

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

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

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

Incident ID	NAPP2036443181
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Melodie Sanjari	Contact Telephone 575-988-8753
Contact email <a href="mailto:msanjari@marathonoil.com">msanjari@marathonoil.com</a>	Incident # (assigned by OCD)
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

### Location of Release Source

Latitude 32.5781898

Longitude -103.7015533  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: GREEN FROG CAFE FEDERAL #001H	Site Type: Oil & Gas Facility
Date Release Discovered: 12/29/2020	API# (if applicable) 30-025-40828

Unit Letter	Section	Township	Range	County
B	18	20S	33E	Lea

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

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 0.01 bbl.	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

A programming error on the inlet separator resulted in 0.01 bbl. of oil upsetting from the flare, igniting and self-extinguishing before hitting the ground as a mist just below the flare on the engineered pad.

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? 19.15.29.7(A)2(a) (Fire)
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes by MOC on 12/29/2020 via C141a	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Melodie Sanjari</u> Title: <u>Environmental Professional</u>
Signature: <u>Melodie Sanjari</u> Date: <u>1/4/2021</u>
email: <u>msanjari@marathonoil.com</u> Telephone: <u>575-988-8753</u>
<b><u>OCD Only</u></b>
Received by: _____ Date: _____

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## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>157</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

**Characterization Report Checklist:** *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

State of New Mexico  
Oil Conservation Division

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Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 2/15/2021

email: msanjari@marathonoil.com Telephone: 575-988-8753

**OCD Only**

Received by: Cristina Eads Date: 02-15-2021

Incident ID	NAPP2036443181
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Facility ID	
Application ID	

## Closure

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

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 2/15/2021

email: msanjari@marathonoil.com Telephone: 575-988-8753

**OCD Only**

Received by: Cristina Eads Date: 02-15-2021

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

Closure Approved by:  Date: 06-23-2021

Printed Name: Cristina Eads Title: Environmental Specialist



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

February 12, 2021

#5E29918-BG1

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

SUBJECT: Closure Report for the Green Frog Café Federal #001H Release (NAPP2036443181), Lea County, New Mexico

To Whom it May Concern:

On behalf of Marathon Oil, Permian LLC, Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report that describes a release of liquids related to oil and gas production activities at the Green Frog Café Federal #001H site. The site is in Unit Letter B, Section 18, Township 20S, Range 33E, Lea County, New Mexico, on private land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

<b>Table 1: Release Information and Closure Criteria</b>			
Name	Green Frog Café Federal #001H	Company	Marathon Oil, Permian LLC
API Number	30-025-40828	Location	32.5781898 -103.7015533
Tracking Number	NAPP2036443181		
Estimated Date of Release	December 29, 2020	Date Reported to NMOCD	January 4, 2021
Land Owner	Federal	Reported To	District 1 NMOCD
Source of Release	Flare		
Released Volume	0.01 BBL	Released Material	Crude Oil
Recovered Volume	0	Net Release	0.01 BBL
NMOCD Closure Criteria	>100 feet to groundwater		
SMA Response Dates	1/19/2021		

## **1.0 Background**

On December 29, 2020, a programming error on the inlet separator caused 0.01 bbl. of crude oil to upset from the flare, which ignited and then self-extinguished before hitting the engineered pad. Figure 1 illustrates the vicinity and site location, Figure 2 illustrates the release location. The C-141 form is included in Appendix A.

## **2.0 Site Information and Closure Criteria**

The Green Frog Café Federal #001H is located approximately 33 miles northeast from Carlsbad, New Mexico on Federal (BLM) land at an elevation of approximately 3,533 feet above mean sea level (amsl).

### Depth to Groundwater

Based upon United States Geological Survey (USGS) water data (Appendix B), depth to groundwater in the area is estimated to be 157 feet below grade surface (bgs). There is one known water source within ½-mile of the location, according to the (USGS) online water well database. The USGS well 323429103421601 has a recorded depth to water of 130 feet below grade surface.

### Wellhead Protection Area

There is one known water source within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database.

### Distance to Nearest Significant Watercourse

The nearest significant watercourse is Laguna Gatuna, located approximately 900 feet to the east.

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 19.15.29.12.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 and Remediation Activities**

On January 19, 2021, SMA arrived on site to collect soil samples to determine whether soil had been impacted above the NMOCD Closure Criteria. Soil samples were 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.

SMA collected soil samples from the four cardinal directions surrounding the source of the release (CSL1 – CSL4). Per the sample plan submitted to the Division via email on January 11, 2021, at each sample location, samples were collected at the surface and at 0.5 feet bgs.

A total of eight (8) 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. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico.

Figure 3 shows the release location and confirmation sample locations. Laboratory results are summarized in Table 3. Laboratory reports are included in Appendix D.

Green Frog Cafe Federal #001H (NAPP2036443181) Closure Report  
February 12, 2021

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#### **4.0 Site Recommendations**

As demonstrated in Table 3, all confirmation samples meet the applicable Closure Criteria and the standards of Table I of 19.15.29.12 NMAC.

SMA recommends no further action and requests closure of Incident Number NAPP2036443181.

#### **5.0 Scope and Limitations**

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

If there are any questions regarding this report, please contact either Ashley Maxwell at 505-320-8975 or Shawna Chubbuck at 505-325-7535.

Submitted by:  
SOUDER, MILLER & ASSOCIATES

Reviewed by:



Ashley Maxwell  
Project Scientist



Shawna Chubbuck  
Senior Scientist

Green Frog Cafe Federal #001H (NAPP2036443181) Closure Report  
February 12, 2021

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**REFERENCES:**

New Mexico Office of the State Engineer (NMOSE) online water well database  
[https://gis.ose.state.nm.us/gisapps/ose\\_pod\\_locations/](https://gis.ose.state.nm.us/gisapps/ose_pod_locations/); accessed 2/9/2021

New Mexico Oil Conservation Division  
<http://www.emnrd.state.nm.us/OCD/>

United States Geological Survey (USGS)  
<https://maps.waterdata.usgs.gov/mapper/>; accessed on 2/9/2021

**ATTACHMENTS:**

**Figures:**

Figure 1: Vicinity and Well Head Protection Map  
Figure 2: Surface Water Radius Map  
Figure 3: Site and Sample Location Map

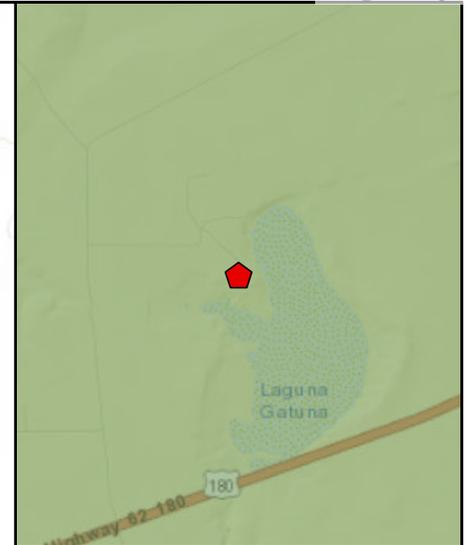
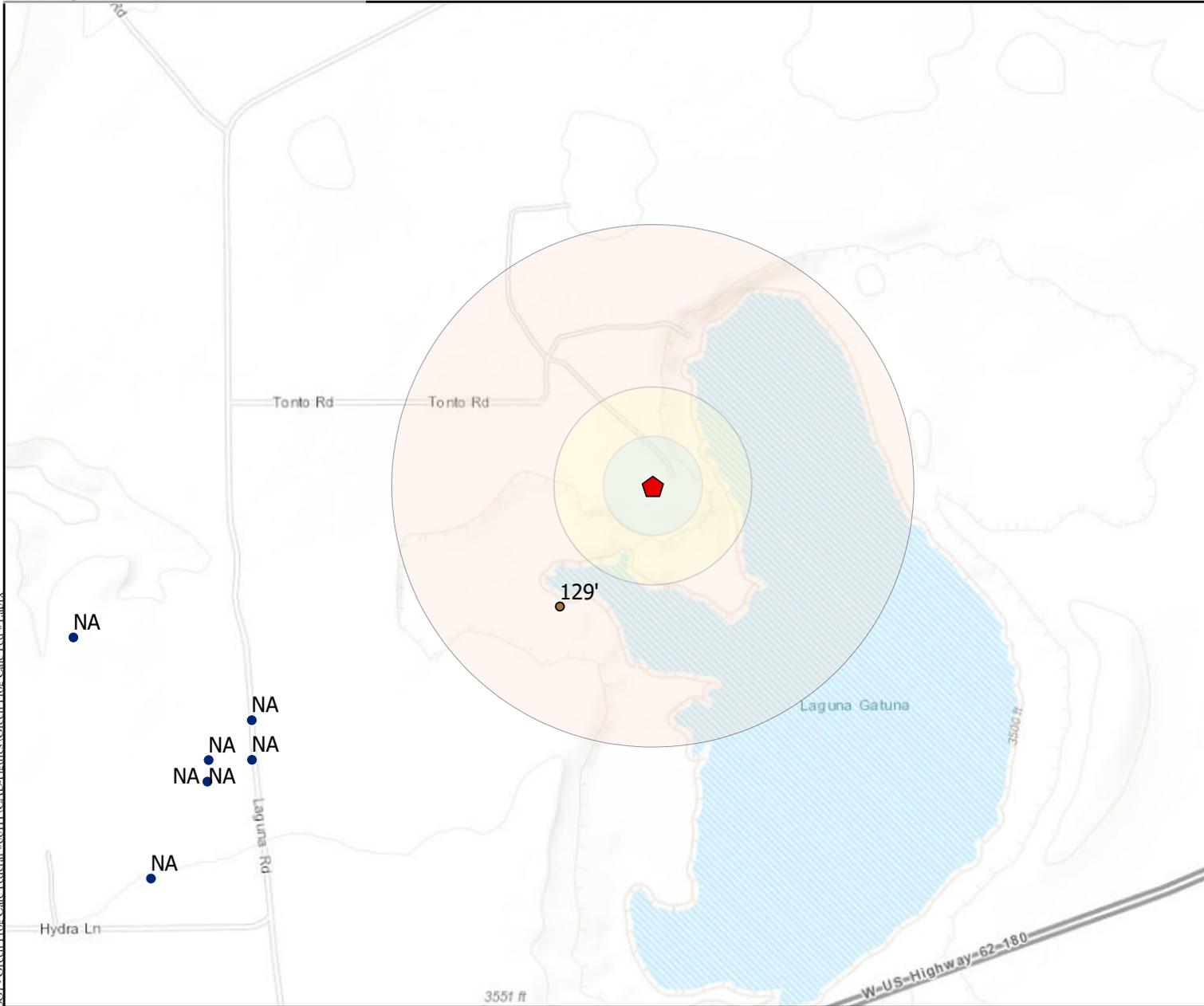
**Tables:**

Table 2: NMOCD Closure Criteria Justification  
Table 3: Summary of Sample Results

**Appendices:**

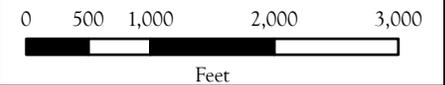
Appendix A: Form C141  
Appendix B: USGS Well Report  
Appendix C: Field Notes & Photo Log  
Appendix D: Laboratory Analytical Reports

# FIGURES



- Buffer Distance**
- .5 Mile
  - 1000 Feet
  - 500 Feet
  - OSE Depth to GW
  - Point of Release
  - USGS GW Well

- Karst Potential**
- Critical
  - High
  - Medium
  - Low



**Site Map**  
 Green Frog Cafe Federal #001 CTB- Marathon Oil  
 UL: B S: 18 T: 20S R: 33E, Lea County, New Mexico

Figure 1

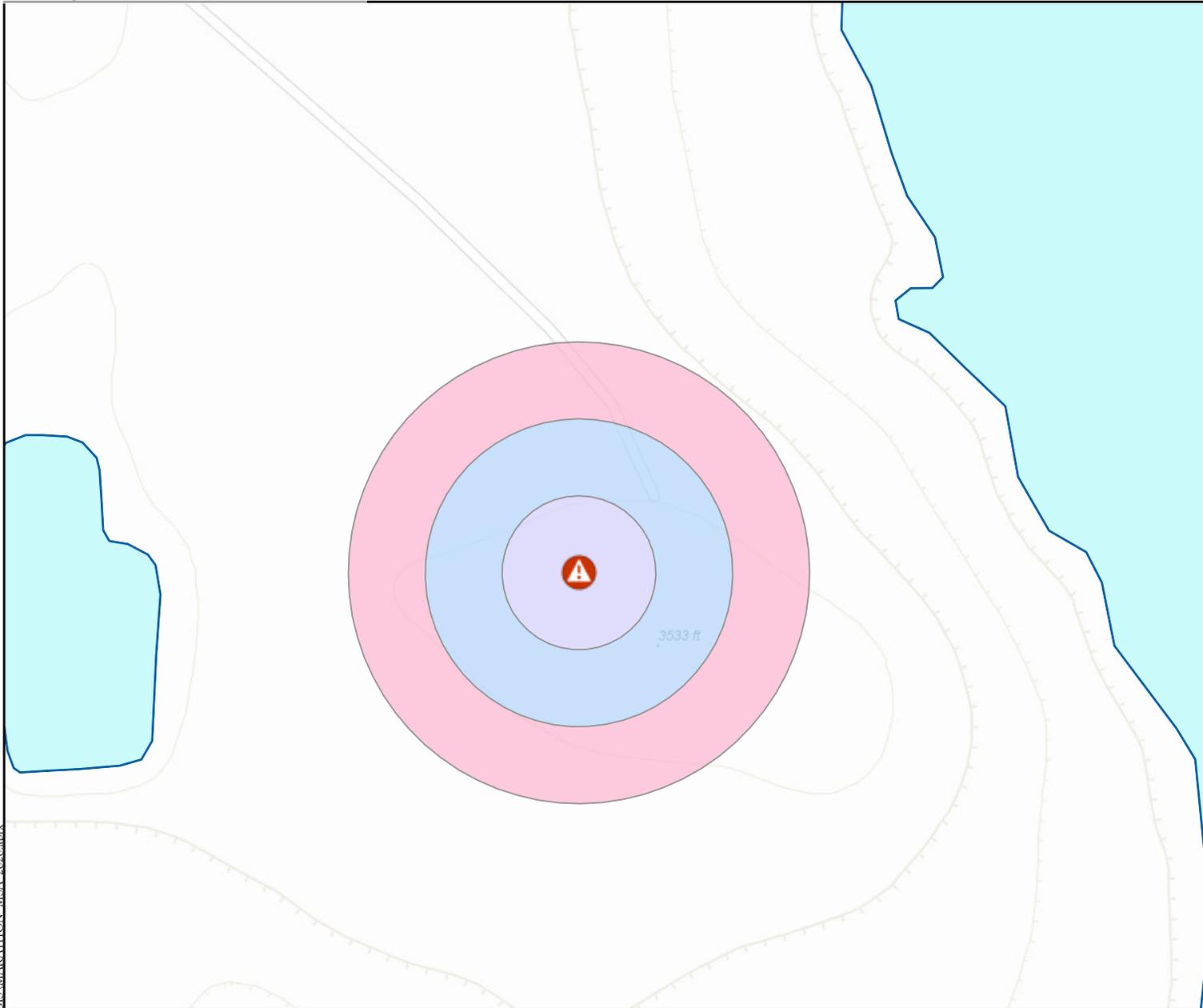
P:\5-Marathon-MSA 2020 (5/17/2020)\BGT - Green Frog Cafe Federal #001\H\CAD\Figures\Green Frog Cafe Fed # 1.mxd  
 Date Saved: 6/16/2020

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

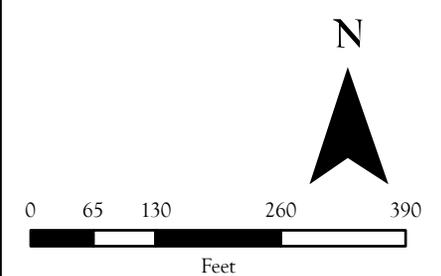
Drawn	Sebastian Orozco
Date	6/16/2020
Checked	_____
Approved	_____



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



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



Surface Water Protection Map  
 Green Frog Cafe Federal #001H, Marathon Oil  
 UL:B Sec:18 T:20S R:33E, Lea County, New Mexico

Figure 2

P:\5\Marathon\_MSA\_2020\5E289801\GIS\MARATHON\_MSA\_2020.aprx

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

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Drawn	Nate Grove	
Date	1/20/2021	
Checked	_____	
Approved	_____	



201 South Halaguena Street  
 Carlsbad, New Mexico 88221  
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 Serving the Southwest & Rocky Mountains



Legend

-  Point of Release
-  Soil Sample
-  Pipeline



Site and Sample Location Map  
 Green Frog Cafe Federal #001H- Marathon Oil  
 UL: B S: 18 T: 20S R: 33E Lea County, New Mexico

Figure 3

P:\5-Marathon\_MSA\_2020\5E\8980\GIS\MARATHON\_MSA\_2020.aprx

Revisions  
 By: \_\_\_\_\_ Date: \_\_\_\_\_ Descr: \_\_\_\_\_  
 By: \_\_\_\_\_ Date: \_\_\_\_\_ Descr: \_\_\_\_\_

Drawn Nate Grove  
 Date 2/10/2021  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_



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 Carlsbad, New Mexico 88221  
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# TABLES

Table 2:  
NMOCD Closure Criteria

Marathon Oil Permian LLC  
Green Frog Cafe Federal #001H (NAPP2036443181)

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes				
Depth to Groundwater (feet bgs)	157	USGS Water Well Data				
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	1,539	USGS 7.5 Quadrangle Map				
Horizontal Distance to Nearest Significant Watercourse (ft)	900	USGS 7.5 Quadrangle Map				
Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene
< 50' BGS		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'	X	20000	2500	1000	50	10
Surface Water	yes or no	if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No					
within a 100-year floodplain?	No					



Table 3: Marathon Oil Permian LLC  
 Sample Results Green Frog Cafe Federal #001H (NAPP2036443181)

Sample ID	Sample Date	Depth of Sample (feet bgs)	Method 8021B		Method 8015D				Method 300.0
			BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Closure Criteria			50	10	1,000			2,500	20,000
CSL1	1/19/2021	Surface	<0.213	<0.024	<4.7	<9.5	<47	<61.2	390
	1/19/2021	0.5	<0.219	<0.024	<4.9	<9.3	<47	<61.2	310
CSL2	1/19/2021	Surface	<0.217	<0.024	<4.8	<9.7	<48	<62.5	300
	1/19/2021	0.5	<0.221	<0.025	<4.9	<9.6	<48	<62.5	280
CSL3	1/19/2021	Surface	<0.220	<0.024	<4.9	<8.9	<45	<58.8	2,300
	1/19/2021	0.5	<0.217	<0.024	<4.8	230	320	550	250
	2/2/2021	1	--	--	<4.9	<9.8	<49	<63.6	--
	2/2/2021	2	--	--	<4.8	<9.8	<49	<63.6	--
CSL4	1/19/2021	Surface	<0.220	<0.024	<4.9	<9.7	<49	<63.6	380
	1/19/2021	0.5	<0.219	<0.024	<4.9	<8.6	<43	<56.5	140

"-" = Not Analyzed

BG: Background sample



# APPENDIX A FORM C141

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Contact email <a href="mailto:msanjari@marathonoil.com">msanjari@marathonoil.com</a>	Incident # (assigned by OCD)
Contact mailing address 4111 S. Tidwell Rd., Carlsbad, NM 8220	

### Location of Release Source

Latitude 32.5781898

Longitude -103.7015533  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: GREEN FROG CAFE FEDERAL #001H	Site Type: Oil & Gas Facility
Date Release Discovered: 12/29/2020	API# (if applicable) 30-025-40828

Unit Letter	Section	Township	Range	County
B	18	20S	33E	Lea

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

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 0.01 bbl.	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

A programming error on the inlet separator resulted in 0.01 bbl. of oil upsetting from the flare, igniting and self-extinguishing before hitting the ground as a mist just below the flare on the engineered pad.

State of New Mexico  
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? 19.15.29.7(A)2(a) (Fire)
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes by MOC on 12/29/2020 via C141a	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:  
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Melodie Sanjari</u> Title: <u>Environmental Professional</u>  Signature: <u>Melodie Sanjari</u> Date: <u>1/4/2021</u>  email: <u>msanjari@marathonoil.com</u> Telephone: <u>575-988-8753</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____



# Spill Calculation Tool

**Standing Liquid Inputs:**

	Length (ft.)	Width (ft.)	Avg. Liquid Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1					0.00	0.00	0.00
Rectangle Area #2					0.00	0.00	0.00
Rectangle Area #3					0.00	0.00	0.00
Rectangle Area #4					0.00	0.00	0.00
Rectangle Area #5					0.00	0.00	0.00
Rectangle Area #6					0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
<b>Liquid Volume:</b>					<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**Saturated Soil Inputs:**

Soil Type: **Gravel Loam**

	Length (ft.)	Width (ft.)	Avg. Saturated Depth (in.)	% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
Rectangle Area #1	35	30	0.125	0%	0.01	0.01	0.00
Rectangle Area #2				0%	0.00	0.00	0.00
Rectangle Area #3				0%	0.00	0.00	0.00
Rectangle Area #4				0%	0.00	0.00	0.00
Rectangle Area #5				0%	0.00	0.00	0.00
Rectangle Area #6				0%	0.00	0.00	0.00
Rectangle Area #7					0.00	0.00	0.00
Rectangle Area #8					0.00	0.00	0.00
<b>Saturated Volume</b>					<b>0.01</b>	<b>0.01</b>	<b>0.00</b>

Volume Recovered and not included in Standing Liquid Inputs:

% Oil	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)

	Total Volume (bbls)	Water Volume (bbls)	Oil Volume (bbls)
<b>Total Spill Volume (bbls):</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>

# APPENDIX B

# USGS WELL REPORT



USGS Home  
Contact USGS  
Search USGS

## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for the Nation

\* IMPORTANT: [Next Generation Station Page](#)

### Search Results -- 1 sites found

site\_no list =

- 323429103421601

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 323429103421601 20S.33E.18.12322

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°34'29", Longitude 103°42'16" NAD27

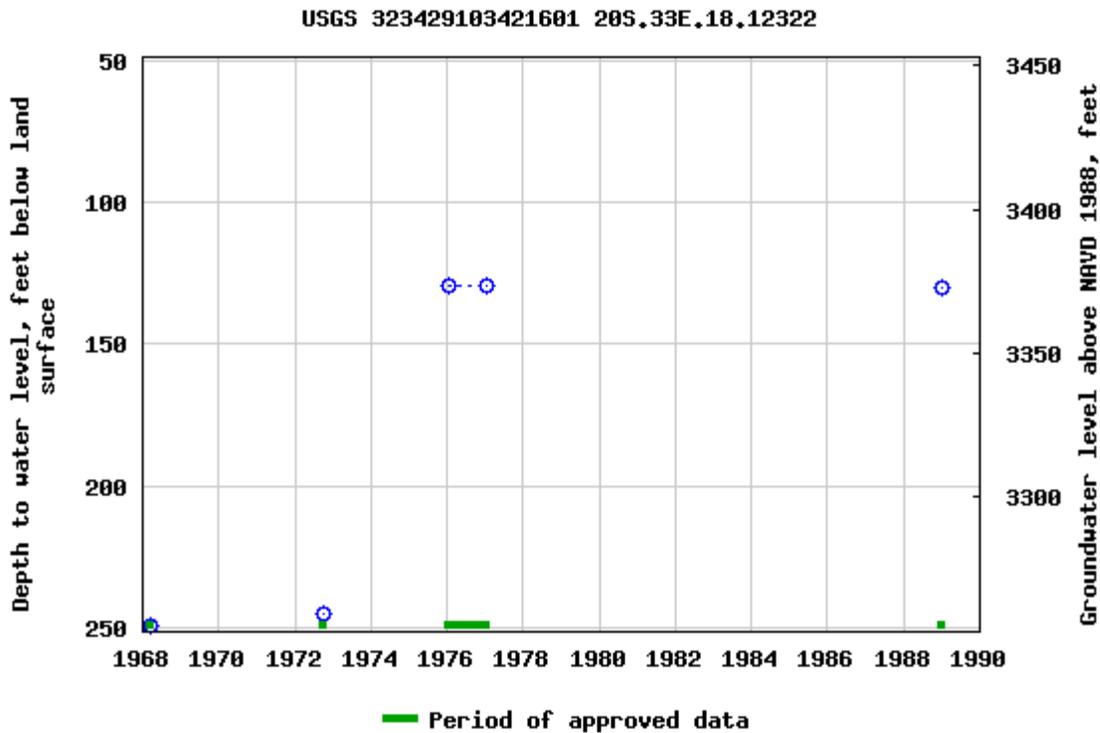
Land-surface elevation 3,503 feet above NAVD88

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

#### Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Breaks in the plot represent a gap of at least one year between field measurements.  
[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

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[Accessibility](#)   [FOIA](#)   [Privacy](#)   [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-02-09 12:32:13 EST

0.68 0.63 nadww01



APPENDIX C  
FIELD NOTES  
&  
PHOTO LOG



Green Frog Café Federal #001H



# APPENDIX D

## LABORATORY ANALYTICAL REPORTS



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

January 27, 2021

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

RE: Green Frog Cafe Federal 1H

OrderNo.: 2101767

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/21/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL1-Sur

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:00:00 AM

**Lab ID:** 2101767-001

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	390	60		mg/Kg	20	1/26/2021 1:15:02 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/23/2021 11:29:40 AM	57681
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/23/2021 11:29:40 AM	57681
Surr: DNOP	90.8	30.4-154		%Rec	1	1/23/2021 11:29:40 AM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/22/2021 9:02:35 PM	57679
Surr: BFB	104	75.3-105		%Rec	1	1/22/2021 9:02:35 PM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/22/2021 9:02:35 PM	57679
Toluene	ND	0.047		mg/Kg	1	1/22/2021 9:02:35 PM	57679
Ethylbenzene	ND	0.047		mg/Kg	1	1/22/2021 9:02:35 PM	57679
Xylenes, Total	ND	0.095		mg/Kg	1	1/22/2021 9:02:35 PM	57679
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	1/22/2021 9:02:35 PM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL1--5

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:05:00 AM

**Lab ID:** 2101767-002

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	310	60		mg/Kg	20	1/26/2021 2:17:06 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/23/2021 11:53:19 AM	57681
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/23/2021 11:53:19 AM	57681
Surr: DNOP	133	30.4-154		%Rec	1	1/23/2021 11:53:19 AM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/22/2021 11:02:56 PM	57679
Surr: BFB	102	75.3-105		%Rec	1	1/22/2021 11:02:56 PM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/22/2021 11:02:56 PM	57679
Toluene	ND	0.049		mg/Kg	1	1/22/2021 11:02:56 PM	57679
Ethylbenzene	ND	0.049		mg/Kg	1	1/22/2021 11:02:56 PM	57679
Xylenes, Total	ND	0.097		mg/Kg	1	1/22/2021 11:02:56 PM	57679
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/22/2021 11:02:56 PM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL2-Sur

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:10:00 AM

**Lab ID:** 2101767-003

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	300	60		mg/Kg	20	1/26/2021 2:54:20 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/23/2021 12:17:02 PM	57681
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/23/2021 12:17:02 PM	57681
Surr: DNOP	96.0	30.4-154		%Rec	1	1/23/2021 12:17:02 PM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/22/2021 11:26:52 PM	57679
Surr: BFB	101	75.3-105		%Rec	1	1/22/2021 11:26:52 PM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/22/2021 11:26:52 PM	57679
Toluene	ND	0.048		mg/Kg	1	1/22/2021 11:26:52 PM	57679
Ethylbenzene	ND	0.048		mg/Kg	1	1/22/2021 11:26:52 PM	57679
Xylenes, Total	ND	0.097		mg/Kg	1	1/22/2021 11:26:52 PM	57679
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	1/22/2021 11:26:52 PM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL2--5

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:15:00 AM

**Lab ID:** 2101767-004

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	280	60		mg/Kg	20	1/26/2021 3:06:44 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/23/2021 12:40:44 PM	57681
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/23/2021 12:40:44 PM	57681
Surr: DNOP	106	30.4-154		%Rec	1	1/23/2021 12:40:44 PM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/22/2021 11:50:43 PM	57679
Surr: BFB	98.1	75.3-105		%Rec	1	1/22/2021 11:50:43 PM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	1/22/2021 11:50:43 PM	57679
Toluene	ND	0.049		mg/Kg	1	1/22/2021 11:50:43 PM	57679
Ethylbenzene	ND	0.049		mg/Kg	1	1/22/2021 11:50:43 PM	57679
Xylenes, Total	ND	0.098		mg/Kg	1	1/22/2021 11:50:43 PM	57679
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/22/2021 11:50:43 PM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL3-Sur

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:20:00 AM

**Lab ID:** 2101767-005

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	2300	60		mg/Kg	20	1/26/2021 3:19:08 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/23/2021 1:04:30 PM	57681
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/23/2021 1:04:30 PM	57681
Surr: DNOP	93.0	30.4-154		%Rec	1	1/23/2021 1:04:30 PM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2021 12:14:37 AM	57679
Surr: BFB	98.4	75.3-105		%Rec	1	1/23/2021 12:14:37 AM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/23/2021 12:14:37 AM	57679
Toluene	ND	0.049		mg/Kg	1	1/23/2021 12:14:37 AM	57679
Ethylbenzene	ND	0.049		mg/Kg	1	1/23/2021 12:14:37 AM	57679
Xylenes, Total	ND	0.098		mg/Kg	1	1/23/2021 12:14:37 AM	57679
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/23/2021 12:14:37 AM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL3-.5

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:25:00 AM

**Lab ID:** 2101767-006

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	250	60		mg/Kg	20	1/26/2021 3:31:33 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	230	9.2		mg/Kg	1	1/25/2021 9:48:36 AM	57681
Motor Oil Range Organics (MRO)	320	46		mg/Kg	1	1/25/2021 9:48:36 AM	57681
Surr: DNOP	104	30.4-154		%Rec	1	1/25/2021 9:48:36 AM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/23/2021 12:38:24 AM	57679
Surr: BFB	97.9	75.3-105		%Rec	1	1/23/2021 12:38:24 AM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/23/2021 12:38:24 AM	57679
Toluene	ND	0.048		mg/Kg	1	1/23/2021 12:38:24 AM	57679
Ethylbenzene	ND	0.048		mg/Kg	1	1/23/2021 12:38:24 AM	57679
Xylenes, Total	ND	0.097		mg/Kg	1	1/23/2021 12:38:24 AM	57679
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/23/2021 12:38:24 AM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL4-Sur

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:30:00 AM

**Lab ID:** 2101767-007

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	380	60		mg/Kg	20	1/26/2021 3:43:58 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/23/2021 1:52:03 PM	57681
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/23/2021 1:52:03 PM	57681
Surr: DNOP	58.4	30.4-154		%Rec	1	1/23/2021 1:52:03 PM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2021 1:02:07 AM	57679
Surr: BFB	98.8	75.3-105		%Rec	1	1/23/2021 1:02:07 AM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/23/2021 1:02:07 AM	57679
Toluene	ND	0.049		mg/Kg	1	1/23/2021 1:02:07 AM	57679
Ethylbenzene	ND	0.049		mg/Kg	1	1/23/2021 1:02:07 AM	57679
Xylenes, Total	ND	0.098		mg/Kg	1	1/23/2021 1:02:07 AM	57679
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/23/2021 1:02:07 AM	57679

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

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

**Analytical Report**

Lab Order **2101767**

Date Reported: **1/27/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** CSL4-.5

**Project:** Green Frog Cafe Federal 1H

**Collection Date:** 1/19/2021 9:35:00 AM

**Lab ID:** 2101767-008

**Matrix:** SOIL

**Received Date:** 1/21/2021 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	140	60		mg/Kg	20	1/26/2021 4:21:10 PM	57733
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	1/23/2021 2:15:53 PM	57681
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/23/2021 2:15:53 PM	57681
Surr: DNOP	70.3	30.4-154		%Rec	1	1/23/2021 2:15:53 PM	57681
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/23/2021 1:25:50 AM	57679
Surr: BFB	98.1	75.3-105		%Rec	1	1/23/2021 1:25:50 AM	57679
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	1/23/2021 1:25:50 AM	57679
Toluene	ND	0.049		mg/Kg	1	1/23/2021 1:25:50 AM	57679
Ethylbenzene	ND	0.049		mg/Kg	1	1/23/2021 1:25:50 AM	57679
Xylenes, Total	ND	0.097		mg/Kg	1	1/23/2021 1:25:50 AM	57679
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/23/2021 1:25:50 AM	57679

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2101767

27-Jan-21

**Client:** Souder, Miller & Associates

**Project:** Green Frog Cafe Federal 1H

Sample ID: <b>MB-57733</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57733</b>	RunNo: <b>74872</b>								
Prep Date: <b>1/26/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2642587</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57733</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57733</b>	RunNo: <b>74872</b>								
Prep Date: <b>1/26/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2642588</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.7	90	110			

Sample ID: <b>2101767-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>CSL1-Sur</b>	Batch ID: <b>57733</b>	RunNo: <b>74872</b>								
Prep Date: <b>1/26/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2642595</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	400	60	30.00	394.7	27.8	36.7	168			S

Sample ID: <b>2101767-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>CSL1-Sur</b>	Batch ID: <b>57733</b>	RunNo: <b>74872</b>								
Prep Date: <b>1/26/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2642596</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	440	59	30.00	394.7	156	36.7	168	9.14	20	

Sample ID: <b>2101767-002AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>CSL1-.5</b>	Batch ID: <b>57733</b>	RunNo: <b>74872</b>								
Prep Date: <b>1/26/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2642598</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	340	60	30.00	310.6	101	36.7	168			

Sample ID: <b>2101767-002AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>CSL1-.5</b>	Batch ID: <b>57733</b>	RunNo: <b>74872</b>								
Prep Date: <b>1/26/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2642599</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	350	60	30.00	310.6	133	36.7	168	2.84	20	

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2101767

27-Jan-21

**Client:** Souder, Miller & Associates  
**Project:** Green Frog Cafe Federal 1H

Sample ID: <b>MB-57681</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57681</b>	RunNo: <b>74816</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/23/2021</b>	SeqNo: <b>2640472</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		114	30.4	154			

Sample ID: <b>LCS-57681</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57681</b>	RunNo: <b>74816</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/23/2021</b>	SeqNo: <b>2640473</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	68.9	141			
Surr: DNOP	5.3		5.000		107	30.4	154			

**Qualifiers:**

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2101767

27-Jan-21

**Client:** Souder, Miller & Associates

**Project:** Green Frog Cafe Federal 1H

Sample ID: <b>ics-57679</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>57679</b>		RunNo: <b>74810</b>							
Prep Date: <b>1/21/2021</b>	Analysis Date: <b>1/22/2021</b>		SeqNo: <b>2640134</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	80	120			
Surr: BFB	1100		1000		113	75.3	105			S

Sample ID: <b>mb-57679</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>57679</b>		RunNo: <b>74810</b>							
Prep Date: <b>1/21/2021</b>	Analysis Date: <b>1/22/2021</b>		SeqNo: <b>2640135</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	75.3	105			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2101767

27-Jan-21

**Client:** Souder, Miller & Associates

**Project:** Green Frog Cafe Federal 1H

Sample ID: <b>2101767-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>CSL1-Sur</b>	Batch ID: <b>57679</b>	RunNo: <b>74810</b>								
Prep Date: <b>1/21/2021</b>	Analysis Date: <b>1/22/2021</b>	SeqNo: <b>2640251</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9823	0	107	76.3	120			
Toluene	1.1	0.049	0.9823	0.01015	108	78.5	120			
Ethylbenzene	1.1	0.049	0.9823	0	109	78.1	124			
Xylenes, Total	3.2	0.098	2.947	0.01584	109	79.3	125			
Surr: 4-Bromofluorobenzene	1.1		0.9823		108	80	120			

Sample ID: <b>2101767-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>CSL1-Sur</b>	Batch ID: <b>57679</b>	RunNo: <b>74810</b>								
Prep Date: <b>1/21/2021</b>	Analysis Date: <b>1/22/2021</b>	SeqNo: <b>2640253</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9766	0	105	76.3	120	1.95	20	
Toluene	1.1	0.049	0.9766	0.01015	108	78.5	120	1.29	20	
Ethylbenzene	1.1	0.049	0.9766	0	108	78.1	124	1.09	20	
Xylenes, Total	3.2	0.098	2.930	0.01584	107	79.3	125	1.61	20	
Surr: 4-Bromofluorobenzene	1.1		0.9766		109	80	120	0	0	

Sample ID: <b>LCS-57679</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57679</b>	RunNo: <b>74810</b>								
Prep Date: <b>1/21/2021</b>	Analysis Date: <b>1/22/2021</b>	SeqNo: <b>2640274</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID: <b>mb-57679</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57679</b>	RunNo: <b>74810</b>								
Prep Date: <b>1/21/2021</b>	Analysis Date: <b>1/22/2021</b>	SeqNo: <b>2640276</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

**Qualifiers:**

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



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

Sample Log-In Check List

Client Name: Souder, Miller & Associat Work Order Number: 2101767 RcptNo: 1

Received By: Isaiah Ortiz 1/21/2021 7:48:00 AM I-OX
Completed By: Isaiah Ortiz 1/21/2021 8:28:53 AM I-OX
Reviewed By: DAD 01/21/21

Chain of Custody

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

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [ ] NA [ ]
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [ ] NA [ ]
5. Sample(s) in proper container(s)? Yes [checked] No [ ]
6. Sufficient sample volume for indicated test(s)? Yes [checked] No [ ]
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No [ ]
8. Was preservative added to bottles? Yes [ ] No [checked] NA [ ]
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [ ] No [ ] NA [checked]
10. Were any sample containers received broken? Yes [ ] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No [ ]
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No [ ]
13. Is it clear what analyses were requested? Yes [checked] No [ ]
14. Were all holding times able to be met? Yes [checked] No [ ]

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: JR 1/21/21

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

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

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Contains 2 rows of data.

### Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address: \_\_\_\_\_

Phone #: \_\_\_\_\_

email or Fax#: \_\_\_\_\_

QA/QC Package:  Standard  Level 4 (Full Validation)  Az Compliance  Other

Accreditation:  NELAC  EDD (Type) \_\_\_\_\_

Turn-Around Time: 5 Day

Standard  Rush

Project Name: Green Frog Cafe Federal IH

Project #: CL.21.00025

Project Manager: Ashley Maxwell

Sampler: \_\_\_\_\_

On Ice:  Yes  No

# of Coolers: 2  $0.1 \pm 0$

Cooler Temp (including CF): 0.4  $\pm 0$  (°C)

Container Type and #

Preservative Type

HEAL No. 2101767

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1/19	9:00	Soil	CSL1-Sur	4oz	Cool	001
	9:05		CSL1-.5			002
	9:10		CSL2-Sur			003
	9:15		CSL2-.5			004
	9:20		CSL3-Sur			005
	9:25		CSL3-.5			006
	9:30		CSL4-Sur			007
	9:35		CSL4-.5			008

Relinquished by: Nate Grove Date: 1/20/21 9:50

Relinquished by: Edumungo Date: 1/20/21 19:00

Received by: Edumungo Date: 1/20/21 9:50

Received by: Edumungo Date: 1/21/21 07:48



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

**Analysis Request**

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

Remarks: Marathon



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

February 12, 2021

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

RE: Green Frog Cafe Federal 001H

OrderNo.: 2102214

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/4/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order **2102214**

Date Reported: **2/12/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S-3 (-1')

**Project:** Green Frog Cafe Federal 001H

**Collection Date:** 2/2/2021 11:25:00 AM

**Lab ID:** 2102214-001

**Matrix:** SOIL

**Received Date:** 2/4/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/5/2021 10:39:13 AM	57918
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/5/2021 10:39:13 AM	57918
Surr: DNOP	82.7	70-130		%Rec	1	2/5/2021 10:39:13 AM	57918
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/9/2021 9:21:48 PM	57917
Surr: BFB	105	75.3-105		%Rec	1	2/9/2021 9:21:48 PM	57917

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2102214

12-Feb-21

**Client:** Souder, Miller & Associates  
**Project:** Green Frog Cafe Federal 001H

Sample ID: <b>MB-57918</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57918</b>	RunNo: <b>75091</b>								
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/5/2021</b>	SeqNo: <b>2650944</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.3	70	130			

Sample ID: <b>LCS-57918</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57918</b>	RunNo: <b>75091</b>								
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/5/2021</b>	SeqNo: <b>2650945</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.8	68.9	141			
Surr: DNOP	4.2		5.000		84.5	70	130			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2102214

12-Feb-21

**Client:** Souder, Miller & Associates  
**Project:** Green Frog Cafe Federal 001H

Sample ID: <b>mb-57917</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57917</b>	RunNo: <b>75165</b>								
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2654244</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	75.3	105			

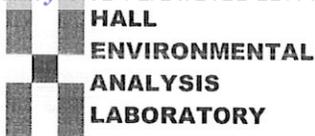
Sample ID: <b>ics-57917</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57917</b>	RunNo: <b>75165</b>								
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2654245</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	80	120			
Surr: BFB	1200		1000		116	75.3	105			S

Sample ID: <b>mb-57946</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57946</b>	RunNo: <b>75212</b>								
Prep Date: <b>2/5/2021</b>	Analysis Date: <b>2/11/2021</b>	SeqNo: <b>2655747</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		97.8	75.3	105			

Sample ID: <b>ics-57946</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57946</b>	RunNo: <b>75212</b>								
Prep Date: <b>2/5/2021</b>	Analysis Date: <b>2/11/2021</b>	SeqNo: <b>2655748</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	75.3	105			S

**Qualifiers:**

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



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

Sample Log-In Check List

Client Name: Souder, Miller & Associates
Work Order Number: 2102214
RcptNo: 1

Received By: Juan Rojas 2/4/2021 7:35:00 AM

[Signature]

Completed By: Sean Livingston 2/4/2021 8:42:51 AM

[Signature]

Reviewed By: SPA 2.4.21

Chain of Custody

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

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [ ] NA [ ]
4. Were all samples received at a temperature of >0° C to 6.0° C Yes [checked] No [ ] NA [ ]
5. Sample(s) in proper container(s)? Yes [checked] No [ ]
6. Sufficient sample volume for indicated test(s)? Yes [checked] No [ ]
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No [ ]
8. Was preservative added to bottles? Yes [ ] No [checked] NA [ ]
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [ ] No [ ] NA [checked]
10. Were any sample containers received broken? Yes [ ] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No [ ]
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No [ ]
13. Is it clear what analyses were requested? Yes [checked] No [ ]
14. Were all holding times able to be met? Yes [checked] No [ ]

# of preserved bottles checked for pH: 10
2/4/21
(<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified:
Date:
By Whom:
Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Contains 3 rows of data.





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

February 12, 2021

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

RE: Green Frog Cafe Federal 001H

OrderNo.: 2102210

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/4/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order **2102210**

Date Reported: **2/12/2021**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Souder, Miller & Associates

**Client Sample ID:** S-3 (-2')

**Project:** Green Frog Cafe Federal 001H

**Collection Date:** 2/2/2021 11:30:00 AM

**Lab ID:** 2102210-001

**Matrix:** SOIL

**Received Date:** 2/4/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/5/2021 9:40:11 AM	57918
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/5/2021 9:40:11 AM	57918
Surr: DNOP	81.0	70-130		%Rec	1	2/5/2021 9:40:11 AM	57918
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/9/2021 8:58:16 PM	57917
Surr: BFB	107	75.3-105	S	%Rec	1	2/9/2021 8:58:16 PM	57917

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2102210

12-Feb-21

**Client:** Souder, Miller & Associates  
**Project:** Green Frog Cafe Federal 001H

Sample ID: <b>MB-57918</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57918</b>	RunNo: <b>75091</b>								
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/5/2021</b>	SeqNo: <b>2650944</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.3	70	130			

Sample ID: <b>LCS-57918</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57918</b>	RunNo: <b>75091</b>								
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/5/2021</b>	SeqNo: <b>2650945</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.8	68.9	141			
Surr: DNOP	4.2		5.000		84.5	70	130			

**Qualifiers:**

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2102210

12-Feb-21

**Client:** Souder, Miller & Associates  
**Project:** Green Frog Cafe Federal 001H

Sample ID: <b>mb-57917</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>57917</b>		RunNo: <b>75165</b>							
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/9/2021</b>		SeqNo: <b>2654244</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	75.3	105			

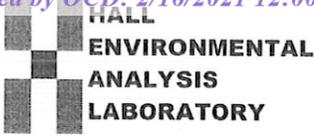
Sample ID: <b>ics-57917</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>57917</b>		RunNo: <b>75165</b>							
Prep Date: <b>2/4/2021</b>	Analysis Date: <b>2/9/2021</b>		SeqNo: <b>2654245</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	80	120			
Surr: BFB	1200		1000		116	75.3	105			S

Sample ID: <b>mb-57946</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>57946</b>		RunNo: <b>75212</b>							
Prep Date: <b>2/5/2021</b>	Analysis Date: <b>2/11/2021</b>		SeqNo: <b>2655747</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		97.8	75.3	105			

Sample ID: <b>ics-57946</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>57946</b>		RunNo: <b>75212</b>							
Prep Date: <b>2/5/2021</b>	Analysis Date: <b>2/11/2021</b>		SeqNo: <b>2655748</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	75.3	105			S

**Qualifiers:**

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



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

Sample Log-In Check List

Client Name: Souder, Miller & Associates Work Order Number: 2102210 RcptNo: 1

Received By: Juan Rojas 2/4/2021 7:35:00 AM

Completed By: Sean Livingston 2/4/2021 8:28:54 AM

Reviewed By: SPA 2.4.21

Handwritten signatures: Juan Rojas, Sean Livingston

Chain of Custody

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

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [ ] NA [ ]
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [ ] NA [ ]
5. Sample(s) in proper container(s)? Yes [checked] No [ ]
6. Sufficient sample volume for indicated test(s)? Yes [checked] No [ ]
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No [ ]
8. Was preservative added to bottles? Yes [ ] No [checked] NA [ ]
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [ ] No [ ] NA [checked]
10. Were any sample containers received broken? Yes [ ] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No [ ]
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No [ ]
13. Is it clear what analyses were requested? Yes [checked] No [ ]
14. Were all holding times able to be met? Yes [checked] No [ ]

# of preserved bottles checked for pH: ITO 2/4/21 (<2 or >12 unless noted) Adjusted? Checked by:

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: Date: By Whom: Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person Regarding: Client Instructions:

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Rows 1-3.



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

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

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

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

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

CONDITIONS  
 Action 18043

**CONDITIONS**

Operator: MARATHON OIL PERMIAN LLC 5555 San Felipe St. Houston, TX 77056	OGRID: 372098
	Action Number: 18043
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
ceads	None	6/23/2021