

October 6, 2020

#5E29133-BG19

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

NMOCD District 1 1625 N. French Dr Hobbs, New Mexico 88240

SUBJECT: Remediation Plan for the Fighting Okra 18-19 Federal #6H Release (NRM2011458318), Lea County, New Mexico

To Whom it May Concern:

On behalf of Devon Energy Production Company, Souder, Miller & Associates (SMA) has prepared this Remediation Plan that describes the delineation and proposed remediation for a release of liquids related to oil and gas production activities at the Fighting Okra 18-19 Federal #6H site. The site is in Unit A, 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 information regarding the release.

Table 1: Release Information and Closure Criteria							
Name	Fighting Okra 18-19 Federal #6H	Company	Devon Energy Production Company				
API Number	30-025-44445	Location	32.0492541, -103.5039442				
Tracking Number	NRM2011458318						
Estimated Date of Release	4/14/2020	Date Reported to NMOCD	04/18/2020				
Land Owner	Federal	Reported To	NMOCD, BLM				
Source of Release	Underground flowline rupture.						
Released Volume	472.16 BBLS	Released Material	Crude Oil				
Recovered Volume	430 BBLS	Net Release	42.16 BBLS				
NMOCD Closure Criteria	>100 feet to groundwater						
SMA Response Dates	5/12/2020, 6/18/2020						

Fighting Okra 18-19 Fed #6H Remediation Plan October 6, 2020

## 1.0 Background

On April 14, 2020, a release was discovered at the Fighting Okra 18-19 Federal #6H site due to a buried flowline developing a rupture. Initial response activities were conducted by Devon personnel, and included source elimination and containment activities, which recovered approximately 430 barrels of fluid. Figure 1 illustrates the vicinity and site location, Figures 2 and 3 illustrate the release location. The C-141 form is included in Appendix A.

## 2.0 Site Information and Closure Criteria

The Fighting Okra 18-19 Federal #6H is an active production facility located approximately 17 miles from Bennett, New Mexico on Federal (BLM) land at an elevation of approximately 3,374 feet above mean sea level (amsl).

#### Depth to Groundwater

Depth to groundwater is estimated to be 150-220 feet bgs; however, there is no depth to groundwater data within a half- mile radius of the area, according to the New Mexico Office of the State Engineer (NMOSE) online water well database (https://gis.ose.state.nm.us/gisapps/ose\_pod\_locations/; accessed 9/24/2020). Surrounding water well data includes: pod C-02295 is located 0.99 miles to the northwest, with a groundwater depth of 200 feet bgs; C-02292, located 1.94 miles to the north with a groundwater depth of 140 feet bgs; C-02291 is located 2.05 miles to the north with a groundwater depth of 160 feet bgs; C-02293 is located 2.33 miles to the west with a groundwater depth of 135 feet bgs; C-02294 is located 2.35 miles to the west with a groundwater depth of 145 feet bgs. SMA has calculated the estimated depth to groundwater for this site using depth-to-groundwater data from these wells, and elevational differences, and included this information in the attached Table 4.

The depth to groundwater determination also included a design of the groundwater level well network utilizing ordinary kriging and creating a potentiometric surface map of groundwater elevation. The design comes from NMOSE observational data of groundwater levels used to estimate the potential state of the groundwater system. Ordinary kriging provides estimates of the variable and a standard error of the estimate, kriging standard deviation is used as a criterion for the determination of well density, and the GIS-based method was analyzed, results of the method are seen in Figure 1A. A potentiometric surface map was created utilizing thirteen (13) NMOSE water wells in the area. Based on the location of each well and its groundwater elevation, the groundwater gradient for the vicinity of the release is 0.01292 ft/ft with flow direction 252.5 degrees from North (positive y axis) gradient, which was calculated using EPA On-line Tools for Site Assessment Calculation (Appendix D), see Figure 1B. Upon approval from surface owners SMA will perform a depth to groundwater gauging event to confirm depth to groundwater levels.

#### Distance to Nearest Significant Watercourse

The nearest significant watercourse is unnamed playa, located approximately 4,885 feet to the northwest.

Table 2 demonstrates the Closure Criteria applicable to this location. 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. C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of greater than 100 feet bgs.

## 3.0 Release Characterization Activities and Findings

On May 12, 2020 and June 18, 2020 SMA personnel performed site delineation activities at the Fighting Okra 18-19 Federal #6H site. SMA collected soil samples around the release site and throughout the

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Fighting Okra 18-19 Fed #6H Remediation Plan October 6, 2020 Page 3 of 5

visibly stained area. The area of visual impact was located entirely within the boundary of the developed production facility. Soil samples were field-screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 2000 photoionization detector (PID) equipped with a 10.6 eV lamp.

A total of ten (10) sample locations (L1-L6 & SW1-SW4) were investigated using a track hoe excavator, ranging in depths from surface to four feet bgs. A total of 31 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 indicate that an area approximately 188 feet by 75 feet by 1-2 feet deep had been impacted.

### 4.0 Proposed Soil Remediation Work Plan

On behalf of Devon, SMA proposes to confirm depth to groundwater data from surrounding wells using a well-sounder for accurate measurements on accessible wells. For remediation of the site, SMA proposes to excavate up to one (1) foot of contaminated soil, which will be in-situ bioremediated utilizing Bio-Regen SA-1000 (see Appendix E for product information) and Bio-Regen soil Rx (see Appendix F for product information). Once the top foot has received bio-treatment, it will be placed back into the excavated area. Composite confirmation sampling of the affected area will be collected from the bio-remediated soil at 60 days to ensure successful treatment. Soil samples will be collected using a hand-auger to one-foot depth and will be field screened for chloride using an EC meter and for hydrocarbon impacts using a calibrated MiniRAE 2000 photoionization detector (PID) and Dexsil® PetroFLAG TPH Analyzer.

Confirmation samples will be comprised of representative wall and base 5-point composite samples, each representing 200 ft<sup>2</sup> of bioremediated area, as demonstrated on Figure 3A. The confirmation samples will be collected from within the excavated area in accordance with the sampling protocol included in Appendix C.

Approximately 704 cubic yards of contaminated soil is projected to be treated in- situ and reworked in order to return the surface to previous contours. Upon approval by NMOCD, the projected timeline for completion of remediation activities is approximately twelve (12) weeks from the approved workplan.

## 5.0 Scope and Limitations

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

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Fighting Okra 18-19 Fed #6H Remediation Plan October 6, 2020

If there are any questions regarding this report, please contact either Ashley Maxwell at 505-320-9241 or Shawna Chubbuck at 505-325-7535.

Submitted by: SOUDER, MILLER & ASSOCIATES Reviewed by:

Ashley Maxwell Project Manager

hauna Chubbuck

Shawna Chubbuck Senior Scientist

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#### **REFERENCES:**

https://www3.epa.gov/ceampubl/learn2model/part-two/onsite/gradient4plus-ns.html

New Mexico Office of the State Engineer (NMOSE) online water well database https://gis.ose.state.nm.us/gisapps/ose\_pod\_locations/; accessed Click or tap to enter a date.

#### ATTACHMENTS:

#### Figures:

Figure 1: Site Map Figure 1A: Potential Depth to Groundwater Model Map Figure 1B: Potentiometric Surface Map Figure 2: Surface Water Radius Map Figure 3: Site and Sample Location Map Figure 3A: Proposed Bioremediation and Confirmation Sample Location

#### Tables:

Table 2: NMOCD Closure Criteria JustificationTable 3: Summary of Sample ResultsTable 4: Estimated Depth to Groundwater

#### Appendices:

Appendix A: Form C141 Appendix B: NMOSE Wells Report Appendix C: Field Documents Appendix D: EPA On-line Tools for Site Assessment Calculation Appendix E: Safety Data Sheet SA-1000 Appendix F: Safety Data Sheet Soil Rx Appendix G: Laboratory Analytical Reports

# FIGURES

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	Buffer Distance
	300 Feet
	200 Feet
	100 Feet
	• Springs & Seeps
	— Rivers
	Flowlines SENM
	NM Wetlands
	Lakes & Playas
	FEMA Flood Zones 2011
	Point of Release
	N
ž	
	0 270 540 1,080 1,620
	Feet
Surface Water Protection Map	<b>D</b> : 2
Fighting Okra 18-19 Federal OH - Devon Energy 32.0492541N, 103 5039442W Lea County New Mexico	Figure 2
Revisions Revisions Sebastian Orozco	201 South Halaguena Street
By:         Date:         Descr:         Date         6/10/2020           By:         Date:         Descr:         Checked         6/10/2020	Carlsbad, New Mexico 88221 (575) 689-7040 Serving the Southwart & Pada Mountains
GAČ ≥ © Souder, Miller & Associates, 2020, All Rights Reserved Approved	serving the southwest & Kocky Mountains

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# TABLES

### Table 2: NMOCD Closure Criteria

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)	Source/Notes	
Depth to Groundwater (feet bgs)	150-220	New Mexico Office of the State Engineer
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	NA	United States Geological Survey Topo Map
Hortizontal Distance to Nearest Significant Watercourse (ft)	4,861	United States Geological Survey Topo Map

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)							
	Closure Criteria (units in mg/kg)						
Depth to Groundwater	Chloride *numerical limit or background, whichever is greater	ТРН	GRO + DRO	BTEX	Benzene		
< 50' BGS		600	100		50	10	
51' to 100'		10000	2500	1000	50	10	
>100'	Х	20000	2500	1000	50	10	
Surface Water		if ye	s, then				
<300' from continuously flowing watercourse or other significant watercourse? <200' from lakebed, sinkhole or playa lake?	No No						
water well or water source							
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes? <1000' from fresh water well or spring?	No No						
Human and Other Areas	-	600	100		50	10	
<300' from an occupied permanent residence, school, hospital, institution or church? within incorporated municipal boundaries or within a defined municipal.	No						
fresh water well field?	No						
<100' from wetland?	No						
within area overlying a subsurface mine	No						
within an unstable area?	No	t l					
within a 100-year floodplain?	No						

#### Table 3: Sample Results

Devon Energy
Fighting Okra 18-19 Federal 6H

		Denth of Sample	Action	Method 8021B		Method 8015D				Method 300.0
Sample ID	Sample Date	(feet bgs)	Taken	BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
	NMOCD Clos	sure Criteria (>4 ft)		50	10	1,0	000		2,500	20,000
		Surface	Excavate	<0.213	<0.024	13	20,000	13,000	33,013	24,000
	5/12/2020	1	In-situ	<0.224	<0.025	<5.0	300	120	420	3,500
L1		2	In-situ	<0.225	<0.025	<5.0	360	150	510	3,000
	6/18/2020	3	In-situ	-	-	<4.8	140	98	238	540
	0/10/2020	4	In-situ	-	-	<4.9	39	<47	39	<60
		Surface	Excavate	1.87	<0.024	32	16,000	11,000	27,032	12,000
L2	5/12/2020	1	In-situ	<0.215	<0.024	<4.8	<9.7	<49	<63.5	650
		2	In-situ	<0.216	<0.024	<4.8	25	<49	25	490
	5/12/2020	Surface	Excavate	<0.220	<0.024	<4.9	270	240	510	79,000
13	5/12/2020	1	In-situ	<0.221	<0.025	<4.9	<9.7	<49	<63.6	3,100
LJ	6/18/2020	2	In-situ	-	-	-	-	-	-	<60
0/10/2020	3	In-situ	-	-	-	-	-	-	140	
	5/12/2020 L4	Surface	Excavate	8.844	0.024	98	25,000	16,000	41,098	3,100
14		1	In-situ	19.241	0.041	340	3,100	980	4,420	770
L4		2	In-situ	<0.222	<0.025	<4.9	<9.8	<49	<64	700
	0/10/2020	3	In-situ	<0.217	<0.024	<4.8	<9.5	47	<61	<60
		Surface	Excavate	10.289	0.029	110	28,000	16,000	44,110	6,100
	5/12/2020	1	In-situ	7.71	<0.025	190	2,100	700	2,990	<60
L5		2	In-situ	0.423	<0.024	26	350	150	526	<60
	6/18/2020	3	In-situ	-	-	<4.8	<9.4	<47	<61.2	-
	0/10/2020	4	In-situ	-	-	<4.9	<9.7	<49	<63.6	-
		Surface	Excavate	<0.224	<0.025	<5.0	270	220	490	25,000
L6	5/12/2020	1	In-situ	<0.215	<0.024	<4.8	<9.9	<49	<63.7	2,000
	2	In-situ	<0.208	<0.023	<4.6	<9.6	<48	<62.2	260	
C\A/1	5/12/2020	Surface	In-situ	<0.225	<0.025	<5.0	180	170	350	920
2001	6/18/2020	Surface	In-situ	<0.213	<0.024	<4.7	<9.8	<49	<63.5	82
cw2	5/12/2020	Surface	In-situ	<0.222	<0.025	<4.9	340	290	630	2,800
SW2	SW2 6/18/2020	Surface	In-situ	<0.216	<0.024	<4.8	<9.8	<49	<63.6	87
0.475	5/12/2020	Surface	In-situ	<0.225	<0.025	<5.0	220	210	430	1,200
SW3	6/18/2020	Surface	In-situ	<0.213	<0.024	<4.7	<9.5	<48	<62.2	85
SW4	5/12/2020	Surface	In-situ	<0.224	<0.025	<5.0	15	<46	15	120

"--" = Not Analyzed

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BG: Background sample

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Depth To Groundwater				Colculations				
Location Elevation	on (ft):	3374		Caicu				
Well Name	Well Elevation (ft)		Well Depth to GW	Groundwater Elevation	Depth to GW at Location	Distance (Miles)		
C-02295	3347		200	3147	227	0.99		
C-02292	3316		140	3176	198	1.94		
C-02291	3315		160	3155	219	2.05		
C-02293	3330		135	3195	428	2.33		
C-02294	3326		145	3181	136	2.35		
C-02286	6 3300		C-02286 3300		175	3125	249	
C-02313	3319		3319		110	3209	165	
C-02316	3314		50	3264	110			
C-02317	3314		C-02317 3314		50	3264	110	
C-02288	3304		180	3124	250			
C-02289	9 3307		160	3147	227			
C-02290	3303		160	3143	231			
C-03577	7 3260		110	3150	224			
C-02270	3254		270 3254		125	3129	245	
C-02285	3306		220	3086	288			
					3374			
Total # of Wells	15				3307			

Potential Depth to GW at Release: 220.4666666666667

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# APPENDIX A FORM C141

State of New Mexico Energy Minerals and Natural Resources Department

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

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Incident ID	NRM2011458318
District RP	
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

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

## **Location of Release Source**

(NAD 83 in decimal degrees to 5 decimal places)

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

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: \_

## Nature and Volume of Release

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

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

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B-	_

#### Oil Conservation Division

Incident ID	NRM2011458318
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
Yes No	
If YES, was immediate no	otice 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

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name:	Title:
Signature: Kendra DeHoyos	Date:
email:	Telephone:
OCD Only	
Received by: Ramona Marcus	Date: <u>4/23/2020</u>

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Oil Conservation Division

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Incident ID	NRM2011458318
District RP	
Facility ID	
Application ID	

# Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🔀 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🔀 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🔀 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🔀 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🔀 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🔀 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🔀 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🔀 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and 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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Page 4	Oil Conservation Division	n	District RP	
			Facility ID	
			Application ID	
I hereby certify that regulations all opera public health or the failed to adequately addition, OCD acce and/or regulations. Printed Name: Signature:	the information given above is true and complete to t itors are required to report and/or file certain release m environment. The acceptance of a C-141 report by th investigate and remediate contamination that pose a t ptance of a C-141 report does not relieve the operator	he best of my knowledge an notifications and perform co the OCD does not relieve the hreat to groundwater, surfa- of responsibility for compl EHS Profes Date:10/15/2020	nd understand that pursu rrective actions for relea operator of liability sho ce water, human health iance with any other fed ssional	ant to OCD rules and ases which may endanger build their operations have or the environment. In leral, state, or local laws
email:Lupe.Ca	rrasco@dvn.com	Telephone:575	-748	
OCD Only Received by:	Cristina Eads	Date: 01/15	5/2021	

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Oil Conservation Division

Incident ID	NRM2011458318
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineating

Scaled sitemap with GPS coordinates showing delineation points

XX Estimated volume of material to be remediated

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Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

<b>Deferral Requests Only:</b> Each of the following items must be confirmed as part of any request for deferral of remediation.		
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.		
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human heal	th, the environment, or groundwater.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Printed Name:Lupe Carrasco	EHS Professional	
Signature: Lupe Carrasco	Date:10/15/20	
email:Lupe.Carrasco@dvn.com	Telephone:575-748-0165	
OCD Only		
Received by: Cristina Eads	Date:01/15/2021	
$\Box$ Approved $$ Approved with Attached Conditions of	f Approval Denied Deferral Approved	
Signature: Justu og	Date: 01/15/2021	

NRM2011458318

Contaminated Soil measurement		Soil measurement
Area (square feet)		Depth(inches)
<u>12974</u>		<u>3.000</u>
Cubic Feet of S	oil Impacted	3243.500
Barrels of So	il Impacted	578.16
Soil T	ype	Clay/Sand
Barrels of Oil Assuming 100% Saturation		<u>86.72</u>
Saturation	Fluid pre	sent with shovel/backhoe
Estimated Barrels of Oil Released		86.72
2	Free Standi	ng Fluid Only
Area (squa	are <mark>fe</mark> et)	Depth(inches)
<u>129</u>	<u>74</u>	<u>2.000</u>
Standin	g fluid	385.443
Total fluid	s spilled	<u>472.167</u>

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# APPENDIX B NMOSE WELLS REPORT



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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file )	(R=POD been repl O=orpha C=the fil	has laced, ned, e is		(	qua	rtei	rs are	1=NW	/ 2=NE	3=SW 4=SI	E)				
water fight file.)	closed)			(	qua	rtei	rs are	smalle	est to lar	gest) (N	NAD83 UTM in m	eters)	(In feet)		
		POD Sub-		Q	Q	Q								W۶	ater
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	Х	Y	DistanceDepth	WellDepthW	ater Col	umn
<u>C 02295</u>		CUB	LE	2	2	4	12	26S	33E	639865	3547624 🌍	1568	250	200	50
<u>C 02292 POD1</u>		CUB	LE	4	1	2	06	26S	34E	640992	3549987 🌍	3123	200	140	60
<u>C 03442 POD1</u>		С	LE	4	1	2	06	26S	34E	641056	3550028 🌍	3159	251		
<u>C 03441 POD1</u>		С	LE	4	1	2	06	26S	34E	640971	3550039 🌍	3177	250		
<u>C 02291</u>		CUB	LE	1	1	2	06	26S	34E	640825	3550140* 🌍	3292	220	160	60
<u>C 02293</u>		CUB	LE	2	2	1	14	26S	33E	637501	3546975 🌍	3742	200	135	65
<u>C 02294</u>		CUB	LE	4	4	3	11	26S	33E	637465	3547003 🌍	3778	200	145	55
<u>C 02288</u>		CUB	LE	4	4	4	03	26S	33E	636646	3548758 🌍	4967	220	180	40
<u>C 02289</u>		CUB	LE	4	4	4	03	26S	33E	636612	3548675* 🌍	4967	200	160	40
											Averag	ge Depth to Water:		160 feet	
												Minimum Depth:		135 feet	
												Maximum Depth:		200 feet	
Record Count: 9															
UTMNAD83 Radius	<u>s Search (ir</u>	<u>1 meters</u>	) <u>:</u>												
Easting (X): 641	1241.96		North	ing	<b>(Y</b>	):	3546	873.8			<b>Radius:</b> 5000				
*UTM location was derived	from PLSS	- see Help	)												
The data is furnished by the laccuracy, completeness, reliable	NMOSE/ISC pility, usabilit	and is acc y, or suita	cepted by th bility for an	ie re y pa	cipi rticu	ent ılar	with t purpo	he expr se of th	essed un e data.	derstanding t	that the OSE/ISC ma	ke no warranties, exp	ressed or implie	d, concernir	ng the
9/23/20 3:50 PM												WATER COLUM WATER	IN/ AVERAG	E DEPTH '	ТО

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# APPENDIX C FIELD DOCUMENTS

5/12/20 Fighting Okra 18-19 Fed 6H 10:00 am : Arrived on location, filled out JHA and mapped contampleted area. - Spill was located on the southern portion of the well pad, not sure if considered pasture since it is located outside of berm 1.1 adjacent to road. 1. 6. 6 N SWI 3 <u>v2</u> L 3 0 4 -6 0 -5 w 3 189 - Six soil samples were collected down to a depth of 2' except for ) J (13 214), a thick layer of caliche was encountered 1 } difficult to dig post I'. - Additionaly four sale wall sumples were collecting, starting worth 5.5 and continuiny clockwise. --0

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. Released to Imaging: 1/15/2021 1:53:15 PM

	Lo	cation	Name:			Date	
5.11. 01.	18-19	Fod 6	H			5/12/20	
Sample Name:	Soil Type:	Depth (BGS)	Collection Time:	EC (ppm)	Temp (°C)	PID Reading	PF
L1	Sand	S	10:40			67ppm	
		1'	10:44			118 ppm	
		2'	10:48			68.5ppm	
1-2		5	10:50			159 ppm	
		1'	[0:53			10.1ppm	
		2'	10:56			14.3ppm	
L3		5'	10:58			i. Sppm	
		1'	11-11			1 ppm	
L4		5	1113			27312m	
		1'	11:19			913 ppm #	e
15	2	5	11:28			286 ppm	
		1'	11:31			1112 ppm *	
		2'	11:39			332 ppm.	
16		S	11:41			2.0 ppm	
		1'	11:44			1.4ppm	
		2'	11:48			1.3ppm.	
SWI		5	12:00			1. Yppm	
SWZ			12:15			1.Sppm	
SW3			12:25			1. Церт	
SWY		+	12:38			1. Цррт	
						_	

# APPENDIX D EPA ON-LINE TOOLS FOR SITE ASSESSMENT CALCULATION

SEPA United States Environmental Protection https://www3.epa.gov/ceampubl/learn2model/part-two/onsite/gradient4plus-ns.html

# **EPA On-line Tools for Site Assessment Calculation**

Hydraulic Gradient -- Magnitude and Direction

Gradient Calculation from fitting a plane to as many as thirty points

```
a x_1 + b y_1 + c = h_1

a x_2 + b y_2 + c = h_2

a x_3 + b y_3 + c = h_3

...

a x_{30} + b y_{30} + c = h_{30}
```

where  $(\boldsymbol{x}_{i},\boldsymbol{y}_{i})$  are the coordinates of the well and  $\boldsymbol{h}_{i}$  is the head

 $i = 1, 2, 3, \dots, 30$ 

The coefficients a, b, and c are calculated by a least-squares fitting of the the data to a plane

The gradient is calculated from the square root of  $(a^2 + b^2)$  and the angle from the arctangent of a/b or b/a depending on the quadrant



Inputs

		· · · · · · · · · · · · · · · · · · ·					
Example Dat	a Set 1	Example Data	Set 2 Ca	Iculate Clear			
Save Data		Recall Data	Go Back				
Site Name		Fighting Okra	-ighting Okra #6H				
Date		9/25/2020	Cu	rrent Date			
Calculation ba	asis	Head	✓				
Coordinates	ft 🗸						
I.D.		x-coordinate	y-coordinate	head ft 🗸			
1) C-02295		639857.01	3547709.10	3147			
2) C-02292		640992.32	3549989.77	3176			
3) C-02291		640825.58	3550143.89	3155			
4) C-02293		637499.92	3546980.23	3195			
5) C-00294		637465.92	3547005.47	3181			
6) C-02286		636471.48	3548716.83	3125			
7) C-02313		636972.36	3552105.26	3209			
8) C-02316		642006.15	3551972.20	3264			
9) C-02317		642006.15	3551972.20	3264			
10) C-02288		636646.55	3548761.62	3124			
11) C-02289		636613.24	3548677.54	3147			
12) C-02290		636539.11	3548771.71	3143			
13) C-03577		636010.54	3543774.56	3150			
14) C-02270		636063.24	3543725.22	3129			
15) C-02285		636614.30	3548857.90	3086			
16)		î	- î	î			

17)		
18)		
19)		
20)		
21)		
22)		
23)		
24)		
25)		
26)		
27)		
28)		
29)		
30)		
Results		

Number of Points Used in Calculation	15
Max. Difference Between Head Values	54.25
Gradient Magnitude (i)	0.01292
Flow direction as degrees from North (positive y axis)	252.5
Coefficient of Determination (R <sup>2</sup> )	0.486
WCMS	

Last updated on 2/23/2016

# APPENDIX E SAFETY DATA SHEET SA-1000



 Safety Data Sheet

 Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

 Revision date: 06/01/2015
 Supersedes: 03/24/15
 Version: 1.0
 Format: GHS
 Language: English (US)

#### **SECTION 1: Identification**

Product	Identifier	
Draduat	Nama	D:- D

Product Name Bio-Regen SA-1000

Product Name Mixture

#### Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

#### Details of the Supplier of the Safety Data Sheet

Manufacturer 3 Tier Technologies, LLC 250 National Place, Suite 142 Longwood, FL 32750

Telephone (General) 877-226-7498

#### **Emergency Telephone Number**

Manufacturer 407-808-4653

#### **SECTION 2: Hazard Identification**

#### **Classification of the Substance or Mixture**

Classification (GHS-US)	Not classified
Label elements	No labeling applicable
Hazard Statements	None
Precautionary Statements	None

#### **Other Information**



#### NFPA Health Hazard

1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

#### NFPA Fire Hazard

0 - Materials that will not burn.

#### **NFPA Reactivity**

0 – Normally stable, even under fire exposure conditions, and are not reactive with water.

06/01/2015

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### **SECTION 3: Composition/Information on Ingredients**

**Substances** Material does not meet the criteria of a substance.

### Mixtures

Bio-Regen SA-1000 is a blended composition "not considered hazardous" under the OSHA Hazard Communication Standard CFR Title 29 1910.1200. All ingredients appear on the EPA TSCA Inventory.

Components	CAS Number	%	Hazardous
Organic Biopolymer	1415-93-6	75	No
RO Water	7732-18-5	15	No
Urea Nitrogen	57-13-6	10	No

Ingredients of <1% have been added to a non-hazardous liquid organic substrate. Active components >5% are identified above.

See Section 11 for Toxicology Information

# SECTION 4: First aid measures

#### **Description of First Aid Measures**

Inhalation Remove to fresh air and keep at rest in a comfortable position for breathing.

- **Skin (or clothing)** Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- **Eye** Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- Ingestion Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

### Most Important Symptoms and Effects, both Acute and Delayed

Refer to Section 11: Toxicological Information.

### Indication of Any Medical Attention and Special Treatment Needed

#### Notes to Physician

All treatments should be based on observed signs and symptoms of distress in patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

<b>SECTION 5: Fire-Fighting Mea</b>	sures	
Extinguishing Media		
Suitable Extinguishing Media	Carbon dioxide. Dry powder. Foam	
Unsuitable Extinguishing Media	Not applicable.	
06/01/2015	Bio-Regen SA-1000 2/7	

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Special Hazards Arising From the Substance or Mixture

Unusual Fire and Explosion Hazards	Not applicable.
Hazardous Combustion Products	Not applicable.
Advice for Firefighters	No special firefighting equipment is needed; however, self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

#### **SECTION 6: Accidental Release Measures**

#### **Personal Precautions, Protective Equipment and Emergency Procedures**

**Personal Precautions** Store in a safe place. Wear approved goggles when handling this product. Wash material off skin with plenty of soap and water. Wash clothing and footwear before reuse. Always wash hands thoroughly after use.

**Emergency Procedures** Not applicable.

**Environmental Precautions** 

#### Methods and Material for Containment and Cleaning Up

**Containment/Clean-Up Measures** Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in a safe manner in accordance with local/national regulations.

#### **SECTION 7: Handling and Storage**

#### **Precautions for Safe Handling**

Handling

Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

#### Conditions for Safe Storage, Including Any Incompatibilities

StorageKeep out of reach of children. Store in a dry, well-ventilated area.Keep container closed when not in use.

Incompatible Materials or Ignition Sources Caustics, oxidizers, reducers.

#### **SECTION 8: Exposure Controls/Personal Protection**

**Control Parameters** 

Exposure Controls

Engineering Measures/Controls None specified.

06/01/2015

**Pictograms** 

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **Personal Protective Equipment**

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Respiratory	MSHA-NIOSH	approved.	No special p	precaution	ns required	1.		
Eye/Face	Protective eye	goggles are	recommen	ded.				
Hands	Wear rubber gl	oves for pro	longed exp	osure; rins	se comple	tely from	skin after o	contact.
Skin/Body	No special prec	cautions req	luired; rinse	complete	ly from ski	in after co	ntact.	
General Industrial Hygiene C	onsiderations	None spec	ifed.					
Environmental Exposure Cor	trols	None spec	ified.					

### **SECTION 9: Physical and Chemical Properties**

Material Description				
Physical Form	Liquid	Appearance - Description	Brown / Black Liquid	
Color	Brown / Black	Odor	Natural / Earthy	
Taste	Data Lacking	Particulate Type	Not relevant	
Particulate Size	Not relevant	Aerosol Type	Not relevant	
Odor Threshold	Data Lacking	Physical and Chemical Properties	Data Lacking	
General Properties				
Boiling Point	>212°F (100°C)	Melting Point	Data Lacking	
Decomposition Temperature	Data Lacking	Heat of Decomposition	Data Lacking	
рН	6.0 - 8.5	Specific Gravity/Relative Density	1.01 – 1.14	
Density	Data Lacking	Bulk Density	Data Lacking	
Water Solubility	99%	Solvent Solubility	Not relevant	
Viscosity	Equivalent to Water	Explosive Properties	Classification criteria not met.	
Oxidizing Properties	Classification criteria not met.			
Volatility				
Vapor Pressure	Equivalent to Water	Vapor Density	Equivalent to Water	
Evaporation Rate	Not Determined	VOC (Wt.)	Negligible	
VOC (Vol.)	Data Lacking	Volatiles (Wt.)	Data Lacking	
Volatiles (Vol.)	Data Lacking			
Flammability				
Flash Point	Not relevant	UEL	Not relevant	
LEL	Not relevant	Autoignition	Not relevant	
Self-Accelerating Decomposition Temperature (SADT)	Not relevant	Heat of Combustion	Not relevant	
Burning Time	Not relevant	Flame Duration	Not relevant	
Flame Height	Not relevant	Flame Extension	Not relevant	
Ignition Distance	Not relevant	Flammability (solid, gas)	Non-flammable	
06/01/2015	Bio-Regen SA-1000		4/7	
# **Bio-Regen SA-1000**

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Environmental			
Half-Life	Data Lacking	Octanol/Water Partition Coefficient	Data Lacking
Coefficient of Water/Oil Distribution	Data Lacking	Bioaccumulation Factor	Data Lacking
Bioconcentration Factor	Data Lacking	Biochemical Oxygen Demand BOD/BOD5	Data Lacking
Chemical Oxygen Demand	Data Lacking	Persistence	Data Lacking
Degredation	Data Lacking		

# **SECTION 10: Stability and Reactivity**

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stable under normal temperatures and pressures.
Possibility of Hazardous Reactions	None known.
Conditions to Avoid	None known.
Incompatible Materials	Strong oxidizing agents, alkalis.
Hazardous Decomposition Products	Carbon oxides (CO, CO2). Sulfur oxides.

# **SECTION 11: Toxicological Information**

### Information of Toxicological Effects

GHS Properties	Classification	
Acute Toxicity	OSHA HCS 2012	Classification criteria not met
Aspiration Hazard	OSHA HCS 2012	Classification criteria not met
Carcinogenicity	OSHA HCS 2012	Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012	Classification criteria not met
Respiratory Sensitization	OSHA HCS 2012	Mild Irritant
Serious Eye Damage/Irritation	OSHA HCS 2012	Mild Irritant
Skin Corrosion/Irritation	OSHA HCS 2012	Classification criteria not met
Skin Sensitization	OSHA HCS 2012	Mild Irritant
STOT-RE	OSHA HCS 2012	Classification criteria not met
STOT-SE	OSHA HCS 2012	Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012	Classification criteria not met

**Target Organs** None.

### Route(s) of Entry/Exposure

### **Potential Health Effects**

#### Inhalation

Acute (Immediate) May cause respiratory irritation. Chronic (Delayed) No data available.

# **Bio-Regen SA-1000**

### Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Skin

•••••	
Acute (Immediate) Chronic (Delayed)	May cause skin irritation. No data available.

### Eye

Acute (Immediate)	Direct contact with the eyes is likely to be irritating.
Chronic (Delayed)	No data available.

#### Ingestion

Acute (Immediate)	May cause gastrointestinal irritation.
Chronic (Delayed)	No data available.

# **SECTION 12: Ecological information**

Toxicity	Material data lacking.
Persistence and Degradability	Material data lacking.
Bioaccumulative Potential	Material data lacking.
Mobility in Soil	Material data lacking.
Other Adverse Effects	No studies have been found.
Other Information	No data is available on the adverse effects of this material on the environment.

# **SECTION 13: Disposal Considerations**

#### **Waste Treatment Methods**

- **Product Waste** Dispose of content in accordance with local, regional, national, and/or international regulations.
- **Packaging Waste** Dispose of container in accordance with local, regional, national, and/or international regulations.

# **SECTION 14: Transport Information**

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
DOT	Not applicable	(N.O.I.) Non Hazardous	Not applicable	Not applicable	Not applicable
TDG	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
IMO/IMDG	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
IATA/ICAO	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**Special Precautions for User** 

None specified.

Transport in Bulk According to

### Annex II of MARPOL 73/78

06/01/2015

Bio-Regen SA-1000

# Bio-Regen SA-1000

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### The IBC Code

None specified.

### **SECTION 15: Regulatory information**

### **US Federal Regulations**

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory.

### **International Regulations**

No additional information available.

### **California Proposition 65**

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

# **SECTION 16: Other Information**

# **Disclaimer/Statement of Liability**

The information for this safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual products use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of Federal, State, Provincial, or local laws. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries, or consequential damages which may result from the use of or reliance on any information contained in this form.

# APPENDIX F SAFETY DATA SHEET SOIL RX



 Safety Data Sheet

 Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

 Revision date: 06/01/2015
 Supersedes: 03/24/15
 Version: 1.0
 Format: GHS
 Language: English (US)

### **SECTION 1: Identification**

Product Identifier	
Product Name	Bio-Regen Soil Rx
Product Name	Mixture
Relevant Identified	Uses of the Substance or Mixture and Uses Advised Against

# Details of the Supplier of the Safety Data Sheet

Manufacturer 3 Tier Technologies, LLC 250 National Place, Suite 142 Longwood, FL 32750

Telephone (General) 877-226-7498

# **Emergency Telephone Number**

Manufacturer 407-808-4653

# **SECTION 2: Hazard Identification**

# **Classification of the Substance or Mixture**

Classification (GHS-US)	Not classified
Label elements	No labeling applicable
Hazard Statements	None
Precautionary Statements	None

# **Other Information**



### NFPA Health Hazard

1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

# NFPA Fire Hazard

0 - Materials that will not burn.

# **NFPA Reactivity**

 $0-\ensuremath{\mathsf{Normally}}$  stable, even under fire exposure conditions, and are not reactive with water.

06/01/2015

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

# **SECTION 3: Composition/Information on Ingredients**

**Substances** Material does not meet the criteria of a substance.

# Mixtures

Bio-Regen Soil Rx is a blended composition "not considered hazardous" under the OSHA Hazard Communication Standard CFR Title 29 1910.1200. All ingredients appear on the EPA TSCA Inventory. All Bacillus Bacteria contained in this product are DSL Listed and Compliant.

Components	CAS Number	%	Hazardous
Organic Biopolymer	1415-93-6	50	No
Bacillus Bacteria	ATCC 18250-7	30	No
RO Water	7732-18-5	10	No
Amino Acids	Various	10	No

Ingredients of <1% have been added to a non-hazardous liquid organic substrate. Active components >5% are identified above.

See Section 11 for Toxicology Information

# **SECTION 4: First aid measures**

# **Description of First Aid Measures**

Inhalation Remove to fresh air and keep at rest in a comfortable position for breathing.

- **Skin (or clothing)** Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.
- **Eye** Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.
- Ingestion Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

# Most Important Symptoms and Effects, both Acute and Delayed

Refer to Section 11: Toxicological Information.

# Indication of Any Medical Attention and Special Treatment Needed

Bio-Regen Soil Rx

# Notes to Physician

All treatments should be based on observed signs and symptoms of distress in patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

# **SECTION 5: Fire-Fighting Measures**

# **Extinguishing Media**

# Suitable Extinguishing Media

Carbon dioxide. Dry powder. Foam

06/01/2015

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Unsuitable Extinguishing Media	Not applicable.	
Special Hazards Arising From the Substance or Mixture		
Unusual Fire and Explosion Hazards	Not applicable.	
Hazardous Combustion Products	Not applicable.	
Advice for Firefighters	No special firefighting equipment is needed; however, self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.	

# SECTION 6: Accidental Release Measures

### **Personal Precautions, Protective Equipment and Emergency Procedures**

Personal PrecautionsStore in a safe place. Wear approved goggles when handling this product. Wash<br/>material off skin with plenty of soap and water. Wash clothing and footwear before<br/>reuse. Always wash hands thoroughly after use.

**Emergency Procedures** Not applicable.

#### **Environmental Precautions**

### Methods and Material for Containment and Cleaning Up

**Containment/Clean-Up Measures** Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in a safe manner in accordance with local/national regulations.

# **SECTION 7: Handling and Storage**

Precautions for Safe Handling							
Handling	Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.						
Conditions for Safe Storage, Including	Conditions for Safe Storage, Including Any Incompatibilities						
Storage	Keep out of reach of children. Store in a dry, well-ventilated area. Keep container closed when not in use.						
Incompatible Materials or Ignition Sources	Caustics, oxidizers, reducers.						

### SECTION 8: Exposure Controls/Personal Protection

**Control Parameters** 

**Exposure Controls** 

**Engineering Measures/Controls** 

None specified.

06/01/2015

Bio-Regen Soil Rx

**Pictograms** 

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **Personal Protective Equipment**

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Respiratory	MSHA-NIOSH	approved.	No special p	precaution	s required.		
Eye/Face	Protective eye	goggles are	erecommen	ded.			
Hands	Wear rubber gl	oves for pro	olonged exp	osure; rins	e complete	ly from skir	n after contact.
Skin/Body	No special pred	cautions rec	quired; rinse	complete	y from skin	after conta	ct.
General Industrial Hygiene C	onsiderations	None spec	cifed.				
Environmental Exposure Cor	ntrols	None spec	cified.				

# **SECTION 9: Physical and Chemical Properties**

Material Description			
Physical Form	Liquid	Appearance - Description	Brown / Black Liquid
Color	Brown / Black	Odor	Mild Citrus Odor
Taste	Data Lacking	Particulate Type	Not relevant
Particulate Size	Not relevant	Aerosol Type	Not relevant
Odor Threshold	Data Lacking	Physical and Chemical Properties	Data Lacking
General Properties			
Boiling Point	>212°F (100°C)	Melting Point	Data Lacking
Decomposition Temperature	Data Lacking	Heat of Decomposition	Data Lacking
рН	6.9 – 9.5	Specific Gravity/Relative Density	1.01 – 1.05
Density	Data Lacking	Bulk Density	Data Lacking
Water Solubility	99%	Solvent Solubility	Not relevant
Viscosity	Equivalent to Water	Explosive Properties	Classification criteria not met.
Oxidizing Properties	Classification criteria not met.		
Volatility			
Vapor Pressure	Equivalent to Water	Vapor Density	Equivalent to Water
Evaporation Rate	Not Determined	VOC (Wt.)	Negligible
VOC (Vol.)	Data Lacking	Volatiles (Wt.)	Data Lacking
Volatiles (Vol.)	Data Lacking		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Self-Accelerating Decomposition Temperature (SADT)	Not relevant	Heat of Combustion	Not relevant
Burning Time	Not relevant	Flame Duration	Not relevant
Flame Height	Not relevant	Flame Extension	Not relevant
Ignition Distance	Not relevant	Flammability (solid, gas)	Non-flammable
06/01/2015	Bio-Regen Soil Rx		4/7

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Environmental			
Half-Life	Data Lacking	Octanol/Water Partition Coefficient	Data Lacking
Coefficient of Water/Oil Distribution	Data Lacking	Bioaccumulation Factor	Data Lacking
Bioconcentration Factor	Data Lacking	Biochemical Oxygen Demand BOD/BOD5	Data Lacking
Chemical Oxygen Demand	Data Lacking	Persistence	Data Lacking
Degredation	Data Lacking		

# **SECTION 10: Stability and Reactivity**

Reactivity	No dangerous reaction known under conditions of normal use.
Chemical Stability	Stable under normal temperatures and pressures.
Possibility of Hazardous Reactions	None known.
Conditions to Avoid	None known.
Incompatible Materials	Strong oxidizing agents, alkalis.
Hazardous Decomposition Products	Carbon oxides (CO, CO2). Sulfur oxides.

# **SECTION 11: Toxicological Information**

### Information of Toxicological Effects

GHS Properties	Classification	
Acute Toxicity	OSHA HCS 2012	Classification criteria not met
Aspiration Hazard	OSHA HCS 2012	Classification criteria not met
Carcinogenicity	OSHA HCS 2012	Classification criteria not met
Germ Cell Mutagenicity	OSHA HCS 2012	Classification criteria not met
Respiratory Sensitization	OSHA HCS 2012	Mild Irritant
Serious Eye Damage/Irritation	OSHA HCS 2012	Mild Irritant
Skin Corrosion/Irritation	OSHA HCS 2012	Classification criteria not met
Skin Sensitization	OSHA HCS 2012	Mild Irritant
STOT-RE	OSHA HCS 2012	Classification criteria not met
STOT-SE	OSHA HCS 2012	Classification criteria not met
Toxicity for Reproduction	OSHA HCS 2012	Classification criteria not met

**Target Organs** None.

### Route(s) of Entry/Exposure

### **Potential Health Effects**

#### Inhalation

Acute (Immediate) May cause respiratory irritation. Chronic (Delayed) No data available.

5/7

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Skin

•	
Acute (Immediate) Chronic (Delayed)	May cause skin irritation. No data available.

### Eye

Acute (Immediate)Direct contact with the eyes is likely to be irritating.Chronic (Delayed)No data available.

#### Ingestion

Acute (Immediate) May cause gastrointestinal irritation. Chronic (Delayed) No data available.

# **SECTION 12: Ecological information**

Toxicity	Material data lacking.
Persistence and Degradability	Material data lacking.
Bioaccumulative Potential	Material data lacking.
Mobility in Soil	Material data lacking.
Other Adverse Effects	No studies have been found.
Other Information	No data is available on the adverse effects of this material on the environment.

### **SECTION 13: Disposal Considerations**

#### **Waste Treatment Methods**

- **Product Waste** Dispose of content in accordance with local, regional, national, and/or international regulations.
- **Packaging Waste** Dispose of container in accordance with local, regional, national, and/or international regulations.

### **SECTION 14: Transport Information**

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(es)	14.4 Packing Group	14.5 Environmental Hazards
DOT	Not applicable	(N.O.I.) Non Hazardous	Not applicable	Not applicable	Not applicable
TDG	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
IMO/IMDG	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
IATA/ICAO	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**Special Precautions for User** 

None specified.

Transport in Bulk According to

#### Annex II of MARPOL 73/78

06/01/2015

Bio-Regen Soil Rx

Safety Data Sheet Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### The IBC Code

None specified.

### **SECTION 15: Regulatory information**

### **US Federal Regulations**

All chemical substances in this product are listed in the EPA (Environmental Protection Agency) TSCA (Toxic Substances Control Act) Inventory.

### **International Regulations**

No additional information available.

### **California Proposition 65**

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

### **SECTION 16: Other Information**

### **Disclaimer/Statement of Liability**

The information for this safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual products use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of Federal, State, Provincial, or local laws. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries, or consequential damages which may result from the use of or reliance on any information contained in this form.

# APPENDIX G LABORATORY ANALYTICAL REPORTS



May 21, 2020

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

RE: Fighting Okra 18 19 Fed 6H

OrderNo.: 2005570

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 20 sample(s) on 5/14/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates <b>Project:</b> Fighting Okra 18 19 Fed 6H	Client Sample ID: L1-Surface Collection Date: 5/12/2020 10:40:00 AM						
Lab ID: 2005570-001	Matrix: SOIL         Received Date: 5/14/2020 9:30:00 AN						
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	24000	1500		mg/Kg	500	5/18/2020 8:11:03 AM	52493
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	20000	500		mg/Kg	50	5/15/2020 8:25:07 AM	52481
Motor Oil Range Organics (MRO)	13000	2500		mg/Kg	50	5/15/2020 8:25:07 AM	52481
Surr: DNOP	0	55.1-146	S	%Rec	50	5/15/2020 8:25:07 AM	52481
EPA METHOD 8015D: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	13	4.7		mg/Kg	1	5/15/2020 8:00:45 PM	52470
Surr: BFB	175	66.6-105	S	%Rec	1	5/15/2020 8:00:45 PM	52470
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	ND	0.024		mg/Kg	1	5/15/2020 8:00:45 PM	52470
Toluene	ND	0.047		mg/Kg	1	5/15/2020 8:00:45 PM	52470
Ethylbenzene	ND	0.047		mg/Kg	1	5/15/2020 8:00:45 PM	52470
Xylenes, Total	0.48	0.095		mg/Kg	1	5/15/2020 8:00:45 PM	52470
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	5/15/2020 8:00:45 PM	52470

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

**Qualifiers:** 

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

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

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates <b>Project:</b> Fighting Okra 18 19 Fed 6H	Client Sample ID: L1-1' Collection Date: 5/12/2020 10:44:00 AM						
Lab ID: 2005570-002	Matrix: SOIL		Recei	ved Dat	e: 5/1	4/2020 9:30:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	3500	150		mg/Kg	50	5/18/2020 8:23:24 AM	52493
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	300	9.6		mg/Kg	1	5/15/2020 9:00:00 AM	52481
Motor Oil Range Organics (MRO)	120	48		mg/Kg	1	5/15/2020 9:00:00 AM	52481
Surr: DNOP	116	55.1-146		%Rec	1	5/15/2020 9:00:00 AM	52481
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2020 9:12:03 PM	52470
Surr: BFB	125	66.6-105	S	%Rec	1	5/15/2020 9:12:03 PM	52470
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	ND	0.025		mg/Kg	1	5/15/2020 9:12:03 PM	52470
Toluene	ND	0.050		mg/Kg	1	5/15/2020 9:12:03 PM	52470
Ethylbenzene	ND	0.050		mg/Kg	1	5/15/2020 9:12:03 PM	52470
Xylenes, Total	ND	0.099		mg/Kg	1	5/15/2020 9:12:03 PM	52470
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	5/15/2020 9:12:03 PM	52470

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall	Environmental	Analysis	Laboratory,	Inc.
		• • • • •		

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates		Cl	ient Sa	ample II	<b>):</b> L1	-2'	
Project:	Fighting Okra 18 19 Fed 6H		(	Collect	tion Dat	e: 5/1	2/2020 10:48:00 AM	
Lab ID:	2005570-003	Matrix: SOIL		Recei	ved Dat	e: 5/1	4/2020 9:30:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS						Analyst:	MRA
Chloride		3000	150		mg/Kg	50	5/18/2020 8:35:44 AM	52493
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst:	BRM
Diesel Ra	ange Organics (DRO)	360	9.9		mg/Kg	1	5/15/2020 9:24:36 AM	52481
Motor Oil	Range Organics (MRO)	150	50		mg/Kg	1	5/15/2020 9:24:36 AM	52481
Surr: D	DNOP	116	55.1-146		%Rec	1	5/15/2020 9:24:36 AM	52481
EPA MET	HOD 8015D: GASOLINE RANG	E					Analyst:	RAA
Gasoline	Range Organics (GRO)	ND	5.0		mg/Kg	1	5/15/2020 10:23:41 PM	52470
Surr: E	3FB	108	66.6-105	S	%Rec	1	5/15/2020 10:23:41 PM	52470
EPA MET	HOD 8021B: VOLATILES						Analyst:	RAA
Benzene		ND	0.025		mg/Kg	1	5/15/2020 10:23:41 PM	52470
Toluene		ND	0.050		mg/Kg	1	5/15/2020 10:23:41 PM	52470
Ethylben	zene	ND	0.050		mg/Kg	1	5/15/2020 10:23:41 PM	52470
Xylenes,	Total	ND	0.10		mg/Kg	1	5/15/2020 10:23:41 PM	52470
Surr: 4	I-Bromofluorobenzene	97.0	80-120		%Rec	1	5/15/2020 10:23:41 PM	52470

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

**Qualifiers:** 

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

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall	Enviro	nmental	Anal	ysis	Lab	oratory	, Inc.
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Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates		Cl	ient Sa	mple II	<b>):</b> L2-	-Surface	
<b>Project:</b> Fighting Okra 18 19 Fed 6H		(	Collect	ion Dat	e: 5/1	2/2020 10:50:00 AM	
Lab ID: 2005570-004	Matrix: SOIL		Recei	ved Dat	e: 5/1-	4/2020 9:30:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	12000	600		mg/Kg	200	5/18/2020 8:48:05 AM	52493
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	16000	480		mg/Kg	50	5/15/2020 9:37:30 AM	52481
Motor Oil Range Organics (MRO)	11000	2400		mg/Kg	50	5/15/2020 9:37:30 AM	52481
Surr: DNOP	0	55.1-146	S	%Rec	50	5/15/2020 9:37:30 AM	52481
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	RAA
Gasoline Range Organics (GRO)	32	4.9		mg/Kg	1	5/15/2020 10:47:26 PM	52470
Surr: BFB	273	66.6-105	S	%Rec	1	5/15/2020 10:47:26 PM	52470
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.024		mg/Kg	1	5/15/2020 10:47:26 PM	52470
Toluene	0.13	0.049		mg/Kg	1	5/15/2020 10:47:26 PM	52470
Ethylbenzene	0.14	0.049		mg/Kg	1	5/15/2020 10:47:26 PM	52470
Xylenes, Total	1.6	0.097		mg/Kg	1	5/15/2020 10:47:26 PM	52470
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	5/15/2020 10:47:26 PM	52470

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

**Qualifiers:** 

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

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates		Cl	ient Sa	ample II	D: L2	2-1'	
Project:	Fighting Okra 18 19 Fed 6H		(	Collect	tion Dat	<b>e:</b> 5/1	12/2020 10:53:00 AM	
Lab ID:	2005570-005	Matrix: SOIL		Recei	ved Dat	<b>e:</b> 5/1	14/2020 9:30:00 AM	
Analyses	5	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS						Analyst	MRA
Chloride		650	60		mg/Kg	20	5/15/2020 8:22:55 PM	52493
EPA MET	THOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel R	ange Organics (DRO)	ND	9.7		mg/Kg	1	5/15/2020 9:49:22 AM	52481
Motor Oi	il Range Organics (MRO)	ND	49		mg/Kg	1	5/15/2020 9:49:22 AM	52481
Surr: I	DNOP	115	55.1-146		%Rec	1	5/15/2020 9:49:22 AM	52481
EPA MET	THOD 8015D: GASOLINE RANG	E					Analyst	RAA
Gasoline	e Range Organics (GRO)	ND	4.8		mg/Kg	1	5/15/2020 11:11:09 PM	52470
Surr: I	BFB	107	66.6-105	S	%Rec	1	5/15/2020 11:11:09 PM	52470
EPA MET	THOD 8021B: VOLATILES						Analyst	RAA
Benzene	9	ND	0.024		mg/Kg	1	5/15/2020 11:11:09 PM	52470
Toluene		ND	0.048		mg/Kg	1	5/15/2020 11:11:09 PM	52470
Ethylben	izene	ND	0.048		mg/Kg	1	5/15/2020 11:11:09 PM	52470
Xylenes,	, Total	ND	0.095		mg/Kg	1	5/15/2020 11:11:09 PM	52470
Surr: 4	4-Bromofluorobenzene	95.6	80-120		%Rec	1	5/15/2020 11:11:09 PM	52470

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

**Qualifiers:** 

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

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

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates		CI	ient Sample II	<b>):</b> L2	-2'	
Project: Fighting Okra 18 19 Fed 6H		(	Direction Date	e: 5/1	2/2020 10:56:00 AM	
Lab ID: 2005570-006	Matrix: SOIL		Received Date	e: 5/1	14/2020 9:30:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	490	59	mg/Kg	20	5/15/2020 8:35:20 PM	52493
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	BRM
Diesel Range Organics (DRO)	25	9.9	mg/Kg	1	5/15/2020 10:13:53 AM	52481
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/15/2020 10:13:53 AM	52481
Surr: DNOP	116	55.1-146	%Rec	1	5/15/2020 10:13:53 AM	52481
EPA METHOD 8015D: GASOLINE RANG	E				Analyst:	RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/15/2020 11:34:41 PM	52470
Surr: BFB	100	66.6-105	%Rec	1	5/15/2020 11:34:41 PM	52470
EPA METHOD 8021B: VOLATILES					Analyst:	RAA
Benzene	ND	0.024	mg/Kg	1	5/15/2020 11:34:41 PM	52470
Toluene	ND	0.048	mg/Kg	1	5/15/2020 11:34:41 PM	52470
Ethylbenzene	ND	0.048	mg/Kg	1	5/15/2020 11:34:41 PM	52470
Xylenes, Total	ND	0.096	mg/Kg	1	5/15/2020 11:34:41 PM	52470
Surr: 4-Bromofluorobenzene	95.6	80-120	%Rec	1	5/15/2020 11:34:41 PM	52470

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

**Qualifiers:** 

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

в Analyte detected in the associated Method Blank

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

**CLIENT:** Souder, Miller & Associates

Fighting Okra 18 19 Fed 6H

Analytical Report

Hall	Environmental	Analysis	Laboratory,	Inc.
		• • • • •		

Lab Order 2005570

Date Reported: 5/21/2020

Client Sample ID: L3-Surface Collection Date: 5/12/2020 10:58:00 AM Received Date: 5/14/2020 9:30:00 AM

Lab ID: 2005570-007	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 5/1	4/2020 9:30:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	79000	3000	mg/Kg	1E-	+ 5/18/2020 9:00:25 AM	52493
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	270	9.6	mg/Kg	1	5/15/2020 10:38:20 AM	52481
Motor Oil Range Organics (MRO)	240	48	mg/Kg	1	5/15/2020 10:38:20 AM	52481
Surr: DNOP	122	55.1-146	%Rec	1	5/15/2020 10:38:20 AM	52481
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/15/2020 11:58:21 PM	52470
Surr: BFB	101	66.6-105	%Rec	1	5/15/2020 11:58:21 PM	52470
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.024	mg/Kg	1	5/15/2020 11:58:21 PM	52470
Toluene	ND	0.049	mg/Kg	1	5/15/2020 11:58:21 PM	52470
Ethylbenzene	ND	0.049	mg/Kg	1	5/15/2020 11:58:21 PM	52470
Xylenes, Total	ND	0.098	mg/Kg	1	5/15/2020 11:58:21 PM	52470
Surr: 4-Bromofluorobenzene	96.5	80-120	%Rec	1	5/15/2020 11:58:21 PM	52470

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

**Qualifiers:** 

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

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

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates		Cl	ient Sample II	<b>):</b> L3	8-1'	
Project:	Fighting Okra 18 19 Fed 6H		(	Collection Date	e: 5/1	12/2020 11:11:00 AM	
Lab ID:	2005570-008	Matrix: SOIL		Received Date	e: 5/1	14/2020 9:30:00 AM	
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analyst:	MRA
Chloride		3100	150	mg/Kg	50	5/18/2020 9:12:47 AM	52493
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	BRM
Diesel Ra	ange Organics (DRO)	ND	9.7	mg/Kg	1	5/15/2020 11:02:38 AM	52481
Motor Oi	I Range Organics (MRO)	ND	49	mg/Kg	1	5/15/2020 11:02:38 AM	52481
Surr: [	ONOP	115	55.1-146	%Rec	1	5/15/2020 11:02:38 AM	52481
EPA MET	HOD 8015D: GASOLINE RANGE	E				Analyst:	RAA
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	5/16/2020 12:22:11 AM	52470
Surr: E	3FB	103	66.6-105	%Rec	1	5/16/2020 12:22:11 AM	52470
EPA MET	HOD 8021B: VOLATILES					Analyst:	RAA
Benzene		ND	0.025	mg/Kg	1	5/16/2020 12:22:11 AM	52470
Toluene		ND	0.049	mg/Kg	1	5/16/2020 12:22:11 AM	52470
Ethylben	zene	ND	0.049	mg/Kg	1	5/16/2020 12:22:11 AM	52470
Xylenes,	Total	ND	0.098	mg/Kg	1	5/16/2020 12:22:11 AM	52470
Surr: 4	4-Bromofluorobenzene	97.1	80-120	%Rec	1	5/16/2020 12:22:11 AM	52470

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates		Cl	ient Sa	ample II	<b>):</b> L4	-Surface		
Project:	Fighting Okra 18 19 Fed 6H	Collection Date: 5/12/2020 11:13:00 AM							
Lab ID:	2005570-009	Matrix: SOIL		Recei	ved Dat	<b>e:</b> 5/1	4/2020 9:30:00 AM		
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch	
EPA MET	THOD 300.0: ANIONS						Analyst:	MRA	
Chloride		3100	150		mg/Kg	50	5/18/2020 9:25:08 AM	52493	
EPA MET	THOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst:	BRM	
Diesel R	ange Organics (DRO)	25000	460		mg/Kg	50	5/15/2020 10:25:38 AM	52481	
Motor Oi	l Range Organics (MRO)	16000	2300		mg/Kg	50	5/15/2020 10:25:38 AM	52481	
Surr: [	DNOP	0	55.1-146	S	%Rec	50	5/15/2020 10:25:38 AM	52481	
EPA MET	THOD 8015D: GASOLINE RANG	E					Analyst	RAA	
Gasoline	Range Organics (GRO)	98	4.6		mg/Kg	1	5/16/2020 12:46:06 AM	52470	
Surr: E	BFB	487	66.6-105	S	%Rec	1	5/16/2020 12:46:06 AM	52470	
EPA MET	THOD 8021B: VOLATILES						Analyst:	RAA	
Benzene		0.024	0.023		mg/Kg	1	5/16/2020 12:46:06 AM	52470	
Toluene		0.96	0.046		mg/Kg	1	5/16/2020 12:46:06 AM	52470	
Ethylben	izene	0.66	0.046		mg/Kg	1	5/16/2020 12:46:06 AM	52470	
Xylenes,	Total	7.2	0.093		mg/Kg	1	5/16/2020 12:46:06 AM	52470	
Surr: 4	4-Bromofluorobenzene	120	80-120		%Rec	1	5/16/2020 12:46:06 AM	52470	

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

**Qualifiers:** 

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

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

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates		Cl	ient Sa	ample II	<b>D:</b> L4	-1'	
Project:	Fighting Okra 18 19 Fed 6H		(	Collect	ion Dat	<b>e:</b> 5/1	2/2020 11:19:00 AM	
Lab ID:	2005570-010	Matrix: SOIL		Recei	ved Dat	<b>e:</b> 5/1	4/2020 9:30:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS						Analyst:	MRA
Chloride		770	60		mg/Kg	20	5/15/2020 9:24:58 PM	52493
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM
Diesel Ra	ange Organics (DRO)	3100	96		mg/Kg	10	5/15/2020 1:05:26 PM	52481
Motor Oil	Range Organics (MRO)	980	480		mg/Kg	10	5/15/2020 1:05:26 PM	52481
Surr: E	DNOP	0	55.1-146	S	%Rec	10	5/15/2020 1:05:26 PM	52481
EPA MET	HOD 8015D: GASOLINE RANG	E					Analyst	RAA
Gasoline	Range Organics (GRO)	340	4.9		mg/Kg	1	5/16/2020 1:09:58 AM	52470
Surr: E	3FB	1550	66.6-105	S	%Rec	1	5/16/2020 1:09:58 AM	52470
EPA MET	HOD 8021B: VOLATILES						Analyst	RAA
Benzene		0.041	0.025		mg/Kg	1	5/16/2020 1:09:58 AM	52470
Toluene		1.8	0.049		mg/Kg	1	5/16/2020 1:09:58 AM	52470
Ethylben	zene	1.4	0.049		mg/Kg	1	5/16/2020 1:09:58 AM	52470
Xylenes,	Total	16	0.98		mg/Kg	10	5/20/2020 11:41:33 AM	52470
Surr: 4	1-Bromofluorobenzene	191	80-120	S	%Rec	1	5/16/2020 1:09:58 AM	52470

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller &	Associates	Cl	ient S	ample II	<b>):</b> L5-	Surface	
Project: Fighting Okra 18	19 Fed 6H	(	Collect	tion Dat	e: 5/12	2/2020 11:28:00 AM	
Lab ID: 2005570-011	Matrix: SOIL		Recei	ved Dat	e: 5/14	4/2020 9:30:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIO	NS					Analyst	MRA
Chloride	6100	300		mg/Kg	100	5/18/2020 9:37:29 AM	52493
EPA METHOD 8015M/D: DI	ESEL RANGE ORGANICS					Analyst	BRM
Diesel Range Organics (DRO)	28000	470		mg/Kg	50	5/15/2020 11:13:59 AM	52481
Motor Oil Range Organics (MF	RO) 16000	2300		mg/Kg	50	5/15/2020 11:13:59 AM	52481
Surr: DNOP	0	55.1-146	S	%Rec	50	5/15/2020 11:13:59 AM	52481
EPA METHOD 8015D: GAS	OLINE RANGE					Analyst	RAA
Gasoline Range Organics (GR	O) 110	4.7		mg/Kg	1	5/16/2020 2:45:03 AM	52470
Surr: BFB	517	66.6-105	S	%Rec	1	5/16/2020 2:45:03 AM	52470
EPA METHOD 8021B: VOL	ATILES					Analyst	RAA
Benzene	0.029	0.023		mg/Kg	1	5/16/2020 2:45:03 AM	52470
Toluene	1.1	0.047		mg/Kg	1	5/16/2020 2:45:03 AM	52470
Ethylbenzene	0.76	0.047		mg/Kg	1	5/16/2020 2:45:03 AM	52470
Xylenes, Total	8.4	0.094		mg/Kg	1	5/16/2020 2:45:03 AM	52470
Surr: 4-Bromofluorobenzene	e 122	80-120	S	%Rec	1	5/16/2020 2:45:03 AM	52470

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Hall Livi unincinal Analysis Laburatury, Inc	Hall	<b>Environmental</b>	Analysis	Laboratory,	Inc.
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Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates	Collection Date: 5/12/2020 11:31:00 AM								
Lab ID:         2005570-012	Matrix: SOIL	,	Recei	ved Dat	e: 5/1	4/2020 9:30:00 AM			
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS						Analyst	MRA		
Chloride	ND	60		mg/Kg	20	5/15/2020 9:49:48 PM	52493		
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	BRM		
Diesel Range Organics (DRO)	2100	95		mg/Kg	10	5/15/2020 1:29:49 PM	52481		
Motor Oil Range Organics (MRO)	700	480		mg/Kg	10	5/15/2020 1:29:49 PM	52481		
Surr: DNOP	0	55.1-146	S	%Rec	10	5/15/2020 1:29:49 PM	52481		
EPA METHOD 8015D: GASOLINE RANGE	E					Analyst	RAA		
Gasoline Range Organics (GRO)	190	4.9		mg/Kg	1	5/16/2020 3:08:52 AM	52470		
Surr: BFB	981	66.6-105	S	%Rec	1	5/16/2020 3:08:52 AM	52470		
EPA METHOD 8021B: VOLATILES						Analyst	RAA		
Benzene	ND	0.025		mg/Kg	1	5/16/2020 3:08:52 AM	52470		
Toluene	0.49	0.049		mg/Kg	1	5/16/2020 3:08:52 AM	52470		
Ethylbenzene	0.62	0.049		mg/Kg	1	5/16/2020 3:08:52 AM	52470		
Xylenes, Total	6.6	0.099		mg/Kg	1	5/16/2020 3:08:52 AM	52470		
Surr: 4-Bromofluorobenzene	132	80-120	S	%Rec	1	5/16/2020 3:08:52 AM	52470		

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

**Qualifiers:** 

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

В Analyte detected in the associated Method Blank

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit
- Page 12 of 26

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates	Client Sample ID: L5-2'								
<b>Project:</b> Fighting Okra 18 19 Fed 6H		(	Collect	ion Dat	e: 5/1	12/2020 11:39:00 AM			
Lab ID: 2005570-013	Matrix: SOIL		Recei	ved Dat	e: 5/1	4/2020 9:30:00 AM			
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS						Analyst	MRA		
Chloride	ND	60		mg/Kg	20	5/15/2020 10:02:12 PM	52493		
EPA METHOD 8015M/D: DIESEL RANGE	E ORGANICS					Analyst	BRM		
Diesel Range Organics (DRO)	350	9.8		mg/Kg	1	5/15/2020 1:54:20 PM	52481		
Motor Oil Range Organics (MRO)	150	49		mg/Kg	1	5/15/2020 1:54:20 PM	52481		
Surr: DNOP	114	55.1-146		%Rec	1	5/15/2020 1:54:20 PM	52481		
EPA METHOD 8015D: GASOLINE RANG	E					Analyst	RAA		
Gasoline Range Organics (GRO)	26	4.8		mg/Kg	1	5/16/2020 3:32:46 AM	52470		
Surr: BFB	229	66.6-105	S	%Rec	1	5/16/2020 3:32:46 AM	52470		
EPA METHOD 8021B: VOLATILES						Analyst	RAA		
Benzene	ND	0.024		mg/Kg	1	5/16/2020 3:32:46 AM	52470		
Toluene	ND	0.048		mg/Kg	1	5/16/2020 3:32:46 AM	52470		
Ethylbenzene	0.063	0.048		mg/Kg	1	5/16/2020 3:32:46 AM	52470		
Xylenes, Total	0.36	0.095		mg/Kg	1	5/16/2020 3:32:46 AM	52470		
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	5/16/2020 3:32:46 AM	52470		

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

**CLIENT:** Souder, Miller & Associates

Fighting Okra 18 19 Fed 6H

Analytical Report

Hall	<b>Environmenta</b>	l An	alysis	Lab	oratory,	Inc.
			•/		•/ /	

Lab Order 2005570

Date Reported: 5/21/2020

Client Sample ID: L6-Surface Collection Date: 5/12/2020 11:41:00 AM Received Date: 5/14/2020 9:30:00 AM

Lab ID:	2005570-014	Matrix: SOIL		Received Dat	<b>e:</b> 5/1	4/2020 9:30:00 AM	
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analyst	MRA
Chloride		25000	1500	mg/Kg	500	) 5/18/2020 9:49:49 AM	52493
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel R	ange Organics (DRO)	270	9.5	mg/Kg	1	5/18/2020 10:42:55 AM	52481
Motor Oi	I Range Organics (MRO)	220	47	mg/Kg	1	5/18/2020 10:42:55 AM	52481
Surr: [	DNOP	112	55.1-146	%Rec	1	5/18/2020 10:42:55 AM	52481
EPA MET	HOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline	Range Organics (GRO)	ND	5.0	mg/Kg	1	5/16/2020 3:56:39 AM	52470
Surr: E	3FB	102	66.6-105	%Rec	1	5/16/2020 3:56:39 AM	52470
EPA MET	HOD 8021B: VOLATILES					Analyst	RAA
Benzene		ND	0.025	mg/Kg	1	5/16/2020 3:56:39 AM	52470
Toluene		ND	0.050	mg/Kg	1	5/16/2020 3:56:39 AM	52470
Ethylben	zene	ND	0.050	mg/Kg	1	5/16/2020 3:56:39 AM	52470
Xylenes,	Total	ND	0.099	mg/Kg	1	5/16/2020 3:56:39 AM	52470
Surr: 4	1-Bromofluorobenzene	94.7	80-120	%Rec	1	5/16/2020 3:56:39 AM	52470

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

**Qualifiers:** 

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range RL Reporting Limit
- Page 14 of 26

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Project:	Souder, Miller & Associates Fighting Okra 18 19 Fed 6H	Client Sample ID: L6-1' Collection Date: 5/12/2020 11:44:00 AM								
Lab ID:	2005570-015	Matrix: SOIL	Matrix: SOIL         Received Date: 5/14/2020 9:30:00 //							
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA MET	HOD 300.0: ANIONS					Analyst	MRA			
Chloride		2000	60	mg/Kg	20	5/15/2020 10:51:51 PM	52493			
EPA MET	HOD 8015M/D: DIESEL RANGE	EORGANICS				Analyst	BRM			
Diesel R	ange Organics (DRO)	ND	9.9	mg/Kg	1	5/15/2020 3:07:58 PM	52481			
Motor Oi	I Range Organics (MRO)	ND	49	mg/Kg	1	5/15/2020 3:07:58 PM	52481			
Surr: [	ONOP	109	55.1-146	%Rec	1	5/15/2020 3:07:58 PM	52481			
EPA MET	HOD 8015D: GASOLINE RANG	Ε				Analyst	RAA			
Gasoline	Range Organics (GRO)	ND	4.8	mg/Kg	1	5/16/2020 4:20:26 AM	52470			
Surr: E	3FB	102	66.6-105	%Rec	1	5/16/2020 4:20:26 AM	52470			
EPA MET	HOD 8021B: VOLATILES					Analyst	RAA			
Benzene	1	ND	0.024	mg/Kg	1	5/16/2020 4:20:26 AM	52470			
Toluene		ND	0.048	mg/Kg	1	5/16/2020 4:20:26 AM	52470			
Ethylben	zene	ND	0.048	mg/Kg	1	5/16/2020 4:20:26 AM	52470			
Xylenes,	Total	ND	0.095	mg/Kg	1	5/16/2020 4:20:26 AM	52470			
Surr: 4	4-Bromofluorobenzene	95.9	80-120	%Rec	1	5/16/2020 4:20:26 AM	52470			

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit
- Page 15 of 26

Surr: 4-Bromofluorobenzene

**Analytical Report** 

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

5/16/2020 4:44:24 AM 52470

CLIENT: Project: Lab ID:	Souder, Miller & Associates Fighting Okra 18 19 Fed 6H 2005570-016	Client Sample ID: L6-2'           Collection Date: 5/12/2020 11:48:00 AM           Matrix: SOIL         Received Date: 5/14/2020 9:30:00 AM									
Analyses	2005570-010	Result	BI	Oual Units	DF	Date Analyzed	Batch				
1 mary ses		Kesuit	KL	Quai Units	DI	Date Maryzeu	Daten				
EPA MET	THOD 300.0: ANIONS					Analys	t: MRA				
Chloride		260	60	mg/Kg	20	5/15/2020 11:04:16 PM	1 52493				
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: BRM				
Diesel R	ange Organics (DRO)	ND	9.6	mg/Kg	1	5/15/2020 3:56:58 PM	52481				
Motor Oi	Range Organics (MRO)	ND	48	mg/Kg	1	5/15/2020 3:56:58 PM	52481				
Surr: I	DNOP	112	55.1-146	%Rec	1	5/15/2020 3:56:58 PM	52481				
EPA MET	HOD 8015D: GASOLINE RANGI	E				Analys	t: RAA				
Gasoline	Range Organics (GRO)	ND	4.6	mg/Kg	1	5/16/2020 4:44:24 AM	52470				
Surr: I	BFB	102	66.6-105	%Rec	1	5/16/2020 4:44:24 AM	52470				
EPA MET	THOD 8021B: VOLATILES					Analys	t: RAA				
Benzene		ND	0.023	mg/Kg	1	5/16/2020 4:44:24 AM	52470				
Toluene		ND	0.046	mg/Kg	1	5/16/2020 4:44:24 AM	52470				
Ethylben	izene	ND	0.046	mg/Kg	1	5/16/2020 4:44:24 AM	52470				
Xylenes,	Total	ND	0.093	mg/Kg	1	5/16/2020 4:44:24 AM	52470				

95.8

80-120

%Rec

1

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates	Client Sample ID: SW1								
Project:	Fighting Okra 18 19 Fed 6H		(	Collection Dat	e: 5/1	2/2020 12:00:00 PM				
Lab ID:	2005570-017	Matrix: SOIL	Matrix: SOIL         Received Date: 5/14/2020 9:30:00							
Analyses	3	Result	RL	Qual Units	DF	Date Analyzed	Batch			
	THOD 300.0: ANIONS					Analyst:	MRA			
Chloride	•	920	59	mg/Kg	20	5/15/2020 11:16:40 PM	52493			
EPA ME	THOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	BRM			
Diesel R	ange Organics (DRO)	180	9.8	mg/Kg	1	5/15/2020 4:45:57 PM	52481			
Motor O	il Range Organics (MRO)	170	49	mg/Kg	1	5/15/2020 4:45:57 PM	52481			
Surr:	DNOP	111	55.1-146	%Rec	1	5/15/2020 4:45:57 PM	52481			
EPA ME	THOD 8015D: GASOLINE RANG	E				Analyst:	RAA			
Gasoline	e Range Organics (GRO)	ND	5.0	mg/Kg	1	5/16/2020 5:07:43 AM	52470			
Surr:	BFB	98.0	66.6-105	%Rec	1	5/16/2020 5:07:43 AM	52470			
EPA ME	THOD 8021B: VOLATILES					Analyst:	RAA			
Benzene	e	ND	0.025	mg/Kg	1	5/16/2020 5:07:43 AM	52470			
Toluene		ND	0.050	mg/Kg	1	5/16/2020 5:07:43 AM	52470			
Ethylber	nzene	ND	0.050	mg/Kg	1	5/16/2020 5:07:43 AM	52470			
Xylenes,	, Total	ND	0.10	mg/Kg	1	5/16/2020 5:07:43 AM	52470			
Surr: 4	4-Bromofluorobenzene	93.2	80-120	%Rec	1	5/16/2020 5:07:43 AM	52470			

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Assoc Project: Fighting Okra 18 19 Fee	iates 1 6H	Client Sample ID: SW2 Collection Date: 5/12/2020 12:15:00 PM								
Lab ID: 2005570-018	Matrix: SOIL		Received Date	e: 5/1	14/2020 9:30:00 AM					
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analys	t: MRA				
Chloride	2800	150	mg/Kg	50	5/18/2020 10:02:11 AN	1 52511				
EPA METHOD 8015M/D: DIESEL	RANGE ORGANICS				Analys	t: BRM				
Diesel Range Organics (DRO)	340	19	mg/Kg	2	5/18/2020 10:30:35 AM	1 52481				
Motor Oil Range Organics (MRO)	290	95	mg/Kg	2	5/18/2020 10:30:35 AN	1 52481				
Surr: DNOP	111	55.1-146	%Rec	2	5/18/2020 10:30:35 AN	1 52481				
EPA METHOD 8015D: GASOLINE	ERANGE				Analys	t: RAA				
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/16/2020 5:31:19 AM	52470				
Surr: BFB	96.4	66.6-105	%Rec	1	5/16/2020 5:31:19 AM	52470				
EPA METHOD 8021B: VOLATILE	S				Analys	t: RAA				
Benzene	ND	0.025	mg/Kg	1	5/16/2020 5:31:19 AM	52470				
Toluene	ND	0.049	mg/Kg	1	5/16/2020 5:31:19 AM	52470				
Ethylbenzene	ND	0.049	mg/Kg	1	5/16/2020 5:31:19 AM	52470				
Xylenes, Total	ND	0.099	mg/Kg	1	5/16/2020 5:31:19 AM	52470				
Surr: 4-Bromofluorobenzene	90.4	80-120	%Rec	1	5/16/2020 5:31:19 AM	52470				

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

**Qualifiers:** 

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

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit

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Analytical Report Lab Order 2005570

# Hall Environmental Analysis Laboratory, Inc. Date Reported: 5/21/2020

CLIENT:	Souder, Miller & Associates		Cl	ient Sample II	D: SV	W3	
Project:	Fighting Okra 18 19 Fed 6H		(	Collection Dat	e: 5/1	12/2020 12:25:00 PM	
Lab ID:	2005570-019	Matrix: SOIL		<b>Received Date</b>	e: 5/1	14/2020 9:30:00 AM	
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS					Analysi	: ЈМТ
Chloride		1200	60	mg/Kg	20	5/17/2020 2:00:44 PM	52511
EPA MET	THOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel R	ange Organics (DRO)	220	9.8	mg/Kg	1	5/18/2020 11:10:18 AN	52481
Motor Oi	il Range Organics (MRO)	210	49	mg/Kg	1	5/18/2020 11:10:18 AN	52481
Surr: [	DNOP	114	55.1-146	%Rec	1	5/18/2020 11:10:18 AN	52481
EPA MET	THOD 8015D: GASOLINE RANG	E				Analyst	RAA
Gasoline	e Range Organics (GRO)	ND	5.0	mg/Kg	1	5/16/2020 5:54:55 AM	52470
Surr: E	BFB	101	66.6-105	%Rec	1	5/16/2020 5:54:55 AM	52470
EPA MET	THOD 8021B: VOLATILES					Analyst	RAA
Benzene	9	ND	0.025	mg/Kg	1	5/16/2020 5:54:55 AM	52470
Toluene		ND	0.050	mg/Kg	1	5/16/2020 5:54:55 AM	52470
Ethylben	izene	ND	0.050	mg/Kg	1	5/16/2020 5:54:55 AM	52470
Xylenes,	Total	ND	0.10	mg/Kg	1	5/16/2020 5:54:55 AM	52470
Surr: 4	4-Bromofluorobenzene	91.5	80-120	%Rec	1	5/16/2020 5:54:55 AM	52470

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

**Qualifiers:** 

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range RL Reporting Limit
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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2005570

Date Reported: 5/21/2020

CLIENT: Souder, Miller & Associates Project: Fighting Okra 18 19 Fed 6H Lab ID: 2005570-020	Client Sample ID: SW4           Collection Date: 5/12/2020 12:38:00 PM           Matrix: SOIL         Received Date: 5/14/2020 9:30:00 AM								
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	: ЈМТ			
Chloride	120	60	mg/Kg	20	5/17/2020 2:13:09 PM	52511			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM			
Diesel Range Organics (DRO)	15	9.2	mg/Kg	1	5/18/2020 10:54:33 AM	52481			
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/18/2020 10:54:33 AM	52481			
Surr: DNOP	80.2	55.1-146	%Rec	1	5/18/2020 10:54:33 AM	52481			
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	RAA			
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/16/2020 6:18:32 AM	52470			
Surr: BFB	95.6	66.6-105	%Rec	1	5/16/2020 6:18:32 AM	52470			
EPA METHOD 8021B: VOLATILES					Analyst	RAA			
Benzene	ND	0.025	mg/Kg	1	5/16/2020 6:18:32 AM	52470			
Toluene	ND	0.050	mg/Kg	1	5/16/2020 6:18:32 AM	52470			
Ethylbenzene	ND	0.050	mg/Kg	1	5/16/2020 6:18:32 AM	52470			
Xylenes, Total	ND	0.099	mg/Kg	1	5/16/2020 6:18:32 AM	52470			
Surr: 4-Bromofluorobenzene	93.1	80-120	%Rec	1	5/16/2020 6:18:32 AM	52470			

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

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
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- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	So Fi <sub>l</sub>	uder, Miller & Ass ghting Okra 18 19	sociate Fed 6	es H							
Sample ID:	MB-52493	SampTy	pe: <b>m</b> l	blk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: <b>52</b>	493	F	RunNo: 6	8940				
Prep Date:	5/15/2020	Analysis Da	ite: 5/	/15/2020	S	SeqNo: 2	386107	Units: mg/K	g		
Analyte Chloride		Result	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID:	LCS-52493	s SampTy	pe: <b>Ic</b> :	3	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	LCSS	Batch	ID: 52	493	F	RunNo: 6	8940				
Prep Date:	5/15/2020	Analysis Da	ite: 5/	/15/2020	S	SeqNo: 2	386108	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.0	90	110			
Sample ID:	MB-52511	SampTy	pe: <b>m</b> l	blk	Tes	tCode: El	PA Method	300.0: Anion	S		
Client ID:	PBS	Batch	ID: 52	511	F	RunNo: 6	8964				
Prep Date:	5/17/2020	Analysis Da	ite: 5/	17/2020	S	SeqNo: 2	387341	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-52511	SampTy	pe: Ics	6	Tes	tCode: El	PA Method	300.0: Anion:	S		
Client ID:	LCSS	Batch	ID: <b>52</b>	511	F	RunNo: 6	8964				
Prep Date:	5/17/2020	Analysis Da	ite: 5/	17/2020	S	SeqNo: 2	387342	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.1	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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21-May-20

WO#:

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Souder, I	Miller & As	ssociate	es								
Project:	Fighting	Okra 18 19	Fed 61	H								
Sample ID:	D: LCS-52481 SampType: LCS				TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID:	LCSS	Batch ID: 52481			RunNo: 68916							
Prep Date:	5/15/2020	Analysis Date: 5/15/2020			SeaNo: 2385415			Units: ma/K	a			
	0,10,2020											
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range (	Organics (DRO)	49	10	50.00	0	98.6	70	130				
Surr: DNOP		4.7		5.000		93.1	55.1	146				
Sample ID: MB-52481 SampType: MBLK				TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID:	PBS	Batch ID: 52481			RunNo: 68916							
Prep Date:	5/15/2020	Analysis Date: 5/15/2020			SeqNo: 2385416			Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range (	Organics (DRO)	ND	10									
Motor Oil Rang	e Organics (MRO)	ND	50									
Surr: DNOP		11		10.00		107	55.1	146				
Sample ID:	ample ID: LCS-52490 SampType: LCS		S	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID:	LCSS	Batch ID: 52490		RunNo: <b>68971</b>								
Prep Date:	5/15/2020	Analysis D	ate: 5/	18/2020	S	SeqNo: 2	387773	Units: %Red	;			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		3.8		5.000		75.1	55.1	146				
Sample ID: MB-52490 SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID:	PBS	Batch ID: 52490		RunNo: <b>68971</b>								
Prep Date:	5/15/2020	Analysis D	ate: 5/	18/2020	5	SeqNo: 2	387774	Units: %Red	;			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		8.5		10.00		85.2	55.1	146				

Qualifiers:

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

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

RL Reporting Limit

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21-May-20

WO#:

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Souder, M Fighting (	filler & As Okra 18 19	sociate Fed 6	es H									
Sample ID:	2005570-002ams SampType: MS				TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	L1-1'	Batch ID: 52470			RunNo: 68939								
Prep Date:	5/14/2020	Analysis Date: 5/15/2020			S	SeqNo: 2	386000	Units: <b>mg/Kg</b>					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang Surr: BFB	e Organics (GRO)	30 1700	4.8	23.99 959.7	2.592	115 173	80 66.6	120 105			S		
Sample ID:	2005570-002amsd	SampTy	/pe: <b>M</b> \$	SD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	L1-1'	Batch ID: 52470			RunNo: 68939								
Prep Date:	5/14/2020	Analysis Date: 5/15/2020			S	SeqNo: 2	386001	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang	e Organics (GRO)	29	4.8	24.11	2.592	111	80	120	2.82	20			
Surr: BFB		1500		964.3		154	66.6	105	0	0	S		
Sample ID:	lcs-52470	SampTy	/pe: <b>LC</b>	S	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	LCSS	Batch	ID: 52	470	F	RunNo: 6	8939						
Prep Date:	5/14/2020	Analysis Da	ate: <b>5/</b>	15/2020	ŝ	SeqNo: 2	386020	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	91.2	80	120					
Surr: BFB		1100		1000		110	66.6	105			S		
Sample ID:	D: mb-52470 SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	PBS	Batch ID: 52470			RunNo: 68939								
Prep Date:	5/14/2020	Analysis Date: 5/15/2020			SeqNo: 2386021			Units: <b>mg/Kg</b>					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang	e Organics (GRO)	ND	5.0	1000		100	66.6	105					
		1000		1000		100	00.0	105					
Sample ID:	e ID: mb-52573 SampType: MBLK					TestCode: EPA Method 8015D: Gasoline Range							
Client ID:	PBS	Batch ID: 52573			F	RunNo: 6	9026						
Prep Date:	5/19/2020	Analysis Da	ate: 5/	20/2020	S	SeqNo: 2	391242	Units: %Red	•				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		870		1000		87.0	66.6	105					
Sample ID:	lcs-52573	TestCode: EPA Method 8015D: Gasoline Range											
Client ID:	LCSS	Batch ID: 52573			RunNo: 69026								
Prep Date:	5/19/2020	Analysis Da	ate: <b>5/</b>	20/2020	S	SeqNo: 2	391243	Units: %Red	•				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		980		1000		97.7	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

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- E Value above quantitation range
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21-May-20

WO#:
Client: Project:	Souder, Fighting	, Miller & Asso g Okra 18 19 F	ociates ed 6H								
Sample ID:	mb-52568	SampTyp	e: MBLI	К	Test	Code: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch II	): <b>5256</b>	8	R	unNo: 69	9026				
Prep Date:	5/19/2020	Analysis Date	e: <b>5/20</b>	/2020	S	eqNo: 23	391267	Units: %Rec	;		
Analyte		Result I	PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		870		1000		87.3	66.6	105			
Sample ID:	lcs-52568	SampTyp	e: LCS		Test	Code: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch I	): <b>5256</b>	8	R	unNo: 69	9026				
Prep Date:	5/19/2020	Analysis Date	e: <b>5/20</b>	/2020	S	eqNo: 23	391268	Units: %Rec	:		
Analyte		Result I	PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		970		1000		97.0	66.6	105			

#### Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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21-May-20

Client:	Souder, N	Ailler & A	ssociate	es							
Project:	Fighting	Okra 18 19	9 Fed 6	H							
Sample ID:	2005570-001ams	SampT	уре: М	3	Tes	stCode: E	PA Method	8021B: Volat	tiles		
Client ID:	L1-Surface	Batch	n ID: <b>52</b>	470	I	RunNo: 6	8939				
Prep Date:	5/14/2020	Analysis D	Date: 5/	15/2020	:	SeqNo: 2	386040	Units: <b>mg/K</b>	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	0.9960	0	107	78.5	119			
Toluene		1.2	0.050	0.9960	0.03033	113	75.7	123			
Ethylbenzene		1.2	0.050	0.9960	0.04512	113	74.3	126			
Xylenes, Total		3.8	0.10	2.988	0.4789	112	72.9	130			
Surr: 4-Bron	nofluorobenzene	0.95		0.9960		95.7	80	120			
Sample ID:	ample ID: 2005570-001amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles										
Client ID:	L1-Surface	Batch	n ID: 52	470	I	RunNo: <b>6</b>	8939				
Prep Date:	5/14/2020	Analysis D	Date: 5/	15/2020	:	SeqNo: 2	386041	Units: <b>mg/K</b>	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	0.9852	0	110	78.5	119	1.80	20	
Toluene		1.2	0.049	0.9852	0.03033	115	75.7	123	1.36	20	
Ethylbenzene		1.2	0.049	0.9852	0.04512	114	74.3	126	0.0289	20	
Xylenes, Total		3.8	0.099	2.956	0.4789	114	72.9	130	0.165	20	
Surr: 4-Bron	nofluorobenzene	0.97		0.9852		98.5	80	120	0	0	
Sample ID:	LCS-52470	SampT	ype: LC	s	Tes	stCode: E	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batch	h ID: 52	470	I	RunNo: 6	8939				
Prep Date:	5/14/2020	Analysis D	Date: 5/	15/2020	:	SeqNo: 2	386061	Units: mg/K	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.88	0.025	1.000	0	87.8	80	120			
Toluene		0.93	0.050	1.000	0	92.7	80	120			
Ethylbenzene		0.93	0.050	1.000	0	93.0	80	120			
Xylenes, Total		2.8	0.10	3.000	0	92.4	80	120			
Surr: 4-Bron	nofluorobenzene	0.96		1.000		95.6	80	120			
Sample ID:	mb-52470	SampT	уре: М	BLK	Tes	stCode: E	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batch	n ID: 52	470	I	RunNo: <b>6</b>	8939				
Prep Date:	5/14/2020	Analysis D	Date: 5/	15/2020	:	SeqNo: 2	386062	Units: <b>mg/K</b>	٢g		
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-Bron	nofluorobenzene	0.95		1.000		95.1	80	120			

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

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

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Client:	Soude	er, Miller & Asso	ociate	es							
Project:	Fighti	ng Okra 18 19 F	Fed 61	H							
Sample ID:	mb-52573	SampTyp	e: ME	BLK	Test	tCode: E	PA Method	8021B: Volati	les		
Client ID:	PBS	Batch II	D: <b>52</b>	573	R	lunNo: 6	9026				
Prep Date:	5/19/2020	Analysis Date	e: <b>5/</b>	20/2020	S	eqNo: 2	391284	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.0		1.000		100	80	120			
Sample ID:	LCS-52573	SampTyp	e: LC	s	Test	tCode: E	PA Method	8021B: Volati	les		
Client ID:	LCSS	Batch II	D: <b>52</b>	573	R	unNo: 6	9026				
Prep Date:	5/19/2020	Analysis Date	e: <b>5/</b>	20/2020	S	eqNo: 2	391285	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.0		1.000		102	80	120			
Sample ID:	mb-52568	SampTyp	e: Me	BLK	Tes	tCode: E	PA Method	8021B: Volati	les		
Client ID:	PBS	Batch II	D: <b>52</b>	568	R	unNo: 6	9026				
Prep Date:	5/19/2020	Analysis Date	e: <b>5/</b>	20/2020	S	eqNo: 2	391318	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.0		1.000		101	80	120			
Sample ID:	LCS-52568	SampTyp	e: LC	s	Tes	tCode: E	PA Method	8021B: Volati	les		
Client ID:	LCSS	Batch II	D: <b>52</b>	568	R	unNo: 6	9026				
Prep Date:	5/19/2020	Analysis Date	e: <b>5/</b>	20/2020	S	eqNo: 2	391320	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.0		1.000		99.6	80	120			

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

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

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	ONMENTAL (SIS Ratory	TEL: 505-342 Website: w	4901 Hawkin Albuquerque, NM 8 5-3975 FAX: 505-345 ww.hallenvironmental	7109 <b>San</b> 4107 .com	Sample Log-In Check Lis				
Client Name:	SMA-CARLSBAD	Work Order Nu	mber: 2005570		RcptNo: 1				
Received By:	Isaiah Ortiz	5/14/2020 9:30:0	0 AM	ILC	4				
Completed By:	Isaiah Ortiz	5/14/2020 11:12:	44 AM	InC	X				
Reviewed By:	of 5/14/2020	)							
Chain of Cus	<u>tody</u>								
1. Is Chain of Cu	stody complete?		Yes 🗹	No 🗌	Not Present				
2. How was the	sample delivered?		Courier						
<u>Log In</u>									
3. Was an attem	pt made to cool the sam	ples?	Yes 🗹	No 🗌	NA 🗌				
4. Were all samp	les received at a temper	ature of >0° C to 6.0°C	Yes 🗹	No 🗌					
5. Sample(s) in p	proper container(s)?		Yes 🗹	No 🗌					
6. Sufficient sam	ple volume for indicated	test(s)?	Yes 🔽	No 🗌					
7. Are samples (e	except VOA and ONG) p	roperly preserved?	Yes 🗹	No 🗌					
8. Was preservat	ive added to bottles?		Yes	No 🗹	NA 🗌				
9. Received at lea	ast 1 vial with headspace	e <1/4" for AQ VOA?	Yes	No 🗌	NA 🗹				
10. Were any sam	ple containers received	broken?	Yes	No 🗹	# of preserved				
11.Does paperwo	rk match bottle labels?		Yes 🔽	No 🗌	bottles checked for pH:				
(Note discrepa	ncies on chain of custod	y)		🗖	(<2 or >12 unless not Adjusted 2				
12. Are matrices c	orrectly identified on Cha	in of Custody?	Yes 🗹	No 🗌	Adjusted?				
14 Woro all heldin	a times able to be used		Yes 🗹	No 🗌	Charles CAA E (U)				
(If no, notify cu	stomer for authorization.	)	Yes 🔽	NO	Checked by GIVI 5/191				
Special Handli	ng (if applicable)								
15. Was client not	ified of all discrepancies	with this order?	Yes	No 🗌	NA 🗹				
Person I	Notified:	Dat	te:						
By Who	n:	Via	: eMail P	hone 🗌 Fax	In Person				
Regardir	ng:				and the second se				
Client In	structions:								
16 Additional	aarke:								

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Not Present			

Page 1 of 1

Client:	SM.	4	,	- □ Standa	urd 🗹 R	ush 2 day			E	ŀ			E			RO	NP		NT	AL
	,			Project Na	me:	4	1 6				414		- 13	<b>91</b> 3	51	_A	БО	KA	10	KI
Mailing	g Address	3:		Fisht	o Atr	1X-19 E-16H		40	01 1	Jour	ww	w.ha	llen\	/iron	mer	ital.c	om	400		
				Projèct #:	g orig	A TO IT TEACT	1	43 Ti		14WK	45-3	075	- All	Juqu Fax	505	Je, N	IVI 87	109		
Phone	#:			1						00 0	10-0	4	Analy	ysis	Rec	ques	-4107			
email	or Fax#:			Project Mar	nager:		Ê	ô					04			Ŧ				
	Package:			0.11	20		(802	/ MR	CB's		IMS		O4, S			Abser				
Accro	litation:			HSNIey	Naxu	nell (co)	1B's	RO	2 P(		70S		2, P			ent/				
	LAC		r	Sampler: S	E Yes	$\frac{n \left( \frac{1}{rozco} \left( \frac{30}{20} \right) \right)}{\prod No}$	- F	0/0	/808	04.1	or 82		No.		4	res				
	D (Type)			# of Cooler	s: L		BE	(GR	ides	pd 5	310 0	etals	VO3,		0	m (F				
				Cooler Terr	1P(including CF):	3.7.40.1 0 33 ~ (°C)	M	15D	estic	letho	y 83	8 Me	Br, h	(OA)	(emi	olifo				
Date	Time	Matrix	Sample Name	Container Type and #	Preservat Type	HEAL No.	BTEX	TPH:80	3081 P	EDB (N	PAHs b	RCRA	CIJF, E	3260 (V	3270 (S	Fotal C				
5/12/20	010:40	Soil	L1 - Surface.	402	Cal	-001	X	X		_	_	-	X	~				+	+	
	10:44		L1-1'			-007						r I							-	++
	10:48		L1-21			-003													+	++
	10:50		L2-Surface			-004														++
	10:53		12-11			- 005													$\top$	++
	10:56		L2-2'			-006										$\square$		1	$\top$	
_	10:58		L3 - Surface			1007	t.												T	++
	11:11		13-11			-008														
	11:13	_	L4-Surface			-009														
	11:19		14-1'			-016														
	11=28		L5 -Surface			-011														
Date:	11:3) Time:	Polinguich	L5-J	Dessived have		-012	1	Y					1							
5/13	11 00	1060	Him Deconcel	Child by	YGA	- 5/13 1130	Rem	arks	S:											
Date:	Time:	Relinquish	ed by:	Received by:	Via:	Date Time														
		110						~												



June 24, 2020

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

RE: Fighting Okra 18-19 Federal 6H

OrderNo.: 2006A84

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: clients.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 11 sample(s) on 6/20/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**CLIENT:** Souder, Miller & Associates

Fighting Okra 18-19 Federal 6H

Analytical Report
Lab Order 2006A84

Hall	Environmenta	al Analy	ysis La	boratory.	, Inc.
		•		•	/

•	Date Reported: 6/24/2020
	Client Sample ID: L1-3'
	Collection Date: 6/18/2020 9:42:00 AM
	Received Date: 6/20/2020 7:40:00 AM

Lab ID: 2006A84-001	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 6/2	20/2020 7:40:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	540	60	mg/Kg	20	6/23/2020 1:47:37 PM	53240
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	140	9.7	mg/Kg	1	6/21/2020 10:25:14 PM	53201
Motor Oil Range Organics (MRO)	98	48	mg/Kg	1	6/21/2020 10:25:14 PM	53201
Surr: DNOP	95.5	55.1-146	%Rec	1	6/21/2020 10:25:14 PM	53201
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/23/2020 1:23:29 AM	53196
Surr: BFB	82.4	66.6-105	%Rec	1	6/23/2020 1:23:29 AM	53196

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

Qualifiers:

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

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

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Analytical Report
Lab Order 2006A84

Date Reported: 6/24/2020

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates Client Sample ID: L1-4' Fighting Okra 18-19 Federal 6H Collection Date: 6/18/2020 9:05:00 AM **Project:** Lab ID: 2006A84-002 Matrix: SOIL Received Date: 6/20/2020 7:40:00 AM Result **RL** Qual Units **DF** Date Analyzed Analyses Batch **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride ND 60 mg/Kg 20 6/23/2020 2:24:50 PM 53240 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM **Diesel Range Organics (DRO)** 39 9.3 mg/Kg 6/21/2020 10:35:24 PM 53201 1 Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 6/21/2020 10:35:24 PM 53201 6/21/2020 10:35:24 PM 53201 Surr: DNOP 97.2 55.1-146 %Rec 1 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 6/23/2020 1:46:58 AM ND 4.9 mg/Kg 1 53196 Surr: BFB 81.4 66.6-105 %Rec 6/23/2020 1:46:58 AM 53196 1

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

Qualifiers: \*

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

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

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							Analytical Report	
							Lab Order 2006A84	
Hall E	nvironmental Analysis	Laboratory, Inc	•				Date Reported: 6/24/20	20
CLIENT:	Souder, Miller & Associates		Cl	ient Sa	ample I	<b>D:</b> L3	-2'	
Project:	Fighting Okra 18-19 Federal 6H		(	Collect	ion Dat	<b>e:</b> 6/1	8/2020 9:20:00 AM	
Lab ID:	2006A84-003	Matrix: SOIL		Recei	ved Dat	<b>e:</b> 6/2	20/2020 7:40:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS						Analys	t: JMT
Chloride		ND	60		mg/Kg	20	6/23/2020 2:37:15 PM	53240

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

Qualifiers:

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

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

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					<b>Analytical Report</b>	
					Lab Order 2006A84	
Hall Environmental Analysi	s Laboratory, I	nc.			Date Reported: 6/24/2	2020
CLIENT: Souder, Miller & Associates		Clien	t Sample I	<b>D:</b> L3	-3'	
<b>Project:</b> Fighting Okra 18-19 Federal 6	Н	Coll	ection Dat	t <b>e: 6</b> /1	8/2020 9:23:00 AM	
Lab ID: 2006A84-004	Matrix: SOIL	Re	ceived Dat	t <b>e:</b> 6/2	20/2020 7:40:00 AM	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	st: JMT
Chloride	140	60	mg/Kg	20	6/23/2020 3:14:28 PM	1 53240

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

Qualifiers:

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

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

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Lab ID:

Analyses

**Analytical Report** Lab Order 2006A84

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2020 **CLIENT:** Souder, Miller & Associates Client Sample ID: L4-2' Fighting Okra 18-19 Federal 6H Collection Date: 6/18/2020 9:43:00 AM 2006A84-005 Matrix: SOIL Received Date: 6/20/2020 7:40:00 AM Result RL Qual Units DF Date Analyzed Batch **EPA METHOD 300.0: ANIONS** Analyst: JMT

Chloride	700	60	mg/Kg	20	6/23/2020 3:26:53 PM	53240
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/21/2020 10:45:29 PM	53201
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/21/2020 10:45:29 PM	53201
Surr: DNOP	95.8	55.1-146	%Rec	1	6/21/2020 10:45:29 PM	53201
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/23/2020 2:10:24 AM	53196
Surr: BFB	81.1	66.6-105	%Rec	1	6/23/2020 2:10:24 AM	53196
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Benzene	ND	0.025	mg/Kg	1	6/23/2020 2:10:24 AM	53196
Toluene	ND	0.049	mg/Kg	1	6/23/2020 2:10:24 AM	53196
Ethylbenzene	ND	0.049	mg/Kg	1	6/23/2020 2:10:24 AM	53196
Xylenes, Total	ND	0.099	mg/Kg	1	6/23/2020 2:10:24 AM	53196
Surr: 4-Bromofluorobenzene	105	80-120	%Rec	1	6/23/2020 2:10:24 AM	53196

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

CLIENT: Souder, Miller & Associates

2006A84-006

Fighting Okra 18-19 Federal 6H

Analytical Report
Lab Order 2006A84

## Hall Environmental Analysis Laboratory, Inc.

 Client Sample ID: L4-3'

 Collection Date: 6/18/2020 9:54:00 AM

 Matrix: SOIL
 Received Date: 6/20/2020 7:40:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	6/23/2020 3:39:18 PM	53240
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/21/2020 10:55:36 PM	53201
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/21/2020 10:55:36 PM	53201
Surr: DNOP	89.1	55.1-146	%Rec	1	6/21/2020 10:55:36 PM	53201
EPA METHOD 8015D: GASOLINE RANGE					Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/23/2020 2:33:52 AM	53196
Surr: BFB	80.7	66.6-105	%Rec	1	6/23/2020 2:33:52 AM	53196
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.024	mg/Kg	1	6/23/2020 2:33:52 AM	53196
Toluene	ND	0.048	mg/Kg	1	6/23/2020 2:33:52 AM	53196
Ethylbenzene	ND	0.048	mg/Kg	1	6/23/2020 2:33:52 AM	53196
Xylenes, Total	ND	0.097	mg/Kg	1	6/23/2020 2:33:52 AM	53196
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	6/23/2020 2:33:52 AM	53196

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

Qualifiers:

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

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

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**CLIENT:** Souder, Miller & Associates

Fighting Okra 18-19 Federal 6H

**Analytical Report** Lab Order 2006A84

Date Reported: 6/24/2020

Hall	<b>Environmental</b>	Analysis	Laboratory, Inc	•
		•		

Client Sample ID: L5-3' Collection Date: 6/18/2020 10:02:00 AM Received Date: 6/20/2020 7:40:00 AM

Lab ID: 2006A84-007	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 6/	20/2020 7:40:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL R/	ANGE ORGANICS				Analys	st: BRM
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	6/21/2020 11:05:43 PI	M 53201
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	6/21/2020 11:05:43 PI	M 53201
Surr: DNOP	92.8	55.1-146	%Rec	1	6/21/2020 11:05:43 PI	M 53201
EPA METHOD 8015D: GASOLINE R	ANGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/23/2020 2:57:22 AM	53196
Surr: BFB	78.5	66.6-105	%Rec	1	6/23/2020 2:57:22 AM	53196

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

**Qualifiers:** 

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

- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

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. Released to Imaging: 1/15/2021 1:53:15 PM

**Analytical Report** Lab Order 2006A84

Hall Environmental	Analysis	Laboratory, Inc.	
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Hall Environmental Analysis Laboratory, Inc.			Date Reported: 6/24/2020				
CLIENT:	Souder, Miller & Associates		Client Sam	ple II	<b>D:</b> L5	-4'	
Project:	Fighting Okra 18-19 Federal 6H		Collection	n Date	e:6/1	8/2020 10:11:00 AM	
Lab ID:	2006A84-008	Matrix: SOIL	Received	l Dat	<b>e:</b> 6/2	20/2020 7:40:00 AM	
Analyses		Result	RL Qual Ur	nits	DF	Date Analyzed	Batch
EPA MET	THOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
			o <b>7</b>				

Diesel Range Organics (DRO)	ND	97	ma/Ka	1	6/22/2020 12:07:05 AM	53205
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/22/2020 12:07:05 AM	53205
Surr: DNOP	110	55.1-146	%Rec	1	6/22/2020 12:07:05 AM	53205
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	6/23/2020 3:20:47 AM	53196
Surr: BFB	81.4	66.6-105	%Rec	1	6/23/2020 3:20:47 AM	53196

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

**Qualifiers:** 

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

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Sample pH Not In Range Р
- RL Reporting Limit

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**CLIENT:** Souder, Miller & Associates

Project: Fighting Okra 18-19 Federal 6H

Analytical Report Lab Order 2006A84

Date Reported: 6/24/2020

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SW1 Collection Date: 6/18/2020 10:35:00 AM

Lab ID: 2006A84-009	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 6/2	20/2020 7:40:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	82	60	mg/Kg	20	6/23/2020 3:51:42 PM	53240
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/22/2020 12:37:59 AN	1 53205
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/22/2020 12:37:59 AN	1 53205
Surr: DNOP	93.4	55.1-146	%Rec	1	6/22/2020 12:37:59 AN	1 53205
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/23/2020 3:44:11 AM	53196
Surr: BFB	81.1	66.6-105	%Rec	1	6/23/2020 3:44:11 AM	53196
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	6/23/2020 3:44:11 AM	53196
Toluene	ND	0.047	mg/Kg	1	6/23/2020 3:44:11 AM	53196
Ethylbenzene	ND	0.047	mg/Kg	1	6/23/2020 3:44:11 AM	53196
Xylenes, Total	ND	0.095	mg/Kg	1	6/23/2020 3:44:11 AM	53196
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	6/23/2020 3:44:11 AM	53196

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

Qualifiers:

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

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

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**CLIENT:** Souder, Miller & Associates

Project: Fighting Okra 18-19 Federal 6H

**Analytical Report** Lab Order 2006A84

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/24/2020 **Client Sample ID: SW2** Collection Date: 6/18/2020 10:42:00 AM . . 

Lab ID: 2006A84-010	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 6/2	20/2020 7:40:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	87	60	mg/Kg	20	6/23/2020 4:04:06 PM	53240
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/22/2020 12:48:23 AN	1 53205
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/22/2020 12:48:23 AN	1 53205
Surr: DNOP	107	55.1-146	%Rec	1	6/22/2020 12:48:23 AN	1 53205
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	6/23/2020 4:07:44 AM	53196
Surr: BFB	82.3	66.6-105	%Rec	1	6/23/2020 4:07:44 AM	53196
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.024	mg/Kg	1	6/23/2020 4:07:44 AM	53196
Toluene	ND	0.048	mg/Kg	1	6/23/2020 4:07:44 AM	53196
Ethylbenzene	ND	0.048	mg/Kg	1	6/23/2020 4:07:44 AM	53196
Xylenes, Total	ND	0.096	mg/Kg	1	6/23/2020 4:07:44 AM	53196
Surr: 4-Bromofluorobenzene	106	80-120	%Rec	1	6/23/2020 4:07:44 AM	53196

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

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Souder, Miller & Associates

Project: Fighting Okra 18-19 Federal 6H

Analytical Report
Lab Order 2006A84

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: SW3 Collection Date: 6/18/2020 10:56:00 AM

<b>Lab ID:</b> 2006A84-011	Matrix: SOIL	]	<b>Received Date:</b> 6/20/2020 7:40:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	: JMT	
Chloride	85	60	mg/Kg	20	6/23/2020 4:16:31 PM	53240	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM	
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	6/22/2020 12:58:46 AN	53205	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/22/2020 12:58:46 AN	53205	
Surr: DNOP	98.4	55.1-146	%Rec	1	6/22/2020 12:58:46 AN	53205	
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/23/2020 4:31:20 AM	53196	
Surr: BFB	79.9	66.6-105	%Rec	1	6/23/2020 4:31:20 AM	53196	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.024	mg/Kg	1	6/23/2020 4:31:20 AM	53196	
Toluene	ND	0.047	mg/Kg	1	6/23/2020 4:31:20 AM	53196	
Ethylbenzene	ND	0.047	mg/Kg	1	6/23/2020 4:31:20 AM	53196	
Xylenes, Total	ND	0.095	mg/Kg	1	6/23/2020 4:31:20 AM	53196	
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	6/23/2020 4:31:20 AM	53196	

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

Qualifiers:

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

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

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. Released to Imaging: 1/15/2021 1:53:15 PM

Hall Env	ironmental Analysis Laboratory, Inc.	WO#:	2006A84 24-Jun-20
Client:	Souder, Miller & Associates		
Project:	Fighting Okra 18-19 Federal 6H		

Sample ID: MB-53240	SampType: <b>mblk</b>	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 53240	RunNo: 69850		
Prep Date: 6/23/2020	Analysis Date: 6/23/2020	SeqNo: 2425612	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit	Qual
Chloride	ND 1.5			
Sample ID: LCS-53240	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Client ID: LCSS	Batch ID: 53240	RunNo: 69850		
Prep Date: 6/23/2020	Analysis Date: 6/23/2020	SeqNo: 2425613	Units: mg/Kg	
Prep Date: 6/23/2020 Analyte	Analysis Date: 6/23/2020 Result PQL SPK value	SeqNo: 2425613 SPK Ref Val %REC LowLimit	Units: <b>mg/Kg</b> HighLimit %RPD RPDLimit	Qual

#### **Qualifiers:**

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

- В Analyte detected in the associated Method Blank
- Value above quantitation range Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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

Client:	Souder, N	filler & As	ssociate	es									
Project:	Fighting (	Okra 18-19	Federa	al 6H									
Sample ID:	2006A84-008AMS	SampT	ype: <b>MS</b>	6	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID:	L5-4'	Batch	ID: 53	205	F	RunNo: 69778							
Prep Date:	6/20/2020	Analysis D	ate: 6/	22/2020	S	SeqNo: 24	422968	Units: <b>mg/K</b>	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range (	Organics (DRO)	63	9.7	48.73	2.936	123	47.4	136					
Surr: DNOP		5.7		4.873		118	55.1	146					
Sample ID:	2006A84-008AMS	<b>)</b> SampT	ype: <b>MS</b>	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics			
Client ID:	L5-4'	Batch	ID: 53	205	F	RunNo: <b>6</b> 9	9778						
Prep Date:	6/20/2020	Analysis D	ate: 6/	22/2020	S	SeqNo: 24	422969	Units: mg/K	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range (	Organics (DRO)	58	9.5	47.66	2.936	116	47.4	136	8.06	43.4			
Surr: DNOP		5.3		4.766		111	55.1	146	0	0			
Sample ID:	LCS-53201	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics			
Client ID:	LCSS	Batch	ID: 53	201	F	RunNo: <b>6</b> 9	9778						
Prep Date:	6/20/2020	Analysis D	ate: 6/	21/2020	S	SeqNo: 24	422990	Units: <b>mg/K</b>	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range (	Organics (DRO)	46	10	50.00	0	91.1	70	130					
Surr: DNOP		4.5		5.000		89.1	55.1	146					
Sample ID:	LCS-53205	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics			
Client ID:	LCSS	Batch	ID: 53	205	F	RunNo: <b>6</b> 9	9778						
Prep Date:	6/20/2020	Analysis D	ate: 6/	21/2020	S	SeqNo: 24	422991	Units: <b>mg/K</b>	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range (	Organics (DRO)	62	10	50.00	0	125	70	130					
Surr: DNOP		5.9		5.000		118	55.1	146					
Sample ID:	MB-53201	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics			
Client ID:	PBS	Batch	ID: 53	201	F	RunNo: <b>6</b>	9778						
Prep Date:	6/20/2020	Analysis D	ate: 6/	21/2020	S	SeqNo: 24	422993	Units: <b>mg/K</b>	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range (	Organics (DRO)	ND	10										
Motor Oil Rang	e Organics (MRO)	ND	50										
Surr: DNOP		9.0		10.00		90.2	55.1	146					

#### **Qualifiers:**

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- 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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2006A84

24-Jun-20

Client: Soude Project: Fight	er, Miller & A ing Okra 18-1	ssociate 9 Federa	es al 6H							
Sample ID: MB-53205	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batc	h ID: 53	205	F	anNo: <b>6</b>	9778				
Prep Date: 6/20/2020	Analysis [	Date: 6/	21/2020	S	SeqNo: 24	422994	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	55.1	146			

#### **Qualifiers:**

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

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2006A84 24-Jun-20

Client: Souder, Project: Fighting	Miller & As Okra 18-19	ssociate Federa	es al 6H									
Sample ID: mb-53196	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e			
Client ID: PBS	Batch	ID: 53	196	F	RunNo: 69815							
Prep Date: 6/20/2020	Analysis D	ate: 6/	22/2020	S	SeqNo: 24	424140	Units: <b>mg/K</b>	g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	ND	5.0										
Surr: BFB	820		1000		81.8	66.6	105					
Sample ID: Ics-53196	SampT	ype: LC	S	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch	ID: 53	196	RunNo: 69815								
Prep Date: 6/20/2020	Analysis D	ate: 6/	22/2020	S	SeqNo: 24	424141	Units: <b>mg/K</b>	g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	20	5.0	25.00	0	80.4	80	120					
Surr: BFB	970		1000		97.1	66.6	105					

#### **Qualifiers:**

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- P Sample pH Not In Range
- RL Reporting Limit

#### WO#: 2006A84 24-Jun-20

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

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

0.92

0.92

2.8

1.1

0.050

0.050

0.10

1.000

1.000

3.000

1.000

Client: Project:	Souder, Fighting	, Miller & A g Okra 18-19	ssociate 9 Federa	es al 6H									
Sample ID: mb-	-53196	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles				
Client ID: PBS	s	Batch	n ID: 53	196	RunNo: 69815								
Prep Date: 6/2	20/2020	Analysis D	0ate: 6/	22/2020	S	SeqNo: 2	424185	Units: mg/K	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		ND	0.025										
Toluene		ND	0.050										
Ethylbenzene		ND	0.050										
Xylenes, Total		ND	0.10										
Surr: 4-Bromofluo	orobenzene	1.1		1.000		105	80	120					
Sample ID: LCS	S-53196	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Volat	iles				
Client ID: LCS	SS	Batch	n ID: 53	196	F	RunNo: <b>6</b>	9815						
Prep Date: 6/2	20/2020	Analysis D	0ate: 6/	22/2020	S	SeqNo: 2	424186	Units: mg/K	g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene		0.91	0.025	1.000	0	90.6	80	120					

0

0

0

92.2

92.4

93.5

112

80

80

80

80

120

120

120

120

**Qualifiers:** 

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

- в Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH Not In Range
- RL Reporting Limit

2006A84

24-Jun-20

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HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environment Aı TEL: 505-345-39 Website: www.	tal Analy. 490 Ibuquerq 75 FAX: hallenvir	sis Labora 1 Hawkin ue, NM 8 505-345- conmental	atory as NE 7109 4107 Leom	Sample Log-In Check List					
Client Name: Souder, Miller & Associates	Work Order Numbe	er: 2006	SA84			RcptNo: 1				
Received By: Juan Rojas	6/20/2020 7:40:00 A	М		Hian	ray					
Completed By: Juan Rojas	6/20/2020 7:53:04 A	М		Guar	E.J	-				
Reviewed By: DF 6/20/2020										
Chain of Custody										
1. Is Chain of Custody complete?		Yes	$\checkmark$	No		Not Present				
2. How was the sample delivered?		<u>Cou</u>	ier							
<u>Log In</u>										
3. Was an attempt made to cool the same	oles?	Yes	$\checkmark$	No		NA 🗌				
4. Were all samples received at a temperative	ature of >0° C to 6.0°C	Yes	✓	No						
5. Sample(s) in proper container(s)?		Yes	$\checkmark$	No						
6. Sufficient sample volume for indicated t	est(s)?	Yes	$\checkmark$	No						
7. Are samples (except VOA and ONG) pr	operly preserved?	Yes	$\checkmark$	No						
8. Was preservative added to bottles?		Yes		No	$\checkmark$	NA 🗌				
9. Received at least 1 vial with headspace	<1/4" for AQ VOA?	Yes		No		NA 🗹				
10. Were any sample containers received I	proken?	Yes		No	$\checkmark$					
11. Does paperwork match bottle labels?		Yes	$\checkmark$	No		# of preserved bottles checked for pH:				
(Note discrepancies on chain of custody	()		_		_	(<2 or >12 unles	s noted)			
12. Are matrices correctly identified on Cha	n of Custody?	Yes	✓	No		Adjusted?				
13. Is it clear what analyses were requested	?	Yes		No		Checked by:				
(If no, notify customer for authorization.)	(	res	V	INO						
<u>Special Handling (if applicable)</u>										
15. Was client notified of all discrepancies	with this order?	Yes		No		NA 🔽				
Person Notified:	Date									
By Whom:	Via:	eMa	ail 🗌 P	hone	Fax	In Person				
Regarding:										
Client Instructions:										
16. Additional remarks:										
17. <u>Cooler Information</u> Cooler No Temp °C Condition	Seal Intact Seal No	Seal Da	ite	Signed	Ву					

Page 1 of 1

1

0.4

Good

Received by OCD: 10/16/20	020	9:2	7:18 AN	1																	Page	97 of	98
<ul> <li>HALL ENVIRONMENTAL</li> <li>HALL ENVIRONMENTAL</li> <li>ANALYSIS LABORATORY</li> <li>www.hallenvironmental.com</li> <li>Hawkins NE - Albuquerque, NM 87109</li> <li>505-345-3975 Fax 505-345-4107</li> </ul>	Analysis Request	₅O₄ (fn	PCB's PO4, S PO4, S	3082 (1,1) (r,1)) (r,1) (r,1) (r,1)) (r,1) (r,1)) (r,1) (r,1)) (r,1) (r,1)) (r,1)) (r,1) (r,1))((r,1))((r,1))((r,1))((r,1))((r,1))((r,1))((r,1))((r,1))((r,1)	9/29 0 or 150, 13, 13, 17 19 19 19 19 19 19 19 19 19 19 19 19 19	sticid 831 Meta Meta Mc A ( A ( A ( ) A ( ) ( ) ( ) ( ) ( ) ( )	8081 Pei PPHs by RCRA 8 8260 (VC 8250 (VC 8250 (VC 70tal Co	×	×	×						×	×	×				Devon wo #20847133	Any sub-contracted data will be clearly notated on the analytical report.
490 Te		(0)	200) 80		0 2 4 0	ם (G	108:H9T	$\times$	$\times$	-		$( \times$	$\times$	×	$\times$	X	X	$\times$		emark		311	ssibility.
Turn-Around Time: 3 day Description of Rush Project Name: Fighting Okra 18-19 Federal 6H Project #:		Project Manager:	Ashley Maxwell	Sampler: SO	On Ice: D-Yes D No	Cooler Temp(including CP)、 の、ソーク この、 (°C) オ	Container Preservative HEAL No.	402 Carl -001	-002	-003	-004	X	-006 X	-00-	-005	1 100-	-010 X	X 10-	210	Received by Via: Date Time Re	Received by: Via: Date Time	122 Concier 6/20/20 7:40 1	ocontracted to other accredited laboratories. This serves as notice of this pos
Client: SMA Mailing Address:	Phone #:	email or Fax#:	QA/QC Package:	Accreditation: 🗆 Az Compliance	NELAC      Other		Date Time Matrix Sample Name	6/18/20 9:42 Soil LI-3'	1 - 17   divos	9:20 L3-2'	9:23 L3-3	9:43 14-21	9:54 L4-3	10-02 15-31	10:11 12-41	10:35 5101	10:42 5022	10:56 203		Date: Time: Relinquished by:	Pate: Time: Belinquished by:	0/19/20 19 20 Stu	If necessary, samples submitted to Hall Environmental may be sub

CONDITIONS

Action 10698

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

Phone:(575) 748-1283 Fax:(575) 748-9720 District III 1000 Rio Brazos Rd., Aztec, NM 87410

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 OF APPROVAL

Operator				OGRID:	Action Number:	Action Type:						
	DEVON ENERGY PRODUCTION COMPAN	333 West Sheridan Ave.	Oklahoma City, OK73102	6137	10698	C-141						
OCD	Condition											
Reviewer												
ceads	Additional excavation may be required. Evidence of the	depth to groundwater determination is	insufficient. When nearby wells are used	to determine depth to g	roundwater, the wells	should be no further						
1	than ½ mile away from the site, the data should be no more than 25 years old, and well construction information should be provided. The responsible party may choose to remediate the affected area to											
	the most stringent levels listed in Table 1 in lieu of drilling	ng to determine the depth to groundwa	ater									