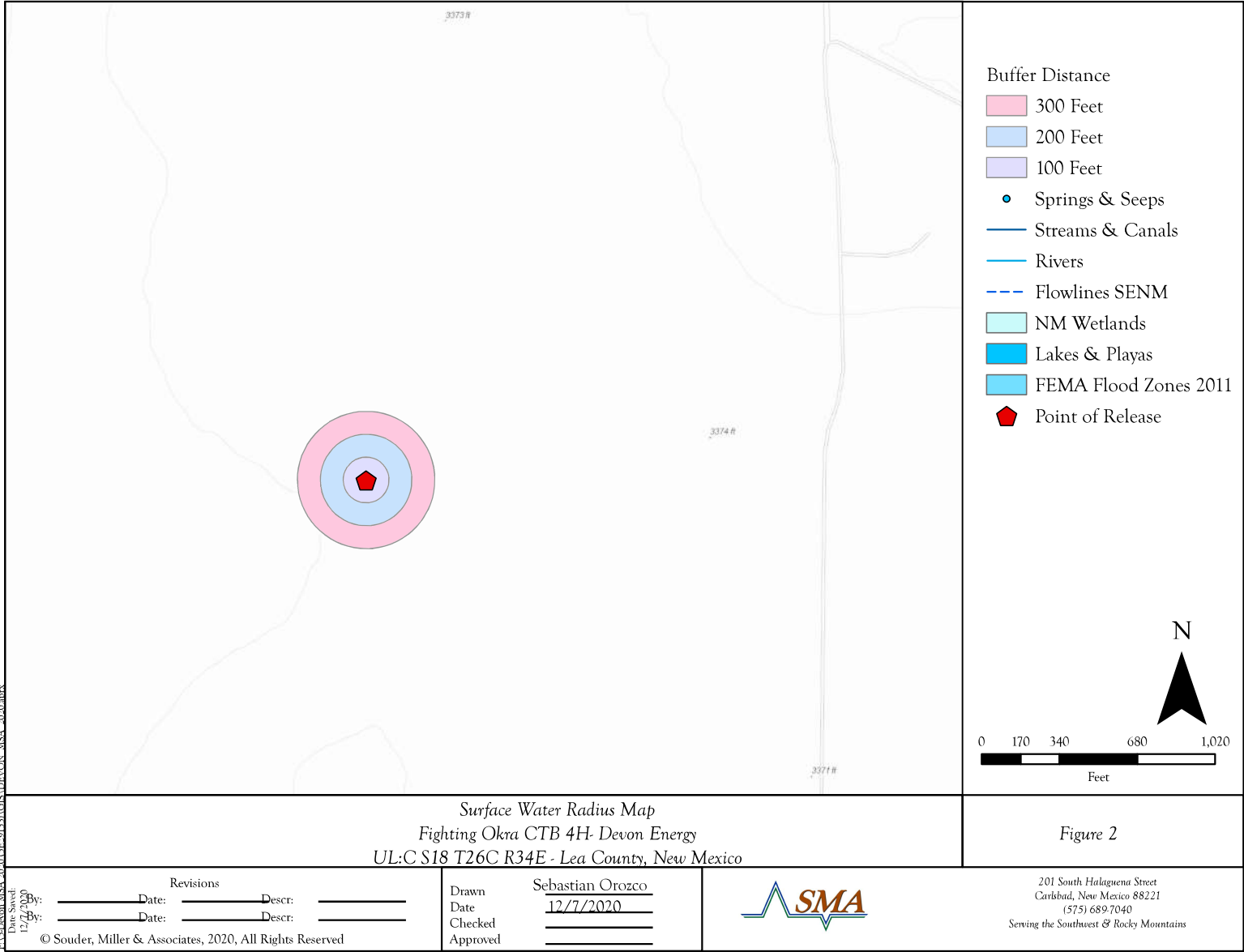
Appendix D: Laboratory Analytical Reports

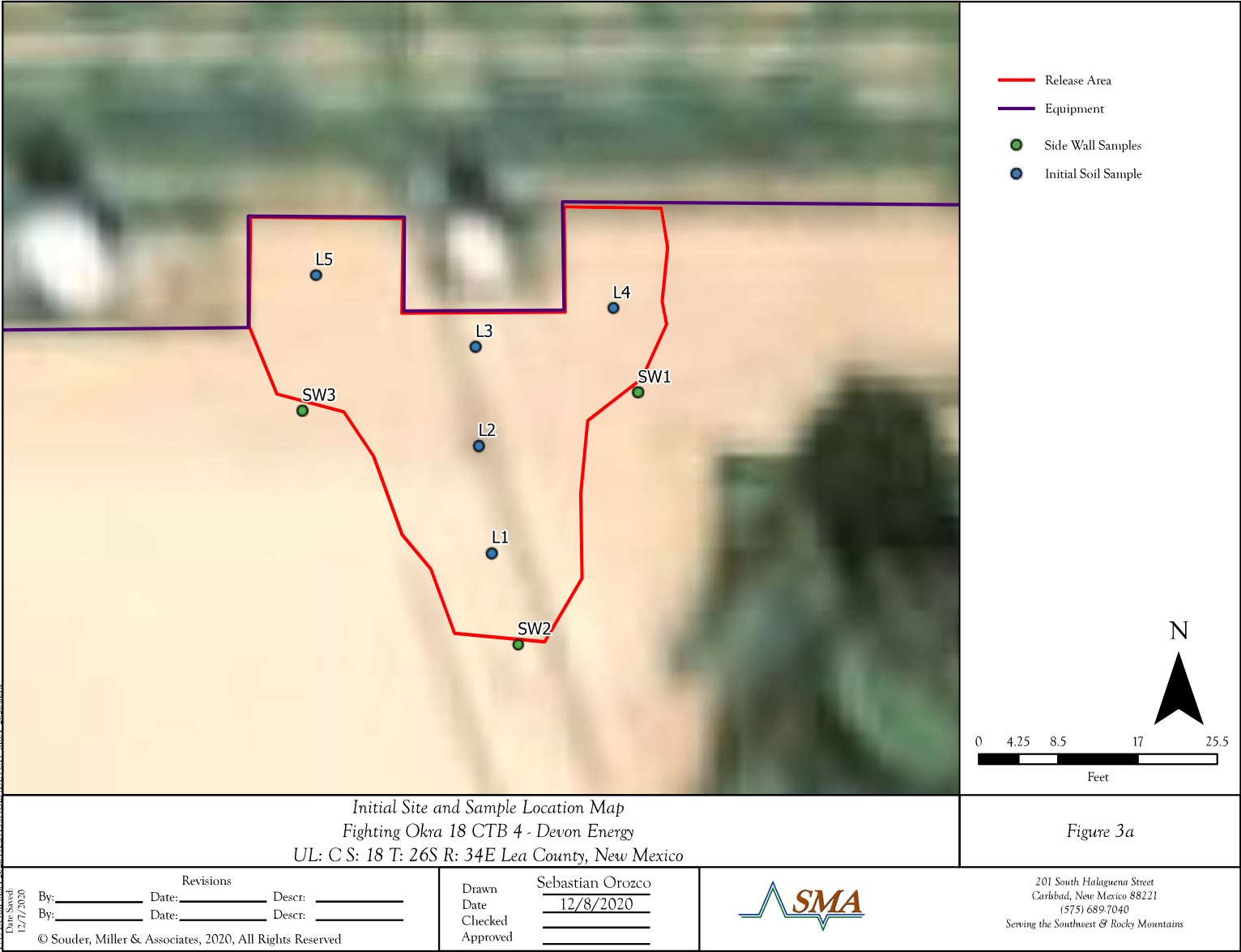
Appendix E: Photo Log

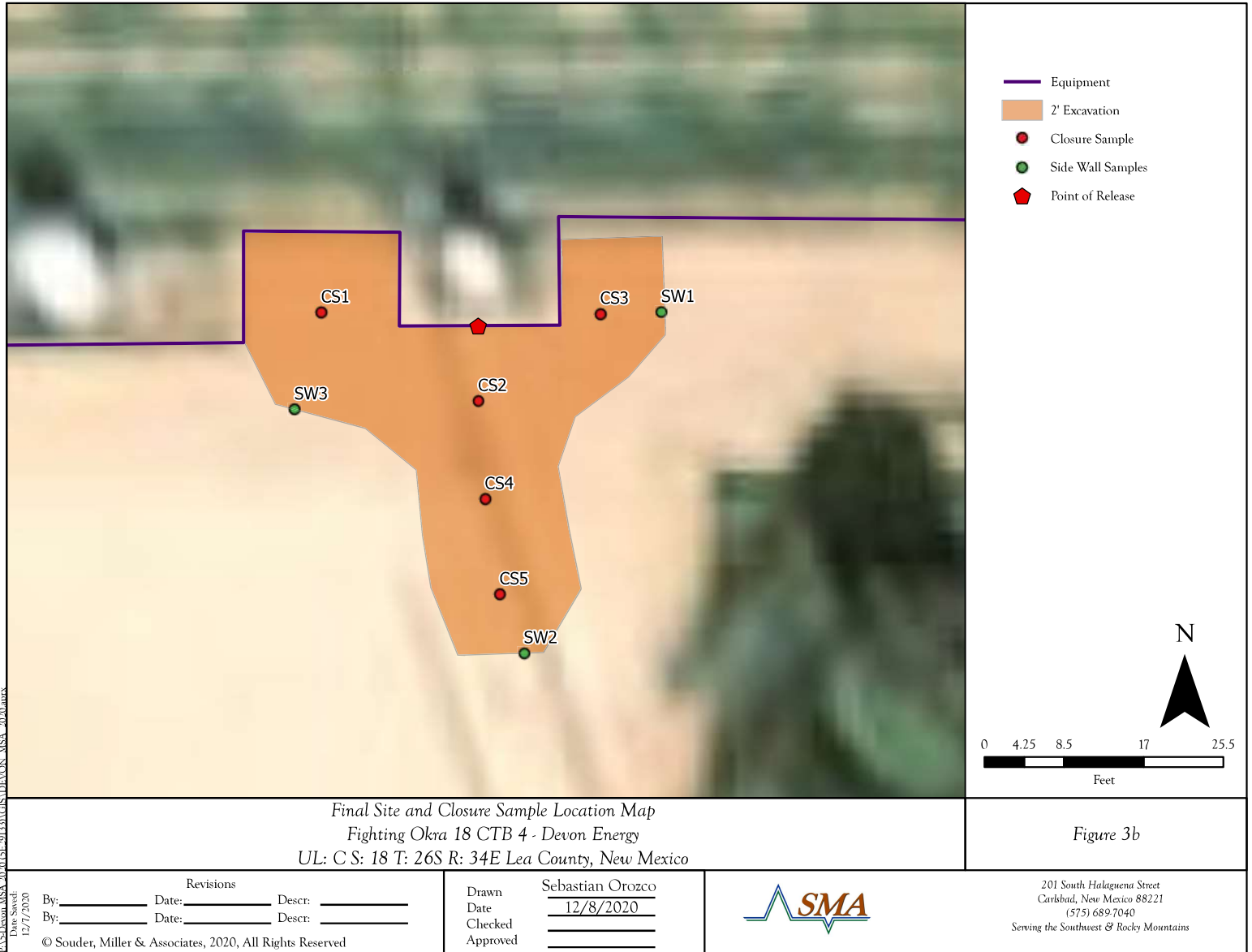


# FIGURES









# TABLES

Table 2:  
NMOCD Closure CriteriaDevon Energy  
Fighting Okra 18-19 CTB 4

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	193	New Mexico Office of the State Engineer
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	-	NA
Horizontal Distance to Nearest Significant Watercourse (ft)	3,700	Man-made pond

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride *numerical limit or background, whichever is greater	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	yes or no	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 3a:  
Initial Sample ResultsDevon Energy  
Fighting Okra CTB 4

Sample ID	Sample Date	Depth of Sample (feet bgs)	Action Taken	Method 8021B		Method 8015D				Method 300.0
				BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Closure Criteria				50	10				100	600
L1	6/4/2020	Surface	Excavate	74.86	0.26	1,700	68,000	38,000	107,700	160
		2	Excavate	0.17	<0.025	8.3	180	110	298.3	<60
		3	In-situ	<0.220	<0.024	<4.9	38.0	<49	38.0	<60
L2	6/4/2020	Surface	Excavate	136.5	1.5	2,600	61,000	27,000	90,600	16,000
		2	Excavate	<0.219	<0.024	6.7	78.0	53.0	137.7	<60
		3	In-situ	<0.224	<0.025	<5.0	<9.7	<48	<62.7	<60
L3	6/4/2020	Surface	Excavate	15.2	<0.12	380	28,000	14,000	42,380	830
		2	In-situ	<0.221	<0.025	<4.9	<9.5	<48	<62.4	<60
		3	In-situ	<0.220	<0.024	<4.9	<9.9	<50	<64.8	<60
L4	6/4/2020	Surface	Excavate	13.179	0.079	240	37,000	19,000	56,240	360
		2	In-situ	<0.225	<0.025	<5.0	15.0	<46	15.0	<60
		3	In-situ	<0.220	<0.024	<4.9	<9.7	<48	<62.6	<60
L5	6/4/2020	Surface	Excavate	1.865	0.025	43	29,000	13,000	42,043	18,000
		2	In-situ	<0.224	<0.025	<5.0	<9.4	<47	<61.4	<60
		3	In-situ	<0.225	<0.025	<5.0	410	260	670	500
SW1	6/4/2020	Surface	Excavate	<0.219	<0.024	<4.9	880	760	1,640	1,300
	6/15/2020		Excavate	<0.212	<0.024	<4.7	150	210	360	960
	9/18/2020		In-situ	<0.225	<0.025	<5.0	<9.7	<49	<64	<61
SW2	6/4/2020	Surface	Excavate	<0.221	<0.025	<4.9	710	640	1,350	1,400
	6/15/2020		Excavate	<0.224	<0.025	<5.0	130	150	280	1,400
	9/18/2020		In-situ	<0.222	<0.025	<4.9	27.0	74.0	101	<60
SW3	6/4/2020	Surface	Excavate	<0.224	<0.025	<5.0	650	610	1,260	1,400
	6/15/2020		Excavate	<0.2147	<0.024	<4.8	160	210	370	1,100
	9/18/2020		In-situ	<0.220	<0.024	<4.9	16.0	<44	16.0	<60

"--" = Not Analyzed

BG: Background sample

SMA #



Sample ID	Sample Date	Depth of Sample (feet bgs)	Action Taken	Method 8021B		Method 8015D				Method 300.0
				BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Closure Criteria				50	10				100	600
CS1	11/16/2020	2	Excavated	<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
CS2				<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
CS3				<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
CS4				<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
CS5				<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
SW1		0-2		<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
SW2				<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
SW3				<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0

"--" = Not Analyzed

BG: Background sample

# 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	NRM2013964055
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Devon Energy Production Company	OGRID 6137
Contact Name Lupe Carrasco	Contact Telephone 575-748-0165
Contact email Lupe.Carrasco@dvn.com	Incident # (assigned by OCD)
Contact mailing address 6488 Seven Rivers HWY	

### Location of Release Source

Latitude 32.048002 Longitude -103.509601  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Fighting Okra 18 CTB 4	Site Type Central Tank Battery
Date Release Discovered 5/7/2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
C	18	26S	34E	Lea

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 checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 2 BBLS	Volume Recovered (bbls) 2 BBLS
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 4 BBLS	Volume Recovered (bbls) 3 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 Fluid released from a broken sight glass.

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Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" 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 checked="" 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:  Spill was not in containment.	
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: <u>Kendra DeHoyos</u>	Title: <u>EHS Associate</u>
Signature: <u>Kendra DeHoyos</u>	Date: <u>5/15/2020</u>
email: <u>kendra.dehoyos@dvn.com</u>	Telephone: <u>575-748-3371</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	

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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?	<u>196</u> (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 <b>not</b> 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.

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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: \_\_\_\_\_ 1/28/21 \_\_\_\_\_

email: \_\_\_\_\_ Lupe.Carrasco@dm.com \_\_\_\_\_ Telephone: \_\_\_\_\_ 575-748-0165 \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	NRM2013964055
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: 1/28/21

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

### OCD Only

Received by: Chad Hensley Date: 03/25/2021

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: Chad Hensley Date: 03/25/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

# APPENDIX B

## NMOSE WELLS REPORT





# APPENDIX C

## SAMPLING PROTOCOL & FIELD NOTES



## 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 Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis. 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 carrier 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.

## SUBJECT

Fighting OTRA 4H

## PROJECT

PAGE

**CLIENT**

Devon Energy

DATE 11/13

By

BY Johnston C.

AP1: 30-025-44444

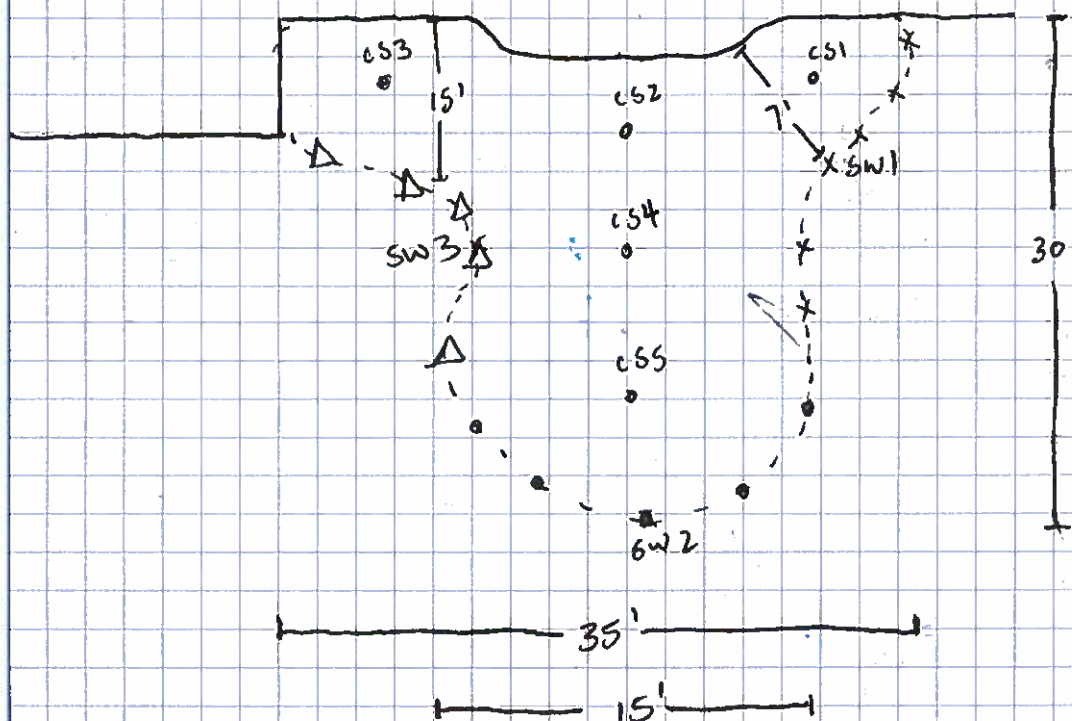
**CHECKED**

BY

Confirmation samples will be taken Monday November 16<sup>th</sup>, 2020.

Nov. 16<sup>th</sup>.

All soil samples were composed of five part composite samples

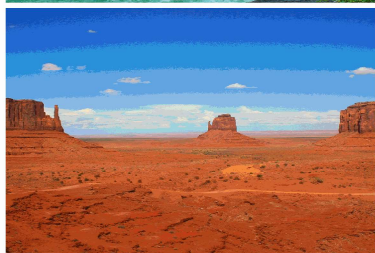
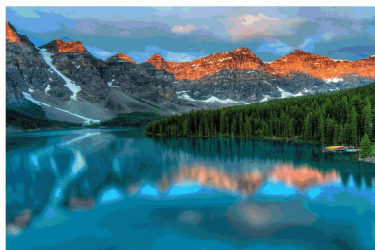


\* Once sampling event was complete we left location.

# APPENDIX D

## LABORATORY ANALYTICAL REPORTS

Report to:  
Ashley Maxwell



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Souder Miller Associates - Carlsbad

Project Name: Fighting Okra 4H

Work Order: E011066

Job Number: 01058-0007

Received: 11/19/2020

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
11/25/20

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted 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 data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 11/25/20

Ashley Maxwell  
201 S Halagueno St.  
Carlsbad, NM 88220



Project Name: Fighting Okra 4H  
Workorder: E011066  
Date Received: 11/19/2020 10:00:00AM

Ashley Maxwell,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/19/2020 10:00:00AM, under the Project Name: Fighting Okra 4H.

The analytical test results summarized in this report with the Project Name: Fighting Okra 4H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Office: 505-632-1881  
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**Alexa Michaels**  
Sample Custody Officer  
Office: 505-632-1881  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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## Sample Summary

Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Fighting Okra 4H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 11/25/20 08:31
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS1	E011066-01A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
CS2	E011066-02A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
CS3	E011066-03A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
CS4	E011066-04A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
CS5	E011066-05A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
SW1	E011066-06A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
SW2	E011066-07A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.
SW3	E011066-08A	Soil	11/16/20	11/19/20	Glass Jar, 4 oz.



## Sample Data

Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Fighting Okra 4H Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 11/25/2020 8:31:42AM
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## CS1

## E011066-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2048001	
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
Surrogate: 4-Bromochlorobenzene-PID	99.4 %	70-130		11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: IY		Batch: 2048001	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	79.8 %	70-130		11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: AC		Batch: 2048004	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/23/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/23/20	
Surrogate: n-Nonane	100 %	50-200		11/23/20	11/23/20	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: NE		Batch: 2048002	
Chloride	ND	20.0	1	11/23/20	11/23/20	



## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## CS2

## E011066-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.6 %	70-130		11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	80.1 %	70-130		11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/23/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/23/20	
<i>Surrogate: n-Nonane</i>						
	88.0 %	50-200		11/23/20	11/23/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	



## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## CS3

## E011066-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		78.9 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/23/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/23/20	
<i>Surrogate: n-Nonane</i>						
		86.4 %	50-200	11/23/20	11/23/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	



## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## CS4

## E011066-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.9 %	70-130		11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	79.1 %	70-130		11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/24/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/24/20	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		11/23/20	11/24/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	



## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## CS5

## E011066-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		79.3 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/24/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/24/20	
<i>Surrogate: n-Nonane</i>						
		94.3 %	50-200	11/23/20	11/24/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	



## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## SW1

## E011066-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		79.5 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/24/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/24/20	
<i>Surrogate: n-Nonane</i>						
		98.2 %	50-200	11/23/20	11/24/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	



## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## SW2

## E011066-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		79.2 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/24/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/24/20	
<i>Surrogate: n-Nonane</i>						
		98.9 %	50-200	11/23/20	11/24/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	





## Sample Data

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

Project Name: Fighting Okra 4H  
Project Number: 01058-0007  
Project Manager: Ashley Maxwell

**Reported:**  
11/25/2020 8:31:42AM

## SW3

## E011066-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Benzene	ND	0.0250	1	11/23/20	11/24/20	
Toluene	ND	0.0250	1	11/23/20	11/24/20	
Ethylbenzene	ND	0.0250	1	11/23/20	11/24/20	
p,m-Xylene	ND	0.0500	1	11/23/20	11/24/20	
o-Xylene	ND	0.0250	1	11/23/20	11/24/20	
Total Xylenes	ND	0.0250	1	11/23/20	11/24/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: IY		Batch: 2048001
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/23/20	11/24/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		79.5 %	70-130	11/23/20	11/24/20	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: AC		Batch: 2048004
Diesel Range Organics (C10-C28)	ND	25.0	1	11/23/20	11/24/20	
Oil Range Organics (C28-C35)	ND	50.0	1	11/23/20	11/24/20	
<i>Surrogate: n-Nonane</i>						
		102 %	50-200	11/23/20	11/24/20	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: NE		Batch: 2048002
Chloride	ND	20.0	1	11/23/20	11/24/20	



## QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Fighting Okra 4H	<b>Reported:</b>
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	11/25/2020 8:31:42AM

## Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2048001-BLK1)

Prepared: 11/23/20 Analyzed: 11/23/20

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	7.74		8.00		96.8	70-130			

## LCS (2048001-BS1)

Prepared: 11/23/20 Analyzed: 11/23/20

Benzene	4.76	0.0250	5.00		95.3	70-130			
Toluene	4.89	0.0250	5.00		97.7	70-130			
Ethylbenzene	4.85	0.0250	5.00		96.9	70-130			
p,m-Xylene	9.59	0.0500	10.0		95.9	70-130			
o-Xylene	4.78	0.0250	5.00		95.6	70-130			
Total Xylenes	14.4	0.0250	15.0		95.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.88		8.00		98.5	70-130			

## Matrix Spike (2048001-MS1)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Benzene	5.27	0.0250	5.00	ND	105	54-133			
Toluene	5.40	0.0250	5.00	ND	108	61-130			
Ethylbenzene	5.35	0.0250	5.00	ND	107	61-133			
p,m-Xylene	10.6	0.0500	10.0	ND	106	63-131			
o-Xylene	5.23	0.0250	5.00	ND	105	63-131			
Total Xylenes	15.8	0.0250	15.0	ND	105	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.67		8.00		95.9	70-130			

## Matrix Spike Dup (2048001-MSD1)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Benzene	5.11	0.0250	5.00	ND	102	54-133	3.09	20	
Toluene	5.22	0.0250	5.00	ND	104	61-130	3.44	20	
Ethylbenzene	5.17	0.0250	5.00	ND	103	61-133	3.33	20	
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131	3.43	20	
o-Xylene	5.04	0.0250	5.00	ND	101	63-131	3.70	20	
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131	3.52	20	
Surrogate: 4-Bromochlorobenzene-PID	7.74		8.00		96.8	70-130			



## QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Fighting Okra 4H	<b>Reported:</b>
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	11/25/2020 8:31:42AM

## Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2048001-BLK1)

Prepared: 11/23/20 Analyzed: 11/23/20

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.71		8.00		83.9	70-130			

## LCS (2048001-BS2)

Prepared: 11/23/20 Analyzed: 11/23/20

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.44		8.00		80.5	70-130			

## Matrix Spike (2048001-MS2)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Gasoline Range Organics (C6-C10)	48.4	20.0	50.0	ND	96.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.34		8.00		79.2	70-130			

## Matrix Spike Dup (2048001-MSD2)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.3	70-130	4.68	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.26		8.00		78.2	70-130			



## QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Fighting Okra 4H	<b>Reported:</b>
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	11/25/2020 8:31:42AM

## Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AC

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2048004-BLK1)

Prepared: 11/23/20 Analyzed: 11/23/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	48.8		50.0		97.6	50-200			

## LCS (2048004-BS1)

Prepared: 11/23/20 Analyzed: 11/23/20

Diesel Range Organics (C10-C28)	434	25.0	500		86.8	38-132			
Surrogate: n-Nonane	48.2		50.0		96.4	50-200			

## Matrix Spike (2048004-MS1)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Diesel Range Organics (C10-C28)	18000	500	500	15800	451	38-132			M2
Surrogate: n-Nonane	56.8		50.0		114	50-200			

## Matrix Spike Dup (2048004-MSD1)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Diesel Range Organics (C10-C28)	14400	500	500	15800	NR	38-132	22.3	20	M2, R3
Surrogate: n-Nonane	55.4		50.0		111	50-200			



## QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Fighting Okra 4H	<b>Reported:</b>
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	11/25/2020 8:31:42AM

## Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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## Blank (2048002-BLK1)

Prepared: 11/23/20 Analyzed: 11/23/20

Chloride ND 20.0

## LCS (2048002-BS1)

Prepared: 11/23/20 Analyzed: 11/23/20

Chloride 254 20.0 250 102 90-110

## Matrix Spike (2048002-MS1)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Chloride 53100 400 250 55500 NR 80-120 M4

## Matrix Spike Dup (2048002-MSD1)

Source: E011065-01 Prepared: 11/23/20 Analyzed: 11/23/20

Chloride 56000 400 250 55500 173 80-120 5.31 20 M4

## 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.



## Definitions and Notes

Souder Miller Associates - Carlsbad	Project Name:	Fighting Okra 4H	
201 S Halagueno St.	Project Number:	01058-0007	<b>Reported:</b>
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	11/25/20 08:31

M2	Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
M4	Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
R3	The RPD exceeded the acceptance limit. LCS spike recovery met acceptance criteria.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 1

Client: <u>SMA/Devon</u>		Bill To: <u>Devon</u>		Lab Use Only		TAT		EPA Program					
Project: <u>Fighting Okra 4H</u>		Attention: <u>Devon</u>		Lab WO# <u>REC11X06010580007</u>		Job Number		1D	3D	RCRA	CWA	SDWA	
Project Manager: <u>Ashley Maxwell</u>		Address:		Analysis and Method				State					
Address: <u>201 S. Halsey Ave</u>		City, State, Zip		DRO/ORO by 8015		GRO/DRO by 8015		BTEX by 8021		VOC by 8260		Metals 6010	
City, State, Zip: <u>Carlsbad, NM</u>		Phone:		Chloride 300.0		BGDOC - NM		BGDOC - TX		NM		CO UT AZ	
Phone: <u>(619) 721-4813</u>		Email:								TX		OK	
Email: <u>Ashley &amp; Sebastian</u>		Report due by:											
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Remarks							
12:00	11/16	Soil	1-402	CS1	1								
12:05				CS2	2								
12:10				CS3	3								
12:15				CS4	4								
12:20				CS5	5								
12:25				SW1	6								
12:30				SW2	7								
12:35				SW3	8								
Additional Instructions: <u>#2071320</u>													
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling 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>Sebastian C.</u>		Date	Time	Received by: (Signature) <u>[Signature]</u>		Date	Time	Lab Use Only					
Relinquished by: (Signature) <u>[Signature]</u>		Date	Time	Received by: (Signature) <u>[Signature]</u>		Date	Time	Received on ice: <u>Y</u> N					
Relinquished by: (Signature) <u>[Signature]</u>		Date	Time	Received by: (Signature) <u>[Signature]</u>		Date	Time	T1 T2 T3					
		Date	Time			Date	Time	AVG Temp °C <u>4</u>					
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.													



5795 US Highway 64, Farmington, NM 87401  
24 Hour Emergency Response Phone (800) 362-1879

Ph (505) 632-1881 Fx (505) 632-1855

envirotech-inc.com  
labadmin@envirotech-inc.com

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## Envirotech Analytical Laboratory

Printed: 11/19/2020 3:58:57PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Souder Miller Associates - Carlsbad	Date Received:	11/19/20 10:00	Work Order ID:	E011066
Phone:	(505) 325-7535	Date Logged In:	11/19/20 13:21	Logged In By:	Alexa Michaels
Email:	ashley.maxwell@soudermiller.com	Due Date:	11/25/20 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Fed ExComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Email- Ashley &amp; Sebastian

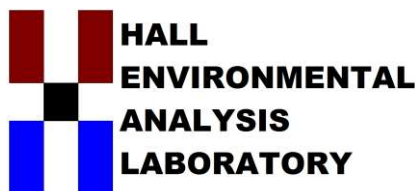
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.





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

September 29, 2020

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

RE: Fighting Okra 18 19 CTB4

OrderNo.: 2009B79

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/22/2020 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](http://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 light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2009B79

Date Reported: 9/29/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW1

Project: Fighting Okra 18 19 CTB4

Collection Date: 9/18/2020 9:45:00 AM

Lab ID: 2009B79-001

Matrix: SOIL

Received Date: 9/22/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	61		mg/Kg	20	9/28/2020 12:49:34 PM	55485
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/23/2020 6:11:49 PM	55363
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/23/2020 6:11:49 PM	55363
Surr: DNOP	94.3	30.4-154		%Rec	1	9/23/2020 6:11:49 PM	55363
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/24/2020 4:52:41 PM	55361
Surr: BFB	87.8	75.3-105		%Rec	1	9/24/2020 4:52:41 PM	55361
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/24/2020 4:52:41 PM	55361
Toluene	ND	0.050		mg/Kg	1	9/24/2020 4:52:41 PM	55361
Ethylbenzene	ND	0.050		mg/Kg	1	9/24/2020 4:52:41 PM	55361
Xylenes, Total	ND	0.10		mg/Kg	1	9/24/2020 4:52:41 PM	55361
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/24/2020 4:52:41 PM	55361

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2009B79

Date Reported: 9/29/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW2

Project: Fighting Okra 18 19 CTB4

Collection Date: 9/18/2020 9:50:00 AM

Lab ID: 2009B79-002

Matrix: SOIL

Received Date: 9/22/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 1:26:47 PM	55485
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	27	8.6		mg/Kg	1	9/23/2020 6:21:54 PM	55363
Motor Oil Range Organics (MRO)	74	43		mg/Kg	1	9/23/2020 6:21:54 PM	55363
Surr: DNOP	99.8	30.4-154		%Rec	1	9/23/2020 6:21:54 PM	55363
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/24/2020 6:03:04 PM	55361
Surr: BFB	86.1	75.3-105		%Rec	1	9/24/2020 6:03:04 PM	55361
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/24/2020 6:03:04 PM	55361
Toluene	ND	0.049		mg/Kg	1	9/24/2020 6:03:04 PM	55361
Ethylbenzene	ND	0.049		mg/Kg	1	9/24/2020 6:03:04 PM	55361
Xylenes, Total	ND	0.099		mg/Kg	1	9/24/2020 6:03:04 PM	55361
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/24/2020 6:03:04 PM	55361

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2009B79

Date Reported: 9/29/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW3

Project: Fighting Okra 18 19 CTB4

Collection Date: 9/18/2020 9:55:00 AM

Lab ID: 2009B79-003

Matrix: SOIL

Received Date: 9/22/2020 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 1:39:11 PM	55485
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	16	8.8		mg/Kg	1	9/23/2020 6:32:00 PM	55363
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/23/2020 6:32:00 PM	55363
Surr: DNOP	95.4	30.4-154		%Rec	1	9/23/2020 6:32:00 PM	55363
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/24/2020 7:13:23 PM	55361
Surr: BFB	90.7	75.3-105		%Rec	1	9/24/2020 7:13:23 PM	55361
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/24/2020 7:13:23 PM	55361
Toluene	ND	0.049		mg/Kg	1	9/24/2020 7:13:23 PM	55361
Ethylbenzene	ND	0.049		mg/Kg	1	9/24/2020 7:13:23 PM	55361
Xylenes, Total	ND	0.098		mg/Kg	1	9/24/2020 7:13:23 PM	55361
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/24/2020 7:13:23 PM	55361

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

<b>Qualifiers:</b>	*	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		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009B79

29-Sep-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 19 CTB4

Sample ID: MB-55485		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 55485		RunNo: 72217						
Prep Date: 9/28/2020		Analysis Date: 9/28/2020		SeqNo: 2532305		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-55485</b>		SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>55485</b>		RunNo: <b>72217</b>						
Prep Date: <b>9/28/2020</b>		Analysis Date: <b>9/28/2020</b>		SeqNo: <b>2532306</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.4	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

Page 4 of 7

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009B79

29-Sep-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 19 CTB4

Sample ID: <b>LCS-55363</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55363</b>	RunNo: <b>72066</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/23/2020</b>	SeqNo: <b>2527107</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	70	130			
Surr: DNOP	4.7		5.000		94.5	30.4	154			

Sample ID: <b>MB-55363</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55363</b>	RunNo: <b>72066</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/23/2020</b>	SeqNo: <b>2527110</b>	Units: <b>mg/Kg</b>							
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	10		10.00		103	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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009B79

29-Sep-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 19 CTB4

Sample ID: <b>2009b79-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SW1</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528264</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.34	0	84.9	61.3	114			
Surr: BFB	990		973.7		102	75.3	105			

Sample ID: <b>2009b79-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SW1</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528266</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	24.83	0	78.7	61.3	114	5.61	20	
Surr: BFB	960		993.0		97.2	75.3	105	0	0	

Sample ID: <b>lcs-55361</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528300</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.4	72.5	106			
Surr: BFB	970		1000		97.0	75.3	105			

Sample ID: <b>mb-55361</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528303</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.2	75.3	105			

**Qualifiers:**

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

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009B79

29-Sep-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 19 CTB4

Sample ID: <b>2009b79-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SW2</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528347</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9443	0	91.4	76.3	120			
Toluene	0.93	0.047	0.9443	0.01320	96.6	78.5	120			
Ethylbenzene	0.95	0.047	0.9443	0	101	78.1	124			
Xylenes, Total	2.9	0.094	2.833	0	101	79.3	125			
Surr: 4-Bromofluorobenzene	0.98		0.9443		103	80	120			

Sample ID: <b>2009b79-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SW2</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528348</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9533	0	85.7	76.3	120	5.42	20	
Toluene	0.90	0.048	0.9533	0.01320	93.5	78.5	120	2.29	20	
Ethylbenzene	0.93	0.048	0.9533	0	97.0	78.1	124	2.55	20	
Xylenes, Total	2.8	0.095	2.860	0	97.7	79.3	125	2.50	20	
Surr: 4-Bromofluorobenzene	0.94		0.9533		98.3	80	120	0	0	

Sample ID: <b>LCS-55361</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528367</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	80	120			
Toluene	0.94	0.050	1.000	0	94.0	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.0	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: <b>mb-55361</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55361</b>	RunNo: <b>72111</b>								
Prep Date: <b>9/22/2020</b>	Analysis Date: <b>9/24/2020</b>	SeqNo: <b>2528369</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

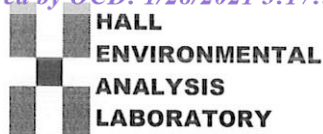
**Qualifiers:**

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

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

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

## Sample Log-In Check List

Client Name: **Souder, Miller & Associat**Work Order Number: **2009B79**

RcptNo: 1

Received By: **Emily Mocho**

9/22/2020 7:30:00 AM

Completed By: **Emily Mocho**

9/21/2020 8:34:42 AM

Reviewed By:

Em 9/22/20

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *Em 9/22/20*

### Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

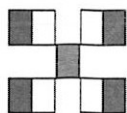
16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good	Not Present			
2	4.8	Good	Not Present			
3	3.7	Good	Not Present			

[illegible]

if necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

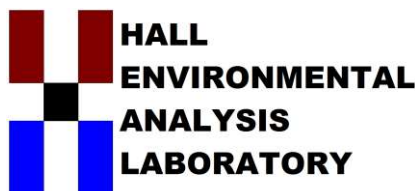
# Analysis Request

[illegible]

Remarks:

$$\begin{aligned} 2.6 \pm 0 &= 2.6 \\ 4.8 \pm 0 &= 4.8 \\ 3.7 \pm 0 &= 3.7 \end{aligned}$$

Bill to Denver



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

June 12, 2020

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

RE: Fighting Okra 18 CTB4

OrderNo.: 2006303

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 18 sample(s) on 6/5/2020 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](http://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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L1-S

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 10:10:00 AM

Lab ID: 2006303-001

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	160	61		mg/Kg	20	6/10/2020 3:44:31 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	1700	50		mg/Kg	10	6/6/2020 12:36:57 PM	52912
Surr: BFB	114	70-130		%Rec	10	6/6/2020 12:36:57 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	68000	960		mg/Kg	100	6/7/2020 6:50:05 PM	52917
Motor Oil Range Organics (MRO)	38000	4800		mg/Kg	100	6/7/2020 6:50:05 PM	52917
Surr: DNOP	0	55.1-146	S	%Rec	100	6/7/2020 6:50:05 PM	52917
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	0.26	0.25		mg/Kg	10	6/6/2020 12:36:57 PM	52912
Toluene	12	0.50		mg/Kg	10	6/6/2020 12:36:57 PM	52912
Ethylbenzene	5.6	0.50		mg/Kg	10	6/6/2020 12:36:57 PM	52912
Xylenes, Total	57	1.0		mg/Kg	10	6/6/2020 12:36:57 PM	52912
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	10	6/6/2020 12:36:57 PM	52912
Surr: 4-Bromofluorobenzene	50.7	70-130	S	%Rec	10	6/6/2020 12:36:57 PM	52912
Surr: Dibromofluoromethane	99.5	70-130		%Rec	10	6/6/2020 12:36:57 PM	52912
Surr: Toluene-d8	92.0	70-130		%Rec	10	6/6/2020 12:36:57 PM	52912

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		

Page 1 of 24



## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L1-2'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 10:50:00 AM

Lab ID: 2006303-002

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 4:21:44 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	8.3	5.0		mg/Kg	1	6/6/2020 8:44:48 PM	52912
Surr: BFB	102	70-130		%Rec	1	6/6/2020 8:44:48 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	180	10		mg/Kg	1	6/6/2020 6:36:40 PM	52917
Motor Oil Range Organics (MRO)	110	50		mg/Kg	1	6/6/2020 6:36:40 PM	52917
Surr: DNOP	90.8	55.1-146		%Rec	1	6/6/2020 6:36:40 PM	52917
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/6/2020 8:44:48 PM	52912
Toluene	ND	0.050		mg/Kg	1	6/6/2020 8:44:48 PM	52912
Ethylbenzene	ND	0.050		mg/Kg	1	6/6/2020 8:44:48 PM	52912
Xylenes, Total	0.17	0.099		mg/Kg	1	6/6/2020 8:44:48 PM	52912
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%Rec	1	6/6/2020 8:44:48 PM	52912
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	6/6/2020 8:44:48 PM	52912
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/6/2020 8:44:48 PM	52912
Surr: Toluene-d8	93.5	70-130		%Rec	1	6/6/2020 8:44:48 PM	52912

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L1-3'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:44:00 AM

Lab ID: 2006303-003

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 4:58:57 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/6/2020 9:13:27 PM	52912
Surr: BFB	101	70-130		%Rec	1	6/6/2020 9:13:27 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	38	9.8		mg/Kg	1	6/6/2020 8:13:52 PM	52920
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/6/2020 8:13:52 PM	52920
Surr: DNOP	88.9	55.1-146		%Rec	1	6/6/2020 8:13:52 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	6/6/2020 9:13:27 PM	52912
Toluene	ND	0.049		mg/Kg	1	6/6/2020 9:13:27 PM	52912
Ethylbenzene	ND	0.049		mg/Kg	1	6/6/2020 9:13:27 PM	52912
Xylenes, Total	ND	0.098		mg/Kg	1	6/6/2020 9:13:27 PM	52912
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	6/6/2020 9:13:27 PM	52912
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	6/6/2020 9:13:27 PM	52912
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	6/6/2020 9:13:27 PM	52912
Surr: Toluene-d8	95.7	70-130		%Rec	1	6/6/2020 9:13:27 PM	52912

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L2-S

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 10:14:00 AM

Lab ID: 2006303-004

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	16000	600		mg/Kg	200	6/11/2020 1:43:57 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	2600	250		mg/Kg	50	6/6/2020 9:42:12 PM	52912
Surr: BFB	110	70-130		%Rec	50	6/6/2020 9:42:12 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	61000	940		mg/Kg	100	6/6/2020 9:26:42 PM	52920
Motor Oil Range Organics (MRO)	27000	4700		mg/Kg	100	6/6/2020 9:26:42 PM	52920
Surr: DNOP	0	55.1-146	S	%Rec	100	6/6/2020 9:26:42 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	1.5	0.12		mg/Kg	5	6/6/2020 1:05:27 PM	52912
Toluene	30	2.5		mg/Kg	50	6/6/2020 9:42:12 PM	52912
Ethylbenzene	9.0	0.25		mg/Kg	5	6/6/2020 1:05:27 PM	52912
Xylenes, Total	96	4.9		mg/Kg	50	6/6/2020 9:42:12 PM	52912
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	5	6/6/2020 1:05:27 PM	52912
Surr: 4-Bromofluorobenzene	46.3	70-130	S	%Rec	5	6/6/2020 1:05:27 PM	52912
Surr: Dibromofluoromethane	102	70-130		%Rec	5	6/6/2020 1:05:27 PM	52912
Surr: Toluene-d8	92.2	70-130		%Rec	5	6/6/2020 1:05:27 PM	52912

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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L2-2'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:00:00 AM

Lab ID: 2006303-005

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 5:23:45 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	6.7	4.9		mg/Kg	1	6/6/2020 10:10:44 PM	52912
Surr: BFB	99.3	70-130		%Rec	1	6/6/2020 10:10:44 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	78	9.6		mg/Kg	1	6/6/2020 9:50:54 PM	52920
Motor Oil Range Organics (MRO)	53	48		mg/Kg	1	6/6/2020 9:50:54 PM	52920
Surr: DNOP	92.5	55.1-146		%Rec	1	6/6/2020 9:50:54 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	6/6/2020 10:10:44 PM	52912
Toluene	ND	0.049		mg/Kg	1	6/6/2020 10:10:44 PM	52912
Ethylbenzene	ND	0.049		mg/Kg	1	6/6/2020 10:10:44 PM	52912
Xylenes, Total	ND	0.097		mg/Kg	1	6/6/2020 10:10:44 PM	52912
Surr: 1,2-Dichloroethane-d4	99.1	70-130		%Rec	1	6/6/2020 10:10:44 PM	52912
Surr: 4-Bromofluorobenzene	73.1	70-130		%Rec	1	6/6/2020 10:10:44 PM	52912
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/6/2020 10:10:44 PM	52912
Surr: Toluene-d8	94.4	70-130		%Rec	1	6/6/2020 10:10:44 PM	52912

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L2-3'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:46:00 AM

Lab ID: 2006303-006

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 5:36:10 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2020 1:30:41 AM	52912
Surr: BFB	98.4	70-130		%Rec	1	6/7/2020 1:30:41 AM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/6/2020 10:39:37 PM	52920
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/6/2020 10:39:37 PM	52920
Surr: DNOP	90.7	55.1-146		%Rec	1	6/6/2020 10:39:37 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 1:30:41 AM	52912
Toluene	ND	0.050		mg/Kg	1	6/7/2020 1:30:41 AM	52912
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2020 1:30:41 AM	52912
Xylenes, Total	ND	0.099		mg/Kg	1	6/7/2020 1:30:41 AM	52912
Surr: 1,2-Dichloroethane-d4	94.6	70-130		%Rec	1	6/7/2020 1:30:41 AM	52912
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	6/7/2020 1:30:41 AM	52912
Surr: Dibromofluoromethane	100	70-130		%Rec	1	6/7/2020 1:30:41 AM	52912
Surr: Toluene-d8	100	70-130		%Rec	1	6/7/2020 1:30:41 AM	52912

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L3-S

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 10:16:00 AM

Lab ID: 2006303-007

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	830	60		mg/Kg	20	6/10/2020 5:48:35 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	380	25		mg/Kg	5	6/6/2020 1:33:58 PM	52912
Surr: BFB	112	70-130		%Rec	5	6/6/2020 1:33:58 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	28000	490		mg/Kg	50	6/6/2020 11:04:00 PM	52920
Motor Oil Range Organics (MRO)	14000	2400		mg/Kg	50	6/6/2020 11:04:00 PM	52920
Surr: DNOP	0	55.1-146	S	%Rec	50	6/6/2020 11:04:00 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.12		mg/Kg	5	6/6/2020 1:33:58 PM	52912
Toluene	2.1	0.25		mg/Kg	5	6/6/2020 1:33:58 PM	52912
Ethylbenzene	1.1	0.25		mg/Kg	5	6/6/2020 1:33:58 PM	52912
Xylenes, Total	12	0.49		mg/Kg	5	6/6/2020 1:33:58 PM	52912
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	5	6/6/2020 1:33:58 PM	52912
Surr: 4-Bromofluorobenzene	57.8	70-130	S	%Rec	5	6/6/2020 1:33:58 PM	52912
Surr: Dibromofluoromethane	99.4	70-130		%Rec	5	6/6/2020 1:33:58 PM	52912
Surr: Toluene-d8	91.3	70-130		%Rec	5	6/6/2020 1:33:58 PM	52912

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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L3-2'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:05:00 AM

Lab ID: 2006303-008

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 6:01:00 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2020 1:59:25 AM	52912
Surr: BFB	99.7	70-130		%Rec	1	6/7/2020 1:59:25 AM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/6/2020 11:28:12 PM	52920
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/6/2020 11:28:12 PM	52920
Surr: DNOP	97.7	55.1-146		%Rec	1	6/6/2020 11:28:12 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 1:59:25 AM	52912
Toluene	ND	0.049		mg/Kg	1	6/7/2020 1:59:25 AM	52912
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2020 1:59:25 AM	52912
Xylenes, Total	ND	0.098		mg/Kg	1	6/7/2020 1:59:25 AM	52912
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	6/7/2020 1:59:25 AM	52912
Surr: 4-Bromofluorobenzene	92.1	70-130		%Rec	1	6/7/2020 1:59:25 AM	52912
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/7/2020 1:59:25 AM	52912
Surr: Toluene-d8	92.0	70-130		%Rec	1	6/7/2020 1:59:25 AM	52912

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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L3-3'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:50:00 AM

Lab ID: 2006303-009

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 6:13:25 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2020 2:27:54 AM	52912
Surr: BFB	98.5	70-130		%Rec	1	6/7/2020 2:27:54 AM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	6/6/2020 11:52:33 PM	52920
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/6/2020 11:52:33 PM	52920
Surr: DNOP	106	55.1-146		%Rec	1	6/6/2020 11:52:33 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	6/7/2020 2:27:54 AM	52912
Toluene	ND	0.049		mg/Kg	1	6/7/2020 2:27:54 AM	52912
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2020 2:27:54 AM	52912
Xylenes, Total	ND	0.098		mg/Kg	1	6/7/2020 2:27:54 AM	52912
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%Rec	1	6/7/2020 2:27:54 AM	52912
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	6/7/2020 2:27:54 AM	52912
Surr: Dibromofluoromethane	99.4	70-130		%Rec	1	6/7/2020 2:27:54 AM	52912
Surr: Toluene-d8	93.8	70-130		%Rec	1	6/7/2020 2:27:54 AM	52912

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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L4-S

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 10:20:00 AM

Lab ID: 2006303-010

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	360	60		mg/Kg	20	6/10/2020 6:25:49 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	240	9.9		mg/Kg	2	6/6/2020 2:02:34 PM	52912
Surr: BFB	108	70-130		%Rec	2	6/6/2020 2:02:34 PM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	37000	490		mg/Kg	50	6/7/2020 12:16:50 AM	52920
Motor Oil Range Organics (MRO)	19000	2400		mg/Kg	50	6/7/2020 12:16:50 AM	52920
Surr: DNOP	0	55.1-146	S	%Rec	50	6/7/2020 12:16:50 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	0.079	0.050		mg/Kg	2	6/6/2020 2:02:34 PM	52912
Toluene	2.9	0.099		mg/Kg	2	6/6/2020 2:02:34 PM	52912
Ethylbenzene	1.0	0.099		mg/Kg	2	6/6/2020 2:02:34 PM	52912
Xylenes, Total	9.2	0.20		mg/Kg	2	6/6/2020 2:02:34 PM	52912
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	2	6/6/2020 2:02:34 PM	52912
Surr: 4-Bromofluorobenzene	51.1	70-130	S	%Rec	2	6/6/2020 2:02:34 PM	52912
Surr: Dibromofluoromethane	99.7	70-130		%Rec	2	6/6/2020 2:02:34 PM	52912
Surr: Toluene-d8	91.2	70-130		%Rec	2	6/6/2020 2:02:34 PM	52912

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L4-2'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:08:00 AM

Lab ID: 2006303-011

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 6:38:13 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2020 2:56:30 AM	52912
Surr: BFB	102	70-130		%Rec	1	6/7/2020 2:56:30 AM	52912
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	15	9.1		mg/Kg	1	6/7/2020 12:41:13 AM	52920
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/7/2020 12:41:13 AM	52920
Surr: DNOP	134	55.1-146		%Rec	1	6/7/2020 12:41:13 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 2:56:30 AM	52912
Toluene	ND	0.050		mg/Kg	1	6/7/2020 2:56:30 AM	52912
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2020 2:56:30 AM	52912
Xylenes, Total	ND	0.10		mg/Kg	1	6/7/2020 2:56:30 AM	52912
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	6/7/2020 2:56:30 AM	52912
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	6/7/2020 2:56:30 AM	52912
Surr: Dibromofluoromethane	105	70-130		%Rec	1	6/7/2020 2:56:30 AM	52912
Surr: Toluene-d8	92.6	70-130		%Rec	1	6/7/2020 2:56:30 AM	52912

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L4-3'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:52:00 AM

Lab ID: 2006303-012

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 6:50:37 PM	53001
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2020 3:25:10 AM	52918
Surr: BFB	96.1	70-130		%Rec	1	6/7/2020 3:25:10 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/7/2020 1:05:26 AM	52920
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/7/2020 1:05:26 AM	52920
Surr: DNOP	128	55.1-146		%Rec	1	6/7/2020 1:05:26 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	6/7/2020 3:25:10 AM	52918
Toluene	ND	0.049		mg/Kg	1	6/7/2020 3:25:10 AM	52918
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2020 3:25:10 AM	52918
Xylenes, Total	ND	0.098		mg/Kg	1	6/7/2020 3:25:10 AM	52918
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%Rec	1	6/7/2020 3:25:10 AM	52918
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	6/7/2020 3:25:10 AM	52918
Surr: Dibromofluoromethane	95.9	70-130		%Rec	1	6/7/2020 3:25:10 AM	52918
Surr: Toluene-d8	93.1	70-130		%Rec	1	6/7/2020 3:25:10 AM	52918

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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L5-S

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 10:21:00 AM

Lab ID: 2006303-013

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	16000	600		mg/Kg	200	6/11/2020 1:56:22 PM	53007
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	43	5.0		mg/Kg	1	6/7/2020 4:50:49 AM	52918
Surr: BFB	105	70-130		%Rec	1	6/7/2020 4:50:49 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	29000	470		mg/Kg	50	6/7/2020 1:29:48 AM	52920
Motor Oil Range Organics (MRO)	13000	2400		mg/Kg	50	6/7/2020 1:29:48 AM	52920
Surr: DNOP	0	55.1-146	S	%Rec	50	6/7/2020 1:29:48 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	0.025	0.025		mg/Kg	1	6/7/2020 4:50:49 AM	52918
Toluene	0.50	0.050		mg/Kg	1	6/7/2020 4:50:49 AM	52918
Ethylbenzene	0.14	0.050		mg/Kg	1	6/7/2020 4:50:49 AM	52918
Xylenes, Total	1.2	0.10		mg/Kg	1	6/7/2020 4:50:49 AM	52918
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	6/7/2020 4:50:49 AM	52918
Surr: 4-Bromofluorobenzene	65.9	70-130	S	%Rec	1	6/7/2020 4:50:49 AM	52918
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/7/2020 4:50:49 AM	52918
Surr: Toluene-d8	92.6	70-130		%Rec	1	6/7/2020 4:50:49 AM	52918

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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L5-2'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:12:00 AM

Lab ID: 2006303-014

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	6/10/2020 8:29:54 PM	53007
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2020 5:19:28 AM	52918
Surr: BFB	101	70-130		%Rec	1	6/7/2020 5:19:28 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/7/2020 1:54:03 AM	52920
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/7/2020 1:54:03 AM	52920
Surr: DNOP	125	55.1-146		%Rec	1	6/7/2020 1:54:03 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 5:19:28 AM	52918
Toluene	ND	0.050		mg/Kg	1	6/7/2020 5:19:28 AM	52918
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2020 5:19:28 AM	52918
Xylenes, Total	ND	0.099		mg/Kg	1	6/7/2020 5:19:28 AM	52918
Surr: 1,2-Dichloroethane-d4	92.4	70-130		%Rec	1	6/7/2020 5:19:28 AM	52918
Surr: 4-Bromofluorobenzene	95.7	70-130		%Rec	1	6/7/2020 5:19:28 AM	52918
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	6/7/2020 5:19:28 AM	52918
Surr: Toluene-d8	95.5	70-130		%Rec	1	6/7/2020 5:19:28 AM	52918

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L5-3'

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:55:00 AM

Lab ID: 2006303-015

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	500	59		mg/Kg	20	6/10/2020 8:42:18 PM	53007
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2020 5:48:04 AM	52918
Surr: BFB	104	70-130		%Rec	1	6/7/2020 5:48:04 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	410	9.9		mg/Kg	1	6/7/2020 2:18:20 AM	52920
Motor Oil Range Organics (MRO)	260	50		mg/Kg	1	6/7/2020 2:18:20 AM	52920
Surr: DNOP	109	55.1-146		%Rec	1	6/7/2020 2:18:20 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 5:48:04 AM	52918
Toluene	ND	0.050		mg/Kg	1	6/7/2020 5:48:04 AM	52918
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2020 5:48:04 AM	52918
Xylenes, Total	ND	0.10		mg/Kg	1	6/7/2020 5:48:04 AM	52918
Surr: 1,2-Dichloroethane-d4	95.5	70-130		%Rec	1	6/7/2020 5:48:04 AM	52918
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	6/7/2020 5:48:04 AM	52918
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/7/2020 5:48:04 AM	52918
Surr: Toluene-d8	95.8	70-130		%Rec	1	6/7/2020 5:48:04 AM	52918

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW1

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:16:00 AM

Lab ID: 2006303-016

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	1300	60		mg/Kg	20	6/10/2020 8:54:43 PM	53007
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2020 6:16:33 AM	52918
Surr: BFB	101	70-130		%Rec	1	6/7/2020 6:16:33 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	880	10		mg/Kg	1	6/7/2020 2:42:28 AM	52920
Motor Oil Range Organics (MRO)	760	50		mg/Kg	1	6/7/2020 2:42:28 AM	52920
Surr: DNOP	122	55.1-146		%Rec	1	6/7/2020 2:42:28 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	6/7/2020 6:16:33 AM	52918
Toluene	ND	0.049		mg/Kg	1	6/7/2020 6:16:33 AM	52918
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2020 6:16:33 AM	52918
Xylenes, Total	ND	0.097		mg/Kg	1	6/7/2020 6:16:33 AM	52918
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%Rec	1	6/7/2020 6:16:33 AM	52918
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	6/7/2020 6:16:33 AM	52918
Surr: Dibromofluoromethane	107	70-130		%Rec	1	6/7/2020 6:16:33 AM	52918
Surr: Toluene-d8	95.5	70-130		%Rec	1	6/7/2020 6:16:33 AM	52918

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW2

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:20:00 AM

Lab ID: 2006303-017

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	1400	60		mg/Kg	20	6/10/2020 9:07:07 PM	53007
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/7/2020 6:45:00 AM	52918
Surr: BFB	97.4	70-130		%Rec	1	6/7/2020 6:45:00 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	710	9.9		mg/Kg	1	6/7/2020 3:06:47 AM	52920
Motor Oil Range Organics (MRO)	640	49		mg/Kg	1	6/7/2020 3:06:47 AM	52920
Surr: DNOP	106	55.1-146		%Rec	1	6/7/2020 3:06:47 AM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 6:45:00 AM	52918
Toluene	ND	0.049		mg/Kg	1	6/7/2020 6:45:00 AM	52918
Ethylbenzene	ND	0.049		mg/Kg	1	6/7/2020 6:45:00 AM	52918
Xylenes, Total	ND	0.098		mg/Kg	1	6/7/2020 6:45:00 AM	52918
Surr: 1,2-Dichloroethane-d4	95.8	70-130		%Rec	1	6/7/2020 6:45:00 AM	52918
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	6/7/2020 6:45:00 AM	52918
Surr: Dibromofluoromethane	97.2	70-130		%Rec	1	6/7/2020 6:45:00 AM	52918
Surr: Toluene-d8	96.0	70-130		%Rec	1	6/7/2020 6:45:00 AM	52918

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006303

Date Reported: 6/12/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW3

Project: Fighting Okra 18 CTB4

Collection Date: 6/4/2020 11:28:00 AM

Lab ID: 2006303-018

Matrix: SOIL

Received Date: 6/5/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	1400	60		mg/Kg	20	6/10/2020 9:19:32 PM	53007
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/7/2020 7:13:34 AM	52918
Surr: BFB	95.3	70-130		%Rec	1	6/7/2020 7:13:34 AM	52918
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	650	48		mg/Kg	5	6/7/2020 7:14:26 PM	52920
Motor Oil Range Organics (MRO)	610	240		mg/Kg	5	6/7/2020 7:14:26 PM	52920
Surr: DNOP	131	55.1-146		%Rec	5	6/7/2020 7:14:26 PM	52920
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	6/7/2020 7:13:34 AM	52918
Toluene	ND	0.050		mg/Kg	1	6/7/2020 7:13:34 AM	52918
Ethylbenzene	ND	0.050		mg/Kg	1	6/7/2020 7:13:34 AM	52918
Xylenes, Total	ND	0.099		mg/Kg	1	6/7/2020 7:13:34 AM	52918
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	6/7/2020 7:13:34 AM	52918
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	6/7/2020 7:13:34 AM	52918
Surr: Dibromofluoromethane	103	70-130		%Rec	1	6/7/2020 7:13:34 AM	52918
Surr: Toluene-d8	97.5	70-130		%Rec	1	6/7/2020 7:13:34 AM	52918

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

<b>Qualifiers:</b>	*	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		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2006303

12-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>MB-53001</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53001</b>	RunNo: <b>69560</b>								
Prep Date: <b>6/10/2020</b>	Analysis Date: <b>6/10/2020</b>	SeqNo: <b>2414167</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-53001</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53001</b>	RunNo: <b>69560</b>								
Prep Date: <b>6/10/2020</b>	Analysis Date: <b>6/10/2020</b>	SeqNo: <b>2414168</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.7	90	110			

Sample ID: <b>MB-53007</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53007</b>	RunNo: <b>69560</b>								
Prep Date: <b>6/10/2020</b>	Analysis Date: <b>6/10/2020</b>	SeqNo: <b>2414203</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-53007</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53007</b>	RunNo: <b>69560</b>								
Prep Date: <b>6/10/2020</b>	Analysis Date: <b>6/10/2020</b>	SeqNo: <b>2414204</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2006303

12-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>2006303-003AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>L1-3'</b>	Batch ID: <b>52920</b>	RunNo: <b>69422</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409534</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	70	9.6	47.98	37.87	66.3	47.4	136			
Surr: DNOP	4.0		4.798		83.8	55.1	146			

Sample ID: <b>2006303-003AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>L1-3'</b>	Batch ID: <b>52920</b>	RunNo: <b>69422</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409535</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	9.0	44.84	37.87	49.6	47.4	136	14.7	43.4	
Surr: DNOP	4.0		4.484		89.1	55.1	146	0	0	

Sample ID: <b>LCS-52917</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52917</b>	RunNo: <b>69422</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409555</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	70	130			
Surr: DNOP	3.6		5.000		72.7	55.1	146			

Sample ID: <b>LCS-52920</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52920</b>	RunNo: <b>69422</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409556</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	10	50.00	0	118	70	130			
Surr: DNOP	4.8		5.000		97.0	55.1	146			

Sample ID: <b>MB-52917</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52917</b>	RunNo: <b>69422</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409557</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		84.3	55.1	146			

**Qualifiers:**

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2006303

12-Jun-20

Client: Souder, Miller &amp; Associates

Project: Fighting Okra 18 CTB4

Sample ID: <b>MB-52920</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52920</b>	RunNo: <b>69422</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409558</b>	Units: <b>mg/Kg</b>							
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		110	55.1	146			

### Qualifiers:

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

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2006303

12-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>mb-52912</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52912</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409217</b>	Units: <b>mg/Kg</b>							
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	0.44		0.5000		88.8	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.2	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.2	70	130			
Surr: Toluene-d8	0.47		0.5000		95.0	70	130			

Sample ID: <b>lcs-52912</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>52912</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409218</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		93.0	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		100	70	130			
Surr: Toluene-d8	0.47		0.5000		93.9	70	130			

Sample ID: <b>mb-52918</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52918</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/7/2020</b>	SeqNo: <b>2409303</b>	Units: <b>mg/Kg</b>							
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	0.45		0.5000		90.5	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.6	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.44		0.5000		88.7	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#: 2006303

12-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>Ics-52918</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>52918</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/7/2020</b>	SeqNo: <b>2409315</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	0.99	0.050	1.000	0	99.3	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.6	70	130			
Surr: Dibromofluoromethane	0.49		0.5000		97.4	70	130			
Surr: Toluene-d8	0.47		0.5000		94.8	70	130			

Sample ID: <b>2006303-012ams</b>	SampType: <b>MS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>L4-3'</b>	Batch ID: <b>52918</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/7/2020</b>	SeqNo: <b>2409346</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9737	0	104	71.1	115			
Toluene	0.93	0.049	0.9737	0	95.7	79.6	132			
Ethylbenzene	0.98	0.049	0.9737	0	101	83.8	134			
Xylenes, Total	2.9	0.097	2.921	0	98.7	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.46		0.4869		95.5	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.4869		95.8	70	130			
Surr: Dibromofluoromethane	0.49		0.4869		99.7	70	130			
Surr: Toluene-d8	0.46		0.4869		93.8	70	130			

Sample ID: <b>2006303-012amsd</b>	SampType: <b>MSD4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>L4-3'</b>	Batch ID: <b>52918</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/7/2020</b>	SeqNo: <b>2409357</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9833	0	115	71.1	115			
Toluene	1.1	0.049	0.9833	0	108	79.6	132			
Ethylbenzene	1.1	0.049	0.9833	0	116	83.8	134			
Xylenes, Total	3.5	0.098	2.950	0	119	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.45		0.4916		92.5	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4916		93.5	70	130			
Surr: Dibromofluoromethane	0.49		0.4916		99.9	70	130			
Surr: Toluene-d8	0.47		0.4916		95.0	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#: 2006303

12-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>mb-52912</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52912</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409450</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		102	70	130			

Sample ID: <b>lcs-52912</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52912</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/6/2020</b>	SeqNo: <b>2409459</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.7	70	130			
Surr: BFB	500		500.0		99.9	70	130			

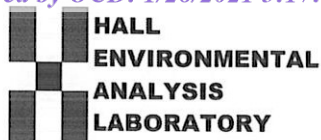
Sample ID: <b>mb-52918</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>52918</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/7/2020</b>	SeqNo: <b>2409485</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	460		500.0		92.7	70	130			

Sample ID: <b>lcs-52918</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>52918</b>	RunNo: <b>69449</b>								
Prep Date: <b>6/5/2020</b>	Analysis Date: <b>6/7/2020</b>	SeqNo: <b>2409486</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	79.8	70	130			
Surr: BFB	500		500.0		100	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: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 2006303

RcptNo: 1

Received By: Juan Rojas

6/5/2020 9:30:00 AM

*Juan Rojas*

Completed By: Desiree Dominguez

6/5/2020 9:49:42 AM

*DD*Reviewed By: *LB**6/5/20*

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *EM 6/5/20*

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.9	Good	Not Present			
2	0.4	Good	Not Present			



## Chain-of-Custody Record

Client: SMA

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Turn-Around Time: 16/10/20

☐ Standard ☐ Rush

Project Name:

Project #: Fighting Okra 18 CTB4

Project Manager:

Ashley Maxwell

Sampler: SOV

On Ice: ☒ Yes ☐ No

# of Coolers: 2 32 6/15/20

Cooler Temp (including CF): 7.9-057.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2006303

Cooler Temp (including CF): 7.9-057.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2006303

Cooler Temp (including CF): 7.9-057.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2006303

Cooler Temp (including CF): 7.9-057.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2006303

Cooler Temp (including CF): 7.9-057.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2006303

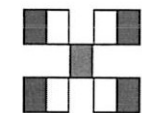
Cooler Temp (including CF): 7.9-057.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2006303



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Total Coliform (Present/Absent)

8270 (Semi-VOA)

8260 (VOA)

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

RCRA 8 Metals

PAHs by 8310 or 8270SIMS

EDB (Method 504.1)

8081 Pesticides/8082 PCB's

TPH:8015D(GRO / DRO / MRO)

BTX: MTBE / TMB's (8021)

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

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Remarks:

Received by: Via: Date Time

Date Time

Received by: Via: Date Time

Date Time

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Date Time

## Chain-of-Custody Record

Client: SMA

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)Turn-Around Time: (6/10/20)  
☐ Standard ☐ Rush  
Project Name: Fighting Okra 18 CTB 4

Project #:

Project Manager:

Ashley Maxwell

Sampler: SOVOn Ice: ☒ Yes ☐ No# of Coolers: 2Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 2.9-0.9 (°C)

## Analysis Request

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

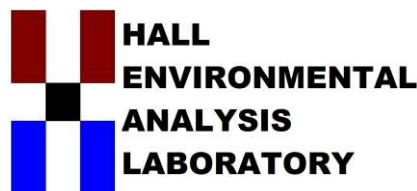
8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks:

Received by: [Signature] Date: 6/4/20 Time: 1400Relinquished by: [Signature]Relinquished by: [Signature]Relinquished by: [Signature]Relinquished by: [Signature]Relinquished by: [Signature]Relinquished by: [Signature]Relinquished by: [Signature]Relinquished by: [Signature]Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30Received by: [Signature] Date: 6/5/20 Time: 9:30





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

June 23, 2020

Ashley Maxwell  
Souder, Miller & Associates  
201 S Halagueno  
Carlsbad, NM 88221  
TEL: (575) 689-8801  
FAX: (505) 327-1496

RE: Fighting Okra 18 CTB4

OrderNo.: 2006852

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/17/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://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".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2006852

Date Reported: 6/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW1

Project: Fighting Okra 18 CTB4

Collection Date: 6/15/2020 12:45:00 PM

Lab ID: 2006852-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	960	61		mg/Kg	20	6/21/2020 10:13:25 PM	53209
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	150	9.9		mg/Kg	1	6/19/2020 9:40:08 PM	53169
Motor Oil Range Organics (MRO)	210	49		mg/Kg	1	6/19/2020 9:40:08 PM	53169
Surr: DNOP	105	55.1-146		%Rec	1	6/19/2020 9:40:08 PM	53169
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/19/2020 11:35:57 PM	53137
Surr: BFB	80.8	66.6-105		%Rec	1	6/19/2020 11:35:57 PM	53137
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	6/19/2020 11:35:57 PM	53137
Toluene	ND	0.047		mg/Kg	1	6/19/2020 11:35:57 PM	53137
Ethylbenzene	ND	0.047		mg/Kg	1	6/19/2020 11:35:57 PM	53137
Xylenes, Total	ND	0.094		mg/Kg	1	6/19/2020 11:35:57 PM	53137
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	6/19/2020 11:35:57 PM	53137

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

<b>Qualifiers:</b>	*	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		

Page 1 of 7



## Analytical Report

Lab Order 2006852

Date Reported: 6/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW2

Project: Fighting Okra 18 CTB4

Collection Date: 6/15/2020 12:50:00 PM

Lab ID: 2006852-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	1400	60		mg/Kg	20	6/21/2020 11:15:27 PM	53209
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	130	9.3		mg/Kg	1	6/19/2020 9:50:23 PM	53169
Motor Oil Range Organics (MRO)	150	47		mg/Kg	1	6/19/2020 9:50:23 PM	53169
Surr: DNOP	89.6	55.1-146		%Rec	1	6/19/2020 9:50:23 PM	53169
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/19/2020 11:59:25 PM	53137
Surr: BFB	78.1	66.6-105		%Rec	1	6/19/2020 11:59:25 PM	53137
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	6/19/2020 11:59:25 PM	53137
Toluene	ND	0.050		mg/Kg	1	6/19/2020 11:59:25 PM	53137
Ethylbenzene	ND	0.050		mg/Kg	1	6/19/2020 11:59:25 PM	53137
Xylenes, Total	ND	0.099		mg/Kg	1	6/19/2020 11:59:25 PM	53137
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/19/2020 11:59:25 PM	53137

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

<b>Qualifiers:</b>	*	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		

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## Analytical Report

Lab Order 2006852

Date Reported: 6/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW3

Project: Fighting Okra 18 CTB4

Collection Date: 6/15/2020 1:05:00 PM

Lab ID: 2006852-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	1100	60		mg/Kg	20	6/21/2020 11:27:51 PM	53209
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	160	9.5		mg/Kg	1	6/19/2020 10:00:45 PM	53169
Motor Oil Range Organics (MRO)	210	48		mg/Kg	1	6/19/2020 10:00:45 PM	53169
Surr: DNOP	94.6	55.1-146		%Rec	1	6/19/2020 10:00:45 PM	53169
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/20/2020 12:22:57 AM	53137
Surr: BFB	77.9	66.6-105		%Rec	1	6/20/2020 12:22:57 AM	53137
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	6/20/2020 12:22:57 AM	53137
Toluene	ND	0.048		mg/Kg	1	6/20/2020 12:22:57 AM	53137
Ethylbenzene	ND	0.048		mg/Kg	1	6/20/2020 12:22:57 AM	53137
Xylenes, Total	ND	0.097		mg/Kg	1	6/20/2020 12:22:57 AM	53137
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/20/2020 12:22:57 AM	53137

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		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2006852

23-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>MB-53209</b>		SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>53209</b>		RunNo: <b>69792</b>						
Prep Date: <b>6/21/2020</b>		Analysis Date: <b>6/21/2020</b>		SeqNo: <b>2423510</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-53209</b>		SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>53209</b>		RunNo: <b>69792</b>						
Prep Date: <b>6/21/2020</b>		Analysis Date: <b>6/21/2020</b>		SeqNo: <b>2423511</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2006852

23-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>LCS-53169</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53169</b>	RunNo: <b>69757</b>								
Prep Date: <b>6/19/2020</b>	Analysis Date: <b>6/19/2020</b>	SeqNo: <b>2421977</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	4.4		5.000		88.0	55.1	146			

Sample ID: <b>MB-53169</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53169</b>	RunNo: <b>69757</b>								
Prep Date: <b>6/19/2020</b>	Analysis Date: <b>6/19/2020</b>	SeqNo: <b>2421979</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		95.6	55.1	146			

Sample ID: <b>LCS-53187</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53187</b>	RunNo: <b>69768</b>								
Prep Date: <b>6/19/2020</b>	Analysis Date: <b>6/20/2020</b>	SeqNo: <b>2422440</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.5		5.000		131	55.1	146			

Sample ID: <b>MB-53187</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53187</b>	RunNo: <b>69768</b>								
Prep Date: <b>6/19/2020</b>	Analysis Date: <b>6/20/2020</b>	SeqNo: <b>2422443</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		115	55.1	146			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical 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#: 2006852

23-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>lcs-53137</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53137</b>	RunNo: <b>69769</b>								
Prep Date: <b>6/17/2020</b>	Analysis Date: <b>6/19/2020</b>	SeqNo: <b>2422183</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	80	120			
Surr: BFB	910		1000		90.9	66.6	105			

Sample ID: <b>mb-53137</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53137</b>	RunNo: <b>69769</b>								
Prep Date: <b>6/17/2020</b>	Analysis Date: <b>6/19/2020</b>	SeqNo: <b>2422184</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	830		1000		83.2	66.6	105			

**Qualifiers:**

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

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2006852

23-Jun-20

**Client:** Souder, Miller & Associates**Project:** Fighting Okra 18 CTB4

Sample ID: <b>LCS-53137</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>53137</b>	RunNo: <b>69769</b>								
Prep Date: <b>6/17/2020</b>	Analysis Date: <b>6/19/2020</b>	SeqNo: <b>2422214</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.6	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.8	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: <b>mb-53137</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>53137</b>	RunNo: <b>69769</b>								
Prep Date: <b>6/17/2020</b>	Analysis Date: <b>6/19/2020</b>	SeqNo: <b>2422215</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

**Qualifiers:**

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RL Reporting Limit

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

## Sample Log-In Check List

Client Name: Souder, Miller & Associates Work Order Number: 2006852 RcptNo: 1

Received By: Emily Mocho 6/17/2020 9:10:00 AM

Completed By: Juan Rojas 6/17/2020 9:56:29 AM

Reviewed By: *em 6/17/20*

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: \_\_\_\_\_

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				







# APPENDIX E PHOTO LOG

N

NE

○ 10°N (T) ● 32°2'53"N, 103°30'34"W ±13ft ▲ 3367ft



0 0°N (T) 32°2'53"N 103°30'34"W ±16M ▲ 3366M



○ 230°SW (T) ● 32°2'53"N 103°30'33"W ±13ft ▲ 3367ft



© 136°SE (T) ● 32°2'53"N 103°30'34"W ±13ft ▲ 3367ft



○ 189°S (T) ● 32°2'53"N, 103°30'34"W ±16ft ▲ 3368ft



0 8°N (T) ● 32°2'53"N 103°30'34"W ±16ft ▲ 3367ft



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 16103

CONDITIONS OF APPROVAL

Operator: DEVON ENERGY PRODUCTION COMPAN			333 West Sheridan Ave.	Oklahoma City, OK73102	OGRID: 6137	Action Number: 16103	Action Type: C-141
OCD Reviewer					Condition		
chensley					None		