

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	NAPP2035543036
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 32.2989697

Longitude -104.13114049  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: GRAVEL GRINDER FEE 23 28 18 WXY #003H	Site Type: Oil & Gas Facility
Date Release Discovered: 12/20/2020	API# (if applicable) 30-015-44627

Unit Letter	Section	Township	Range	County
M	18	23S	28E	Eddy

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

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe)	Volume/Weight Released (provide units) Oil, Sand & Produced Water Mixture from Wellhead (emulsion) 250 bbl.	Volume/Weight Recovered (provide units) 250 bbl.

#### Cause of Release

Upon arrival at the Gravel Grinder location, it was discovered that an extra heavy 90 on the casing failed as a result of sand erosion which led to the release of approx. 250 bbl. of emulsion (water, oil & sand -appears to be mostly water) on the engineered pad. Recovery efforts began immediately as there were already two trucks in the vicinity – an emergency on call was placed and a surface scrape was conducted after standing fluids were removed to ensure the release did not migrate laterally into the pasture.

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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?  Volume
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? By Melodie Sanjari via a C141a on 12/20	

## 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: 12/22/2020
email: <u>msanjari@marathonoil.com</u>	Telephone: <u>575-988-8753</u>
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

Incident ID	NAPP2035543036
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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>70</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 checked="" type="checkbox"/> Yes <input 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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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: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 12/30/2021

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

**OCD Only**

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



Incident ID	NAPP2035543036
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 delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Melodie Sanjari Title: Environmental Professional

Signature: Melodie Sanjari Date: 12/30/2021

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

**OCD Only**

Received by: Chad Hensley Date: 02/16/2022

☒ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Chad Hensley Date: 02/16/2022



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

December 27, 2021

#5E28980-BG15

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

SUBJECT: Response to OCD rejection for the Gravel Grinder Fee 23 28 18 WXY #003H Release (NAPP2035543036), Eddy County, New Mexico

Mr. Mike Bratcher:

On behalf of Marathon Oil Permian LLC (Marathon, Souder, Miller & Associates (SMA) has prepared this response to the rejected OCD Application for administrative approval of a release notification and corrective action C-141 for the release of liquids related to oil and gas production activities at the Gravel Grinder Fee 23 28 18 WXY #003H site. The site is in Unit M, Section 18, Township 23S, Range 28E, Eddy County, New Mexico, on Federal land.

Per the email dated December 12, 2021, OCD allowed the submittal of an alternative work plan.

On December 11, 2021, the site was delineated for a second time. The results are included in the attached table.

SMA is proposing the following work plan to target hydrocarbon contamination:

- The hydrocarbon impacted area will be excavated to meet the NMOCD Table I closure standards for a depth to ground water of less than 50 feet below grade surface (bgs). Excavation activities will include the use of heavy equipment, hydrovac equipment, and manual tools.

Per the background sample collected on December 20, 2021, naturally occurring chlorides were detected at 1,700 mg/Kg using EPA Method 300.0 for chlorides. SMA is requesting a variance of NMOCD Table I closure standards for a depth of ground water of less than 50 feet bgs for chlorides to be adjusted to 2,229 mg/Kg. The 2,229 mg/Kg equates the detected background ground of 1,700 mg/Kg to non-detect limits while allowing 599 mg/Kg to obtain closure equivalent to the closure standard of 600 mg/Kg as listed in the NMOCD Table I closure standards.

Marathon is requesting 90 days, upon OCD approval of this plan, to complete the proposed plan. Upon completion of work, OCD will be provided with a letter summarizing remediation activities and photo documentation of work completed.

If there are any questions, please contact me at 505-320-8975.

Submitted by:  
SOUDER, MILLER & ASSOCIATES

A handwritten signature in black ink, appearing to read 'Ashley Maxwell', written over a light blue horizontal line.

Ashley Maxwell  
Project Scientist

Table 3:  
Summary of Sample Results

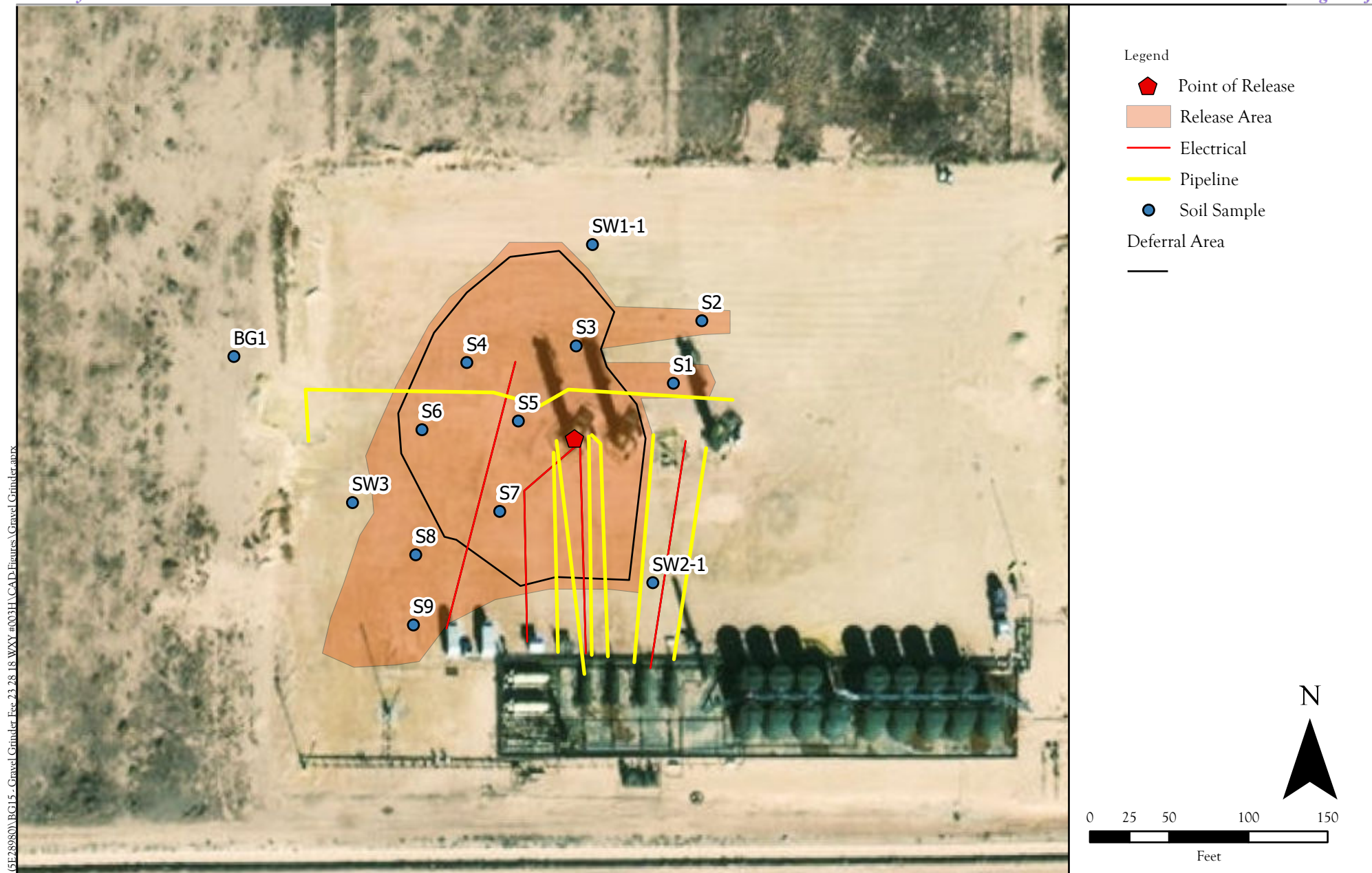
Marathon Oil, Permian LLC  
Gravel Grinder 23 28 18 WXY #003H

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 Reclamation Requirement			50	10	-		--	100	2,229*
SB BG1	12/20/2021	Surface	--	--	--	--	--	--	720
		1	--	--	--	--	--	--	770
		2	--	--	--	--	--	--	1,100
		3	--	--	--	--	--	--	1,100
		4	--	--	--	--	--	--	1,700
S1	12/11/2021	Surface	<0.216	<0.024	<4.8	<10	<50	<64.8	3,600
		2	-	-	<4.9	<9.4	<47	<61.3	1,900
		4	-	-	<4.9	<9.4	<47	<61.3	840
S2	12/11/2021	Surface	<0.208	<0.023	<4.6	11	<47	11	4,200
		2	-	-	<5.0	<9.7	<48	<62.7	1,100
		4	-	-	<4.8	<10	<50	<64.8	2,300
S3	12/11/2021	Surface	<0.225	<0.025	<5.0	77	370	447	6,000
		2	-	-	<5.0	<9.6	<48	<62.6	2,300
		4	-	-	<4.8	<9.5	<47	<61.3	1,900
S4	12/11/2021	Surface	<0.212	<0.024	<4.7	28	<48	28	210
		2	-	-	<4.8	<9.4	<47	<61.2	<59
		4	-	-	<4.9	<9.2	<46	<60.1	<60
S5	12/11/2021	Surface	<0.224	<0.025	<5.0	820	1,700	2,520	130
		2	-	-	<4.9	<9.4	<47	<61.3	890
		4	-	-	<4.7	<50	<10	<64.7	2,800
S6	12/11/2021	Surface	<0.212	<0.024	<4.7	2,400	1,500	3,900	4,100
		2	-	-	<4.8	<9.8	<49	<63.6	2,000
		4	-	-	<4.9	<9.8	<49	<63.7	290
S7	12/11/2021	Surface	<0.220	<0.024	<4.8	68	82	150	4,200
		2	-	-	<4.9	<10	<50	<64.9	3,500
		4	-	-	<4.8	<9.9	<50	<64.7	1,400
S8	12/11/2021	Surface	<0.216	<0.024	<4.8	10	<48	10	970
		2	-	-	<5.0	<9.8	<49	<63.8	2,400
		4	-	-	<4.7	<9.7	<48	<62.4	1,200
S9	12/11/2021	Surface	<0.220	<0.024	<4.9	<9.4	<47	<61.3	4,400
		2	-	-	<4.8	<10	<50	<64.8	2,900
		4	-	-	<4.7	<9.5	<48	<62.2	1,000

"--" = Not Analyzed

BG: Background sample

"\*" Variance request



*Deferral Map*  
 Gravel Grinder Fee 23 28 18 WXY #3H - Marathon Oil,  
 UL: M : 18 T:23S R: 28E Eddy County, New Mexico

Figure 4

## Revisions

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

Drawn  
 Date  
 Checked  
 Approved

Jake Madison  
 2/24/2021



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

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

December 21, 2021

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

RE: Gravel Grinder 282318TBGH

OrderNo.: 2112840

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 45 sample(s) on 12/14/2021 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S1- Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-001

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	3600	150		mg/Kg	50	12/16/2021 9:30:17 AM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 4:19:43 PM	64496
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 4:19:43 PM	64496
Surr: DNOP	80.7	70-130		%Rec	1	12/14/2021 4:19:43 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 6:33:00 AM	64490
Surr: BFB	92.9	70-130		%Rec	1	12/15/2021 6:33:00 AM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 6:33:00 AM	64490
Toluene	ND	0.048		mg/Kg	1	12/15/2021 6:33:00 AM	64490
Ethylbenzene	ND	0.048		mg/Kg	1	12/15/2021 6:33:00 AM	64490
Xylenes, Total	ND	0.096		mg/Kg	1	12/15/2021 6:33:00 AM	64490
Surr: 4-Bromofluorobenzene	81.5	70-130		%Rec	1	12/15/2021 6:33:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S1-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-003

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1900	60		mg/Kg	20	12/15/2021 3:47:27 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/14/2021 4:55:45 PM	64496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 4:55:45 PM	64496
Surr: DNOP	84.3	70-130		%Rec	1	12/14/2021 4:55:45 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 7:32:00 AM	64490
Surr: BFB	87.6	70-130		%Rec	1	12/15/2021 7:32:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S1-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-005

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	840	60		mg/Kg	20	12/15/2021 3:59:52 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/14/2021 5:07:40 PM	64496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 5:07:40 PM	64496
Surr: DNOP	83.8	70-130		%Rec	1	12/14/2021 5:07:40 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 8:31:00 AM	64490
Surr: BFB	85.4	70-130		%Rec	1	12/15/2021 8:31:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S2-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-006

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	4200	150		mg/Kg	50	12/16/2021 9:42:41 AM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	11	9.4		mg/Kg	1	12/14/2021 5:19:35 PM	64496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 5:19:35 PM	64496
Surr: DNOP	84.8	70-130		%Rec	1	12/14/2021 5:19:35 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/15/2021 8:50:00 AM	64490
Surr: BFB	89.7	70-130		%Rec	1	12/15/2021 8:50:00 AM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	12/15/2021 8:50:00 AM	64490
Toluene	ND	0.046		mg/Kg	1	12/15/2021 8:50:00 AM	64490
Ethylbenzene	ND	0.046		mg/Kg	1	12/15/2021 8:50:00 AM	64490
Xylenes, Total	ND	0.093		mg/Kg	1	12/15/2021 8:50:00 AM	64490
Surr: 4-Bromofluorobenzene	79.4	70-130		%Rec	1	12/15/2021 8:50:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S2-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-008

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1100	60		mg/Kg	20	12/15/2021 4:49:28 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/14/2021 5:31:44 PM	64496
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 5:31:44 PM	64496
Surr: DNOP	84.5	70-130		%Rec	1	12/14/2021 5:31:44 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/15/2021 9:10:00 AM	64490
Surr: BFB	91.8	70-130		%Rec	1	12/15/2021 9:10:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S2-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-010

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2300	60		mg/Kg	20	12/15/2021 5:01:53 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 5:43:38 PM	64496
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 5:43:38 PM	64496
Surr: DNOP	85.9	70-130		%Rec	1	12/14/2021 5:43:38 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 9:30:00 AM	64490
Surr: BFB	89.8	70-130		%Rec	1	12/15/2021 9:30:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S3-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-011

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	6000	300		mg/Kg	100	12/16/2021 9:55:06 AM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	77	9.3		mg/Kg	1	12/14/2021 5:55:25 PM	64496
Motor Oil Range Organics (MRO)	370	46		mg/Kg	1	12/14/2021 5:55:25 PM	64496
Surr: DNOP	79.2	70-130		%Rec	1	12/14/2021 5:55:25 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/15/2021 9:49:00 AM	64490
Surr: BFB	87.8	70-130		%Rec	1	12/15/2021 9:49:00 AM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/15/2021 9:49:00 AM	64490
Toluene	ND	0.050		mg/Kg	1	12/15/2021 9:49:00 AM	64490
Ethylbenzene	ND	0.050		mg/Kg	1	12/15/2021 9:49:00 AM	64490
Xylenes, Total	ND	0.10		mg/Kg	1	12/15/2021 9:49:00 AM	64490
Surr: 4-Bromofluorobenzene	80.3	70-130		%Rec	1	12/15/2021 9:49:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S3-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-013

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2300	60		mg/Kg	20	12/15/2021 5:26:42 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/15/2021 10:28:22 AM	64496
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/15/2021 10:28:22 AM	64496
Surr: DNOP	87.6	70-130		%Rec	1	12/15/2021 10:28:22 AM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/15/2021 10:09:00 AM	64490
Surr: BFB	94.4	70-130		%Rec	1	12/15/2021 10:09:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S3-4

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-015

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1900	60		mg/Kg	20	12/15/2021 5:39:06 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/14/2021 6:18:47 PM	64496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 6:18:47 PM	64496
Surr: DNOP	86.8	70-130		%Rec	1	12/14/2021 6:18:47 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 10:29:00 AM	64490
Surr: BFB	91.0	70-130		%Rec	1	12/15/2021 10:29:00 AM	64490

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 interference		

## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S4-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-016

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	210	59		mg/Kg	20	12/15/2021 5:51:30 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	28	9.6		mg/Kg	1	12/14/2021 6:30:22 PM	64496
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 6:30:22 PM	64496
Surr: DNOP	75.9	70-130		%Rec	1	12/14/2021 6:30:22 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 10:48:00 AM	64490
Surr: BFB	94.7	70-130		%Rec	1	12/15/2021 10:48:00 AM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 10:48:00 AM	64490
Toluene	ND	0.047		mg/Kg	1	12/15/2021 10:48:00 AM	64490
Ethylbenzene	ND	0.047		mg/Kg	1	12/15/2021 10:48:00 AM	64490
Xylenes, Total	ND	0.094		mg/Kg	1	12/15/2021 10:48:00 AM	64490
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	12/15/2021 10:48:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S4-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-018

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	59		mg/Kg	20	12/15/2021 6:03:54 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/14/2021 6:41:55 PM	64496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 6:41:55 PM	64496
Surr: DNOP	81.2	70-130		%Rec	1	12/14/2021 6:41:55 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 11:47:00 AM	64490
Surr: BFB	89.9	70-130		%Rec	1	12/15/2021 11:47:00 AM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S4-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-020

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/15/2021 6:16:18 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/14/2021 6:53:25 PM	64496
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/14/2021 6:53:25 PM	64496
Surr: DNOP	80.0	70-130		%Rec	1	12/14/2021 6:53:25 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 12:07:00 PM	64490
Surr: BFB	90.8	70-130		%Rec	1	12/15/2021 12:07:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S5-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-021

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	130	60		mg/Kg	20	12/15/2021 6:28:43 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	820	96		mg/Kg	10	12/15/2021 10:51:49 AM	64496
Motor Oil Range Organics (MRO)	1700	480		mg/Kg	10	12/15/2021 10:51:49 AM	64496
Surr: DNOP	0	70-130	S	%Rec	10	12/15/2021 10:51:49 AM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/15/2021 12:27:00 PM	64490
Surr: BFB	89.8	70-130		%Rec	1	12/15/2021 12:27:00 PM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/15/2021 12:27:00 PM	64490
Toluene	ND	0.050		mg/Kg	1	12/15/2021 12:27:00 PM	64490
Ethylbenzene	ND	0.050		mg/Kg	1	12/15/2021 12:27:00 PM	64490
Xylenes, Total	ND	0.099		mg/Kg	1	12/15/2021 12:27:00 PM	64490
Surr: 4-Bromofluorobenzene	81.0	70-130		%Rec	1	12/15/2021 12:27:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S5-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-023

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	890	60		mg/Kg	20	12/15/2021 7:05:56 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/14/2021 7:27:49 PM	64496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 7:27:49 PM	64496
Surr: DNOP	77.7	70-130		%Rec	1	12/14/2021 7:27:49 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 1:26:00 PM	64490
Surr: BFB	108	70-130		%Rec	1	12/15/2021 1:26:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S5-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-025

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2800	150		mg/Kg	50	12/16/2021 10:07:30 AM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 7:39:21 PM	64496
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 7:39:21 PM	64496
Surr: DNOP	85.0	70-130		%Rec	1	12/14/2021 7:39:21 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 1:45:00 PM	64490
Surr: BFB	90.0	70-130		%Rec	1	12/15/2021 1:45:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S6-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-026

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	4100	150		mg/Kg	50	12/16/2021 10:44:42 AM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	2400	93		mg/Kg	10	12/15/2021 11:38:59 AM	64496
Motor Oil Range Organics (MRO)	1500	470		mg/Kg	10	12/15/2021 11:38:59 AM	64496
Surr: DNOP	0	70-130	S	%Rec	10	12/15/2021 11:38:59 AM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 2:05:00 PM	64490
Surr: BFB	88.1	70-130		%Rec	1	12/15/2021 2:05:00 PM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 2:05:00 PM	64490
Toluene	ND	0.047		mg/Kg	1	12/15/2021 2:05:00 PM	64490
Ethylbenzene	ND	0.047		mg/Kg	1	12/15/2021 2:05:00 PM	64490
Xylenes, Total	ND	0.094		mg/Kg	1	12/15/2021 2:05:00 PM	64490
Surr: 4-Bromofluorobenzene	77.4	70-130		%Rec	1	12/15/2021 2:05:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S6-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-028

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2000	61		mg/Kg	20	12/15/2021 7:43:09 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/15/2021 12:02:45 PM	64496
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/15/2021 12:02:45 PM	64496
Surr: DNOP	95.8	70-130		%Rec	1	12/15/2021 12:02:45 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 2:25:00 PM	64490
Surr: BFB	90.4	70-130		%Rec	1	12/15/2021 2:25:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S6-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-030

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	290	60		mg/Kg	20	12/15/2021 7:55:33 PM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/14/2021 8:25:28 PM	64496
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/14/2021 8:25:28 PM	64496
Surr: DNOP	86.3	70-130		%Rec	1	12/14/2021 8:25:28 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 2:45:00 PM	64490
Surr: BFB	87.0	70-130		%Rec	1	12/15/2021 2:45:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S7-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-031

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	4200	150		mg/Kg	50	12/16/2021 10:57:06 AM	64535
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	68	9.1		mg/Kg	1	12/14/2021 8:36:54 PM	64496
Motor Oil Range Organics (MRO)	82	46		mg/Kg	1	12/14/2021 8:36:54 PM	64496
Surr: DNOP	79.8	70-130		%Rec	1	12/14/2021 8:36:54 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 3:04:00 PM	64490
Surr: BFB	86.2	70-130		%Rec	1	12/15/2021 3:04:00 PM	64490
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 3:04:00 PM	64490
Toluene	ND	0.048		mg/Kg	1	12/15/2021 3:04:00 PM	64490
Ethylbenzene	ND	0.048		mg/Kg	1	12/15/2021 3:04:00 PM	64490
Xylenes, Total	ND	0.096		mg/Kg	1	12/15/2021 3:04:00 PM	64490
Surr: 4-Bromofluorobenzene	79.3	70-130		%Rec	1	12/15/2021 3:04:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S7-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-033

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	3500	150		mg/Kg	50	12/16/2021 11:09:30 AM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 8:48:23 PM	64496
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 8:48:23 PM	64496
Surr: DNOP	85.1	70-130		%Rec	1	12/14/2021 8:48:23 PM	64496
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 3:24:00 PM	64490
Surr: BFB	87.9	70-130		%Rec	1	12/15/2021 3:24:00 PM	64490

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S7-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-035

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1400	60		mg/Kg	20	12/15/2021 4:26:04 PM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/14/2021 5:33:49 PM	64498
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 5:33:49 PM	64498
Surr: DNOP	87.0	70-130		%Rec	1	12/14/2021 5:33:49 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 5:41:00 PM	64491
Surr: BFB	83.6	70-130		%Rec	1	12/15/2021 5:41:00 PM	64491

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S8-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-036

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	970	60		mg/Kg	20	12/15/2021 5:03:18 PM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	10	9.6		mg/Kg	1	12/14/2021 6:05:37 PM	64498
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 6:05:37 PM	64498
Surr: DNOP	118	70-130		%Rec	1	12/14/2021 6:05:37 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 6:40:00 PM	64491
Surr: BFB	87.5	70-130		%Rec	1	12/15/2021 6:40:00 PM	64491
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 6:40:00 PM	64491
Toluene	ND	0.048		mg/Kg	1	12/15/2021 6:40:00 PM	64491
Ethylbenzene	ND	0.048		mg/Kg	1	12/15/2021 6:40:00 PM	64491
Xylenes, Total	ND	0.096		mg/Kg	1	12/15/2021 6:40:00 PM	64491
Surr: 4-Bromofluorobenzene	79.9	70-130		%Rec	1	12/15/2021 6:40:00 PM	64491

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S8-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-038

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2400	150		mg/Kg	50	12/16/2021 11:21:55 AM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/14/2021 6:16:10 PM	64498
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/14/2021 6:16:10 PM	64498
Surr: DNOP	87.7	70-130		%Rec	1	12/14/2021 6:16:10 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/15/2021 7:39:00 PM	64491
Surr: BFB	85.7	70-130		%Rec	1	12/15/2021 7:39:00 PM	64491

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S8-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-040

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1200	60		mg/Kg	20	12/15/2021 5:28:06 PM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/14/2021 6:26:42 PM	64498
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 6:26:42 PM	64498
Surr: DNOP	93.6	70-130		%Rec	1	12/14/2021 6:26:42 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 7:59:00 PM	64491
Surr: BFB	88.4	70-130		%Rec	1	12/15/2021 7:59:00 PM	64491

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S9-Surface

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-041

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	4400	150		mg/Kg	50	12/16/2021 11:34:19 AM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/14/2021 6:37:16 PM	64498
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/14/2021 6:37:16 PM	64498
Surr: DNOP	88.2	70-130		%Rec	1	12/14/2021 6:37:16 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 8:18:00 PM	64491
Surr: BFB	88.7	70-130		%Rec	1	12/15/2021 8:18:00 PM	64491
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 8:18:00 PM	64491
Toluene	ND	0.049		mg/Kg	1	12/15/2021 8:18:00 PM	64491
Ethylbenzene	ND	0.049		mg/Kg	1	12/15/2021 8:18:00 PM	64491
Xylenes, Total	ND	0.098		mg/Kg	1	12/15/2021 8:18:00 PM	64491
Surr: 4-Bromofluorobenzene	81.1	70-130		%Rec	1	12/15/2021 8:18:00 PM	64491

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S9-2'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-043

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2900	150		mg/Kg	50	12/16/2021 11:46:44 AM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 6:47:49 PM	64498
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 6:47:49 PM	64498
Surr: DNOP	92.3	70-130		%Rec	1	12/14/2021 6:47:49 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 8:38:00 PM	64491
Surr: BFB	88.3	70-130		%Rec	1	12/15/2021 8:38:00 PM	64491

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 interference		

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## Analytical Report

Lab Order 2112840

Date Reported: 12/21/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: S9-4'

Project: Gravel Grinder 282318TBGH

Collection Date: 12/11/2021

Lab ID: 2112840-045

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1000	60		mg/Kg	20	12/15/2021 6:05:20 PM	64536
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/14/2021 6:58:20 PM	64498
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 6:58:20 PM	64498
Surr: DNOP	92.2	70-130		%Rec	1	12/14/2021 6:58:20 PM	64498
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 8:58:00 PM	64491
Surr: BFB	92.5	70-130		%Rec	1	12/15/2021 8:58:00 PM	64491

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 interference		

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

WO#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>MB-64536</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64536</b>	RunNo: <b>84572</b>								
Prep Date: <b>12/15/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972732</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-64536</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64536</b>	RunNo: <b>84572</b>								
Prep Date: <b>12/15/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972733</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.7	90	110			

Sample ID: <b>MB-64535</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64535</b>	RunNo: <b>84574</b>								
Prep Date: <b>12/15/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972962</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-64535</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64535</b>	RunNo: <b>84574</b>								
Prep Date: <b>12/15/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972963</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	95.2	90	110			

**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 interference		

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

WO#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>MB-64498</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64498</b>	RunNo: <b>84493</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970622</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	8.8		10.00		87.9	70	130			

Sample ID: <b>LCS-64498</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64498</b>	RunNo: <b>84493</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970623</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	88.6	68.9	135			
Surr: DNOP	4.1		5.000		81.7	70	130			

Sample ID: <b>2112840-035AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>S7-4'</b>	Batch ID: <b>64498</b>	RunNo: <b>84493</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970643</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.4	46.95	6.128	78.0	39.3	155			
Surr: DNOP	4.1		4.695		86.5	70	130			

Sample ID: <b>2112840-035AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>S7-4'</b>	Batch ID: <b>64498</b>	RunNo: <b>84493</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970644</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.6	47.98	6.128	80.3	39.3	155	4.32	23.4	
Surr: DNOP	3.9		4.798		81.8	70	130	0	0	

Sample ID: <b>MB-64496</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64496</b>	RunNo: <b>84524</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970781</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	8.9		10.00		89.0	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 interference		

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

WO#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>LCS-64496</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64496</b>	RunNo: <b>84524</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970782</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	88.4	68.9	135			
Surr: DNOP	4.3		5.000		85.9	70	130			

Sample ID: <b>2112840-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>S1- Surface</b>	Batch ID: <b>64496</b>	RunNo: <b>84524</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970836</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.7	48.45	8.606	81.1	39.3	155			
Surr: DNOP	4.1		4.845		85.2	70	130			

Sample ID: <b>2112840-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>S1- Surface</b>	Batch ID: <b>64496</b>	RunNo: <b>84524</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/14/2021</b>	SeqNo: <b>2970837</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.5	47.62	8.606	67.8	39.3	155	15.8	23.4	
Surr: DNOP	4.1		4.762		85.9	70	130	0	0	

**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 interference		

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

WO#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>mb-64490</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972094</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	910		1000		91.4	70	130			

Sample ID: <b>mb-64491</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972095</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	870		1000		87.2	70	130			

Sample ID: <b>lcs-64490</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972096</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	78.6	131			
Surr: BFB	1100		1000		110	70	130			

Sample ID: <b>lcs-64491</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972097</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	78.6	131			
Surr: BFB	1000		1000		102	70	130			

Sample ID: <b>2112840-003ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>S1-2'</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972098</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.32	0	135	61.3	114			S
Surr: BFB	1100		972.8		110	70	130			

Sample ID: <b>2112840-035ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>S7-4'</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972099</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

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

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

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

WO#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>2112840-035ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>S7-4'</b>	Batch ID: <b>64491</b>		RunNo: <b>84562</b>							
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>		SeqNo: <b>2972099</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	5.0	24.98	0	127	61.3	114			S
Surr: BFB	1000		999.0		104	70	130			

Sample ID: <b>2112840-003amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>S1-2'</b>	Batch ID: <b>64490</b>		RunNo: <b>84562</b>							
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>		SeqNo: <b>2972100</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	32	4.8	24.15	0	133	61.3	114	1.78	20	S
Surr: BFB	960		966.2		99.4	70	130	0	0	

Sample ID: <b>2112840-035amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>S7-4'</b>	Batch ID: <b>64491</b>		RunNo: <b>84562</b>							
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>		SeqNo: <b>2972101</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.9	24.58	0	117	61.3	114	9.90	20	S
Surr: BFB	1000		983.3		104	70	130	0	0	

**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 interference

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#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>mb-64490</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972142</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	0.82		1.000		81.8	70	130			

Sample ID: <b>mb-64491</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972143</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	0.78		1.000		78.0	70	130			

Sample ID: <b>lcs-64490</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972144</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.2	80	120			
Toluene	0.91	0.050	1.000	0	91.2	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.0	80	120			
Surr: 4-Bromofluorobenzene	0.81		1.000		81.4	70	130			

Sample ID: <b>lcs-64491</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972145</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.8	80	120			
Toluene	0.89	0.050	1.000	0	88.8	80	120			
Ethylbenzene	0.88	0.050	1.000	0	87.8	80	120			
Xylenes, Total	2.6	0.10	3.000	0	85.4	80	120			
Surr: 4-Bromofluorobenzene	0.79		1.000		79.4	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 interference

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#: 2112840

21-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 282318TBGH

Sample ID: <b>2112840-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>S1- Surface</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972146</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9747	0	97.8	80	120			
Toluene	0.95	0.049	0.9747	0	97.3	80	120			
Ethylbenzene	0.95	0.049	0.9747	0	97.9	80	120			
Xylenes, Total	2.8	0.097	2.924	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	0.80		0.9747		82.1	70	130			

Sample ID: <b>2112840-036ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>S8-Surface</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972147</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.024	0.9615	0	99.1	80	120			
Toluene	0.94	0.048	0.9615	0	97.5	80	120			
Ethylbenzene	0.94	0.048	0.9615	0	97.9	80	120			
Xylenes, Total	2.8	0.096	2.885	0	95.4	80	120			
Surr: 4-Bromofluorobenzene	0.78		0.9615		81.5	70	130			

Sample ID: <b>2112840-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>S1- Surface</b>	Batch ID: <b>64490</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972149</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9653	0	97.3	80	120	1.50	20	
Toluene	0.93	0.048	0.9653	0	96.4	80	120	1.91	20	
Ethylbenzene	0.93	0.048	0.9653	0	96.2	80	120	2.73	20	
Xylenes, Total	2.7	0.097	2.896	0	93.5	80	120	2.86	20	
Surr: 4-Bromofluorobenzene	0.78		0.9653		81.3	70	130	0	0	

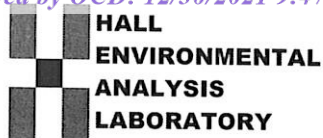
Sample ID: <b>2112840-036amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>S8-Surface</b>	Batch ID: <b>64491</b>	RunNo: <b>84562</b>								
Prep Date: <b>12/14/2021</b>	Analysis Date: <b>12/15/2021</b>	SeqNo: <b>2972150</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9533	0	98.3	80	120	1.68	20	
Toluene	0.92	0.048	0.9533	0	97.0	80	120	1.47	20	
Ethylbenzene	0.93	0.048	0.9533	0	97.3	80	120	1.53	20	
Xylenes, Total	2.7	0.095	2.860	0	94.4	80	120	1.98	20	
Surr: 4-Bromofluorobenzene	0.78		0.9533		81.6	70	130	0	0	

**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 interference

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: **2112840**

RcptNo: 1

Received By: **Desiree Dominguez** 12/14/2021 8:10:00 AM

Completed By: **Cheyenne Cason** 12/14/2021 9:02:14 AM

Reviewed By: *KPA* 12/14/21

*DD*

*CC*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *jm 12/14/21*

### Special Handling (if applicable)

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

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

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

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

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

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

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

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Not Present			
2	1.5	Good	Not Present			





## Chain-of-Custody Record

Client:

SMA-Corlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard
 ☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard

☒ Rush

Project Name:

Crawl Gravel 23 28 18 TB6 H

Project #:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard
 ☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

Project Manager:

Ashley Maxwell

Sampler:

LAAPB

On Ice:

☒ Yes
 ☐ No

# of Coolers:

(2)

2.5 + 0.0 = 2.5

Cooler Temp (including CF):

1.5 + 0.0 = 1.5 (°C)

Date:

12/1/21

Time:

Matrix:

Soil

Sample Name:

S3-2'

Container Type and #

402

Preservative Type

Ice

HEAL No.

2112840

Date:

013

Time:

hold

Date:

015

Time:

hold

Date:

016

Time:

hold

Date:

017

Time:

hold

Date:

018

Time:

hold

Date:

019

Time:

hold

Date:

020

Time:

hold

Date:

021

Time:

hold

Date:

022

Time:

hold

Date:

023

Time:

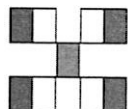
hold

Date:

024

Time:

hold



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

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

Remarks:

Received by: Via: Date: Time

 Received by: *Admiral* 12/13/21 9:15  
 Received by: *DBS* Courier 12/14/21 8:10

pg 2 of 5



## Chain-of-Custody Record

Client: SMH-Carlsted

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

Civil Center 232818 TBCH

Project #:

Project Manager:

Andrew Maxwell

Sampler:

CAAPBOn Ice: ☒ Yes ☐ No# of Coolers: (2)  $2.5 \pm 0.0 = 2.5^\circ\text{C}$ Cooler Temp (including CF):  $1.5 \pm 0.0 = 1.5^\circ\text{C}$ 

Container Type and #

402

Preservative Type

lcl

HEAL No.

2112840

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'S7-2'S7-3'S7-4'S8-Surface

Date

12/21

Matrix

Soil

Sample Name

S5-4'S6-SurfaceS6-1'S6-2'S6-3'S6-4'S7-SurfaceS7-1'

## Chain-of-Custody Record

Client: SMA-Calsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

Project #:

Project Manager:

Sampler:

On Ice: ☒ Yes ☐ No

# of Coolers: (2) 2.5 + 0.0 = 2.5 °C

Cooler Temp (including CF): 1.5 + 0.0 = 1.5 °C

Container Type and #

Preservative Type

HEAL No.

2112840

037 hold

038

039 hold

040

041

042 hold

043

044 hold

045

046

047

048

Date: 12/13/21

Relinquished by: Alan A. AntReceived by: Alan A. Ant

Date: 12/13/21

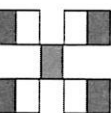
Time: 9:15

Date: 12/13/21

Relinquished by: Alan A. AntReceived by: Alan A. Ant

Date: 12/14/21

Time: 8:10

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMB's (8021)

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides / 8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

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

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Remarks:

046 - 060 on separate chain of custody  
Pg 4 of 5  
One 12/14/21



## Chain-of-Custody Record

Client:

SMA Coalbed

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☐ Standard☒ Rush

Project Name:

SMA Coalbed 23 28 18 73

Project #:

Project Manager:

Ashley Maxwell

Sampler:

LAA1P3

On Ice:

☒ Yes ☐ No

# of Coolers: (3) 2.5 + 0.0 = 2.5

Cooler Temp (including CF): 1.5 + 0.0 = 1.5

Cooler Temp (including CF): 1.5 + 0.0 = 1.5

Container Type and #

Type

HEAL No.

2112840

049

050

051

052

053

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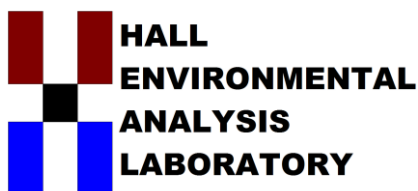
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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [clients.hallenvironmental.com](http://clients.hallenvironmental.com)

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

RE: Gravel Grinder 23 28 18 T13 6H

OrderNo.: 2112C65

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/22/2021 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2112C65

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SB BG1 - Surface

Project: Gravel Grinder 23 28 18 T13 6H

Collection Date: 12/20/2021 4:17:00 PM

Lab ID: 2112C65-001

Matrix: SOIL

Received Date: 12/22/2021 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	720	60		mg/Kg	20	12/22/2021 9:32:05 PM	64701

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

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

Page 1 of 6

## Analytical Report

Lab Order 2112C65

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SB BG1 - 1'

Project: Gravel Grinder 23 28 18 T13 6H

Collection Date: 12/20/2021 4:19:00 PM

Lab ID: 2112C65-002

Matrix: SOIL

Received Date: 12/22/2021 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	770	60		mg/Kg	20	12/22/2021 10:09:09 PM	64701

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

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

Page 2 of 6



## Analytical Report

Lab Order 2112C65

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SB BG1 - 2'

Project: Gravel Grinder 23 28 18 T13 6H

Collection Date: 12/20/2021 4:21:00 PM

Lab ID: 2112C65-003

Matrix: SOIL

Received Date: 12/22/2021 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1100	60		mg/Kg	20	12/22/2021 10:21:30 PM	64701

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

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

Page 3 of 6

**Analytical Report**Lab Order **2112C65**

Date Reported:

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SB BG1 - 3'**Project:** Gravel Grinder 23 28 18 T13 6H**Collection Date:** 12/20/2021 4:25:00 PM**Lab ID:** 2112C65-004**Matrix:** SOIL**Received Date:** 12/22/2021 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JMT</b>
Chloride	1100	60		mg/Kg	20	12/22/2021 10:58:32 PM	64701

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 interference		

Page 4 of 6

**Analytical Report**Lab Order **2112C65**

Date Reported:

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller & Associates**Client Sample ID:** SB BG1 - 4'**Project:** Gravel Grinder 23 28 18 T13 6H**Collection Date:** 12/20/2021 4:29:00 PM**Lab ID:** 2112C65-005**Matrix:** SOIL**Received Date:** 12/22/2021 7:25:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>JMT</b>
Chloride	1700	61		mg/Kg	20	12/22/2021 11:10:52 PM	64701

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 interference		

Page 5 of 6

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

WO#: 2112C65

27-Dec-21

**Client:** Souder, Miller & Associates  
**Project:** Gravel Grinder 23 28 18 T13 6H

Sample ID: <b>MB-64701</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>64701</b>	RunNo: <b>84755</b>								
Prep Date: <b>12/22/2021</b>	Analysis Date: <b>12/22/2021</b>	SeqNo: <b>2980646</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-64701</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>64701</b>	RunNo: <b>84755</b>								
Prep Date: <b>12/22/2021</b>	Analysis Date: <b>12/22/2021</b>	SeqNo: <b>2980647</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	93.9	90	110			

**Qualifiers:**

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

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: 2112C65

RcptNo: 1

Received By: Isaiah Ortiz 12/22/2021 7:25:00 AM

Completed By: Isaiah Ortiz 12/22/2021 7:58:23 AM

Reviewed By: KPG 12/22/21

IOX

IOX

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. Received at least 1 vial with headspace  $<1/4"$  for AQ VOA? Yes ☐ No ☐ NA ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels? Yes ☒ No ☐  
(Note discrepancies on chain of custody)  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met? Yes ☒ No ☐  
(If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: JR 12/22/21

Special Handling (if applicable)

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

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

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

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

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

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

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

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Not Present			



**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 69637

**CONDITIONS**

Operator: MARATHON OIL PERMIAN LLC 990 Town & Country Blvd. Houston, TX 77024	OGRID: 372098
	Action Number: 69637
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
chensley	The OCD approves the closure criteria of depth to groundwater of less than 50 feet below grade surface (bgs).	2/16/2022
chensley	.Closure report due by 4/16/2022	2/16/2022