

Incident ID	nAB1532733082
District RP	2RP-3411
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	~69 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Oil Conservation Division

Incident ID	nAB1532733082
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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: Dale Woodall Title: EHS Consultant
Signature: Dale Woodall Date: 12/28/2022
email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 12/28/2022

Incident ID	nAB1532733082
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Closure

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

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

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

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

Printed Name: Dale Woodall Title: EHS Consultant
Signature: *Dale Woodall* Date: 12/28/2022
email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: Jocelyn Harimon Date: 12/28/2022

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

Closure Approved by: *Brittany Hall* Date: 02/03/2023
Printed Name: Brittany Hall Title: Environmental Specialist



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

October 14, 2020

#5E29133-BG32

NMOCD District 2
811 S. First St
Artesia, New Mexico 88240

SUBJECT: Remediation Closure Report for the Burton Flat Deep Unit 38 Release (2RP-3411), Eddy County, New Mexico

To Whom It May Concern:

On behalf of Devon Energy Production Company (Devon), Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report that describes the remediation of a release of liquids related to oil and gas production activities at the Burton Flat Deep Unit 38 site. The site is in Unit P, Section 02, Township 21S, Range 27E, Eddy County, New Mexico, on Federal land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

Table 1: Release Information and Closure Criteria			
Name	Burton Flat Deep Unit 38	Company	Devon Energy Production Company
API Number	30-015-25189	Location	32.5030666 -104.1527476
Tracking Number	2RP-3411		
Estimated Date of Release	November 16, 2015	Date Reported to NMOCD	November 16, 2015
Land Owner	Federal	Reported To	NMOCD, BLM
Source of Release	Heater Treater		
Released Volume	5 BBL Oil 5 BBL Produced Water	Released Material	Oil & Produced Water
Recovered Volume	3 BBL Oil 0 BBL Produced Water	Net Release	2 BBL Oil 5 BBL Produced Water
NMOCD Closure Criteria	<50 feet to groundwater		
SMA Response Dates	8/3, 8/14, 9/17, 9/30/2020		

1.0 Background

On November 16, 2015, a release was discovered at the Burton Flat Deep Unit 38 site due to a pin hole leak on the 2-inch collar of the drain line on the heater treater's weld seam. Initial response activities were conducted by Devon Energy, and included source elimination, containment, and site stabilization activities, which recovered approximately 3 barrels of oil and no produced water. Figure 1 illustrates the vicinity and site location; Figure 2 illustrates the release location. The C-141 form is included in Appendix A.

2.0 Site Information and Closure Criteria

The Burton Flat Deep Unit 38 is an active production facility located approximately 7 miles northeast of Carlsbad, New Mexico on Federal (BLM) land at an elevation of approximately 3221 feet above mean sea level (amsl).

Depth to Groundwater

Based upon New Mexico Office of the State Engineer (Appendix B), average depth to groundwater in the area is estimated to be 69 feet below grade surface (bgs).

Wellhead Protection Area

There are no accessible water sources within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database.

Distance to Nearest Significant Watercourse

The nearest significant watercourse is Palmilla Draw, located approximately 4,709 feet to the northeast.

Surface and Karst Geology

The Burton Flat Deep Unit 38 surface geology is dominantly Pajarito loamy fine sand. The Pajarito loamy fine sand deposition is from alluvium or eolian process, which tends to create landforms of dunes, interdunes and plains. The Pajarito has a non-saline to very slightly saline characteristic. The Burton Flat Deep Unit 38 is in a potentially unstable area presenting a high karst area.

Table 2 demonstrates the Closure Criteria applicable to this location. Figure 2 illustrates the site with 200 and 300-foot radii to indicate that it does lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of less than 50 feet.

3.0 Release Characterization and Remediation Activities

On August 3 and 14, 2020 SMA personnel performed site delineation activities at the Burton Flat Deep Unit 38 site. SMA collected soil samples around the release site and throughout the presumed release area. The area of visual impact was located in between the tank battery and immediately east of the heater treater. Soil samples were field-screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 2000 photoionization detector (PID) equipped with a 10.6 eV lamp.

A total of seven (7) sample locations (L1-L7) were investigated using a hand-auger, to depths up to two (2) feet bgs. A total of seventeen (17) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

Site Name Remediation Closure Report
October 14, 2020

Page 3 of 4

As summarized in Table 3, results indicated that sample location L7 was the only location impacted and appeared to be less than one foot in depth.

On September 17, 2020 SMA returned to the site to guide excavation of contaminated soil. SMA guided the excavation activities by collecting soil samples for field screening. Samples were screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 2000 photoionization detector (PID) equipped with a 10.6 eV lamp. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. NMOCD was notified on September 15, 2020 that closure samples were expected to be collected in two (2) business days.

On September 17, 2020, SMA conducted confirmation samples collected from the walls and base of the excavation, which measured approximately 13 by 20 feet by one-foot depth (260 square feet). On September 30, 2020 SMA returned to the site to extend the eastern side (SW2) two (2) feet to the east until NMOCD Criteria would be met.

Confirmation samples were comprised of five-point composites of the base (CS1) and walls (SW1-SW4).

A total of six (6) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Laboratory samples were collected in accordance with the sampling protocol included in Appendix C. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Envirotech in Farmington, New Mexico (Appendix D).

Figure 3 shows the site and initial sample locations, Figure 3A shows the extent of the final excavation and closure sample locations. All field screening and laboratory results are summarized in Table 3. Field notes are included in Appendix C, and photos are included in Appendix E. Laboratory reports are included in Appendix D.

4.0 Site Recommendations

As demonstrated in Table 3, all closure samples meet the Closure Criteria. The site has been remediated to meet the standards of Table I of 19.15.29.12 NMAC.

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

SMA recommends no further action and requests closure of 2RP-3411.

5.0 Scope and Limitations

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

If there are any questions regarding this report, please contact either Ashley Maxwell at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Site Name Remediation Closure Report
October 14, 2020

Page 4 of 4

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:



Ashley Maxwell
Project Scientist

Shawna Chubbuck
Senior Scientist

REFERENCES:

New Mexico Office of the State Engineer (NMOSE) online water well database
https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed Click or tap to enter a date.
United States Geological Survey
<https://waterdata.usgs.gov/nwis/>
Soil Survey
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

ATTACHMENTS:

Figures:

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

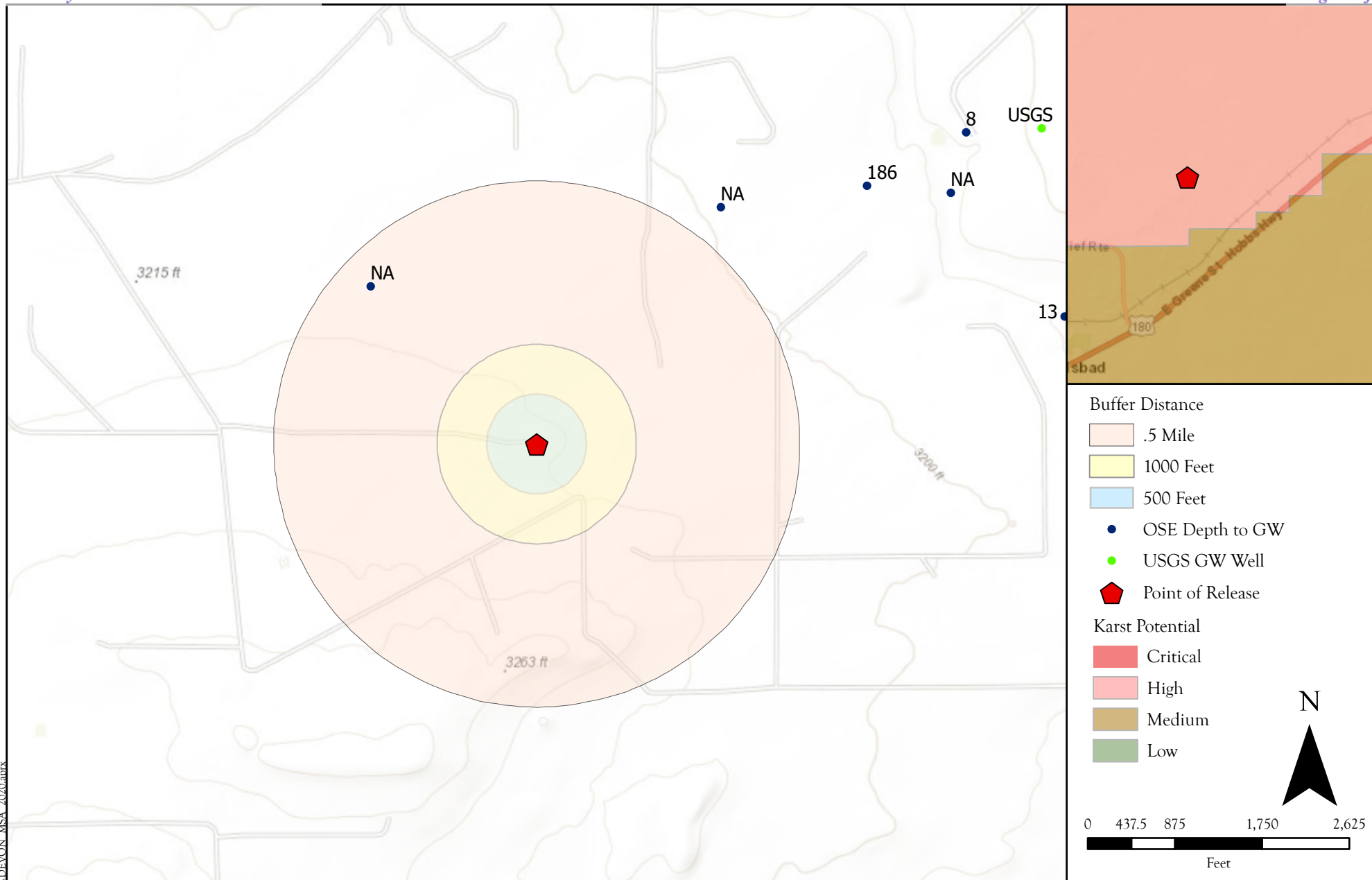
Tables:

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

Appendices:

Appendix A: Form C141
Appendix B: NMOSE Wells Report
Appendix C: Sampling Protocol and Field Notes
Appendix D: Laboratory Analytical Reports

FIGURES



Site Map
 Burton Flat Deep Unit #38 - Devon Energy Production Company
 32.5030666, -104.1527476 Lea County, New Mexico

Figure 1

P:\5 Devon MSA 2020\5E291131\GIS\DEVON_MSA_2020.aprx
 Date Saved: 7/22/2020

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

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Drawn Sebastian Orozco
 Date 7/27/2020
 Checked _____
 Approved _____



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 Carlsbad, New Mexico 88221
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Surface Water Protection Map
 Burton Flats Deep Unit #38- Devon Energy
 32.5030666, -104.1527476 Lea County, New Mexico

Figure 2

Revisions

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

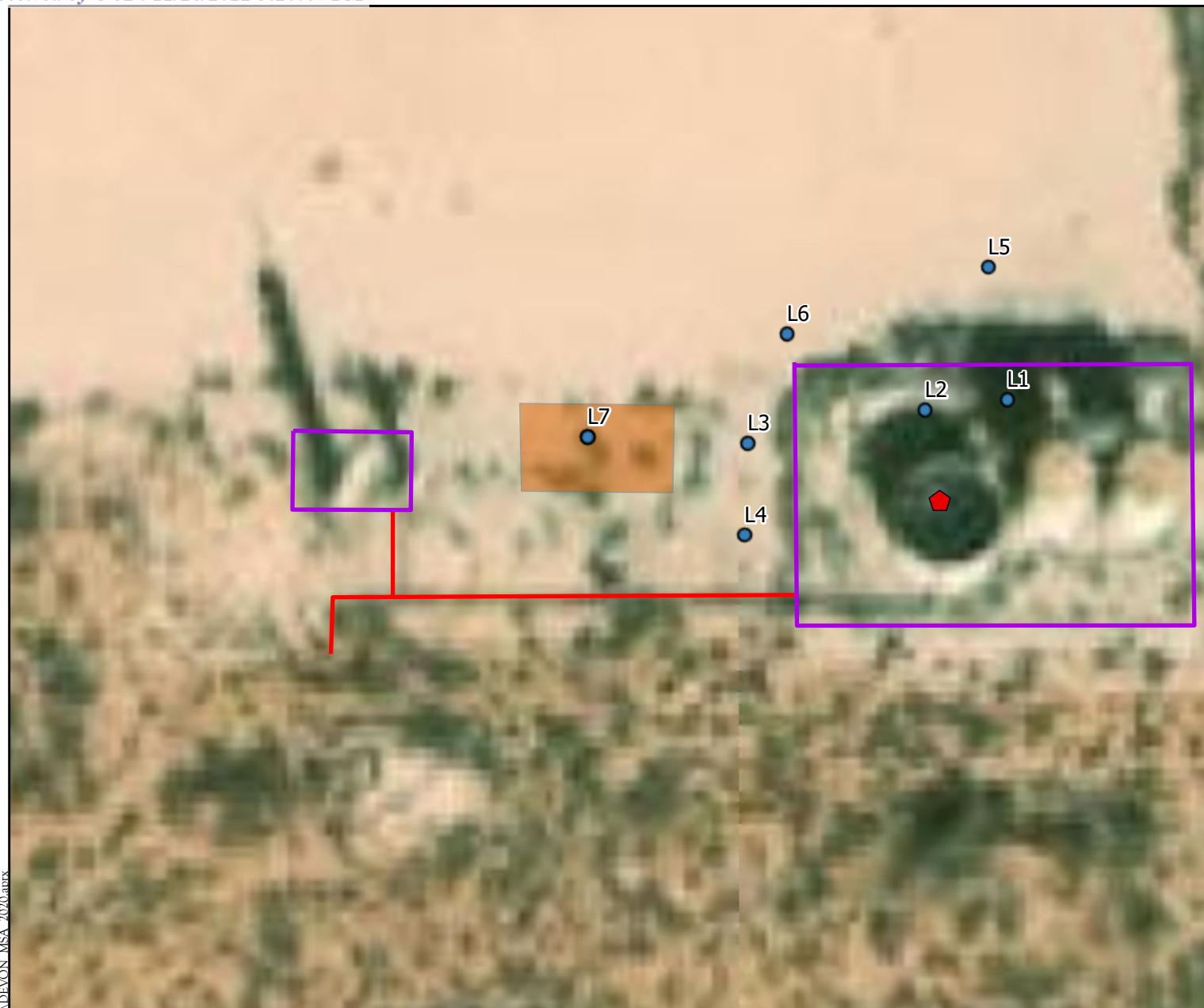
Drawn
 Date
 Checked
 Approved

Sebastian Orozco
 10/13/2020



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Pipelines

Berm

1' Excavation

Sample Points

Initial Soil Samples

Point of Release

N

0 5 10 20 30
Feet

Site and Sample Location Map
Burton Flat Deep Unit #38- Devon Energy
32.5030666, -104.1527476 Eddy County, New Mexico

Figure 3

Revisions

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

Drawn Sebastian Orozco
Date 9/1/2020
Checked _____
Approved _____



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Carlsbad, New Mexico 88221
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Site and Confirmation Sample Location Map
 Burton Flat Deep Unit #38- Devon Energy
 32.5030666, -104.1527476 Eddy County, New Mexico

Figure 3A

Revisions

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

Drawn Sebastian Orozco
 Date 10/13/2020
 Checked _____
 Approved _____



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 Carlsbad, New Mexico 88221
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TABLES

Table 2:
NMOCD Closure Criteria

Devon Energy Production Company
Burton Flat Deep Unit 38
2RP-3411

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	~69	New Mexico Office of the State Engineer
Horizontal Distance From All Water Sources Within 1/2 Mile (ft)	NA	United State Geological Survey Topo Map
Horizontal Distance to Nearest Significant Watercourse (ft)	4,709	United State Geological Survey Topo Map

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		Closure Criteria (units in mg/kg)				
		Chloride *numerical limit or background, whichever is greater	TPH	GRO + DRO	BTEX	Benzene
< 50' BGS	X	600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'		20000	2500	1000	50	10
Surface Water	yes or no	if yes, then				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	Yes (High Karst)					
within a 100-year floodplain?	No					

SMA #

Table 3:
Summary of Sample Results

Devon Energy
Burton Deep Flat Unit #38
(2RP-3411)

Sample ID	Sample Date	Depth of Sample (feet bgs)	Proposed/A ction Taken	Method 8021B		Method 8015D				Method 300.0
				BTEX	Benzene	GRO	DRO	MRO	Total TPH	Cl-
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
NMOCD Reclamation Requirement (0-4 ft)				50	10	--	--	--	100	600
NMOCD Closure Criteria (>4 ft)				50	10				100	600
L1	8/3/2020	Surface	In-situ	<0.225	<0.025	<5.0	<8.5	<43	<56.5	<60
L2		Surface		<0.216	<0.024	<4.8	<9.0	<45	<58.8	<60
L3		Surface		<0.221	<0.025	<4.9	<9.4	<47	<61.3	<60
		1		<0.215	<0.024	<4.8	<8.9	<45	<58.7	<61
		2		<0.219	<0.024	<4.9	<9.9	<50	<64.8	<60
L4		Surface		<0.211	<0.023	<4.7	<9.6	<48	<62.3	<60
		1		<0.221	<0.025	<4.9	<9.7	<49	<63.6	<60
		2		<0.216	<0.024	<4.8	<9.8	<49	<63.6	<60
L5		Surface		<0.216	<0.024	<4.8	<9.9	<49	<63.7	<60
		1		<0.224	<0.025	<5.0	<9.5	<47	<61.5	<60
		2		<0.220	<0.024	<4.9	<9.1	<46	<60	<60
L6		Surface		<0.211	<0.023	<4.7	<9.8	<49	<0.211	<60
		1		<0.219	<0.024	<4.9	<9.7	<48	<62.6	<60
		2		<0.220	<0.024	<4.9	<10	<50	<64.9	<60
L7	8/14/2020	Surface	Excavate	<0.221	<0.025	<4.9	140	450	590	<60
		1	In-situ	<0.100	<0.0250	<20.0	46.6	<50.0	46.6	<20.0
		2	In-situ	<0.100	0.025	<20.0	<25.0	<50.0	<95.0	<20.0
Closure Samples										
CS1	9/17/2020	1	In-situ	<0.210	<0.023	<4.7	18	<49	18	<60
SW1	9/17/2020	0-1	In-situ	<0.221	<0.025	<4.9	31	65	96	<60
SW2	9/17/2020	0-1	Excavate	<0.207	<0.023	<4.6	260	530	790	<60
	9/30/2020	0-1	In-situ	<0.100	<0.0250	<20.0	<25.0	<50.0	<95.0	<20.0
SW3	9/7/2020	0-1	In-situ	<0.220	<0.024	<4.9	<10	<50	<64.9	<60
SW4	9/7/2020	0-1	In-situ	<0.217	<0.024	<4.8	<9.8	<49	<63.6	<60

"--" = Not Analyzed

BG: Background sample

SMA #

APPENDIX A

FORM C141

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

NAB1532733082

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Devon Energy Production LO137	Contact Mike McMahan Production Assistant Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88220	Telephone No. 575.706.4165
Facility Name Burton Flat Deep Unit 38	Facility Type Oil

Surface Owner Federal	Mineral Owner State	API No. 30-015-25189
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LOCATION OF RELEASE

Unit Letter P	Section 2	Township 21S	Range 27E	Feet from the 467	North/South Line FSL	Feet from the 467	East/West Line FEL	County EDDY
------------------	--------------	-----------------	--------------	----------------------	-------------------------	----------------------	-----------------------	----------------

Latitude: 32.5030666 Longitude: -104.1527476

NATURE OF RELEASE

Type of Release Spill Oil & Produced Water	Volume of Release 5 BBL Oil & 5 BBL Produced water	Volume Recovered 3 BBL Oil & 0 BBL Produced Water
Source of Release Heater Treater	Date and Hour of Occurrence 11/16/15 at 4:30 PM	Date and Hour of Discovery 11/16/15 at 4:30 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD left message BLM left message	
By Whom? Mike McMahan	Date and Hour OCD 11/16/15 AT 5:00 pm BLM 11/16/15 AT 5:00 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse N/A	

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 20 2015

RECEIVED

If a Watercourse was Impacted, Describe Fully.* N/A

Describe Cause of Problem and Remedial Action Taken.*

A pin hole leak on the 2 inch collar of drain line, the leak was on weld seam off collar. Opened drain line to divert fluid to open top tank and called for a vacuum truck.

Describe Area Affected and Cleanup Action Taken.*

5 BBL oil & 5 BBL of produced water was released on a 25X 3 area all on pad, 3 BBL of oil & 0 BBL of produced water was recovered. An environmental agency will be called out for remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: <u>Jeanette Barron</u>	OIL CONSERVATION DIVISION	
Printed Name: <u>Jeanette Barron</u>	Approved by Environmental Specialist: <u>[Signature]</u>	
Title: <u>Field Admin Support</u>	Approval Date: <u>11/23/15</u>	Expiration Date: <u>N/A</u>
E-mail Address: <u>Jeanette.barron@dvn.com</u>	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines SUBMIT REMEDIATION PROPOSAL NO	
Date: <u>11/20/15</u> Phone: <u>575.748.1813</u>	Attached ☐	

* Attach Additional Sheets If Necessary

LATER THAN: 12/23/15

2RP-3411

Patterson, Heather, EMNRD

From: Barron, Jeanette <Jeanette.Barron@devon.com>
Sent: Friday, November 20, 2015 1:09 PM
To: Amos, James; Shelly Tucker (stucker@blm.gov); Patterson, Heather, EMNRD; Bratcher, Mike, EMNRD
Cc: McMahan, Mike; Fulks, Brett; Sanchez, Gilbert
Subject: C-141 Burton Flat Deep Unit 38
Attachments: C-141 Burton Flat Deep Unit 38 11.16.15.doc; Burton Flat Deep Unit 38 Pic 3 of 3.docx; Burton Flat Deep Unit 38.pdf; Burton Flat Deep Unit 38 Pic 1 of 3.docx; Burton Flat Deep Unit 38 Pic 2 of 3.docx

Please see attached, if you have any questions please contact Production Assistant Foreman Mike McMahan or EHS representative Brett Fulks.

Have a great & safe Thanksgiving!

Thanks,

Jeanette Barron

Field Admin Support-Production

Devon Energy Corporation

P.O. Box 250

Artesia, NM 88211

575 748 1813 Direct

jeanette.barron@devon.com

devon

Confidentiality Warning: This message and any attachments are intended only for the use of the intended recipient(s), are confidential, and may be privileged. If you are not the intended recipient, you are hereby notified that any review, retransmission, conversion to hard copy, copying, circulation or other use of all or any portion of this message and any attachments is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by return e-mail, and delete this message and any attachments from your system.

Incident ID	nAB1532733082
District RP	2RP-3411
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	~69 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

Oil Conservation Division

Incident ID	nAB1532733082
District RP	2RP-3411
Facility ID	
Application ID	

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

Printed Name: Dale Woodall Title: EHS Consultant

Signature: Dale Woodall Date: 12/28/2022

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

Incident ID	nAB1532733082
District RP	2RP-3411
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Dale Woodall Title: EHS Consultant

Signature: Dale Woodall Date: 12/28/2022

email: dale.woodall@dvn.com Telephone: 575-748-1838

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

APPENDIX B

NMOSE WELLS REPORT



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C_00469	C	CUB	ED	1	4	02	21S	27E		579078	3596994*	646	767		
C_02992		C	ED	3	3	2	01	21S	27E	580594	3597311*	1304	250	186	64
C_03350		C	ED	1	4	2	01	21S	27E	580896	3597476	1646	76	8	68
C_03268 POD1		CUB	ED	4	2	4	01	21S	27E	581201	3596915	1702	48	13	35

Average Depth to Water: **69 feet**
Minimum Depth: **8 feet**
Maximum Depth: **186 feet**

Record

4

Count:

UTMNAD83 Radius Search (in meters):

Easting (X): 579540

Northing (Y): 3596542.22

Radius: 1750

*UTM location was derived from PLSS - see Help

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

10/12/20 5:26 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



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National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323021104082201

Minimum number of levels = 1

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

USGS 323021104082201 21S.27E.01.43222

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°30'21", Longitude 104°08'22" NAD27

Land-surface elevation 3,193 feet above NAVD88

The depth of the well is 30 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

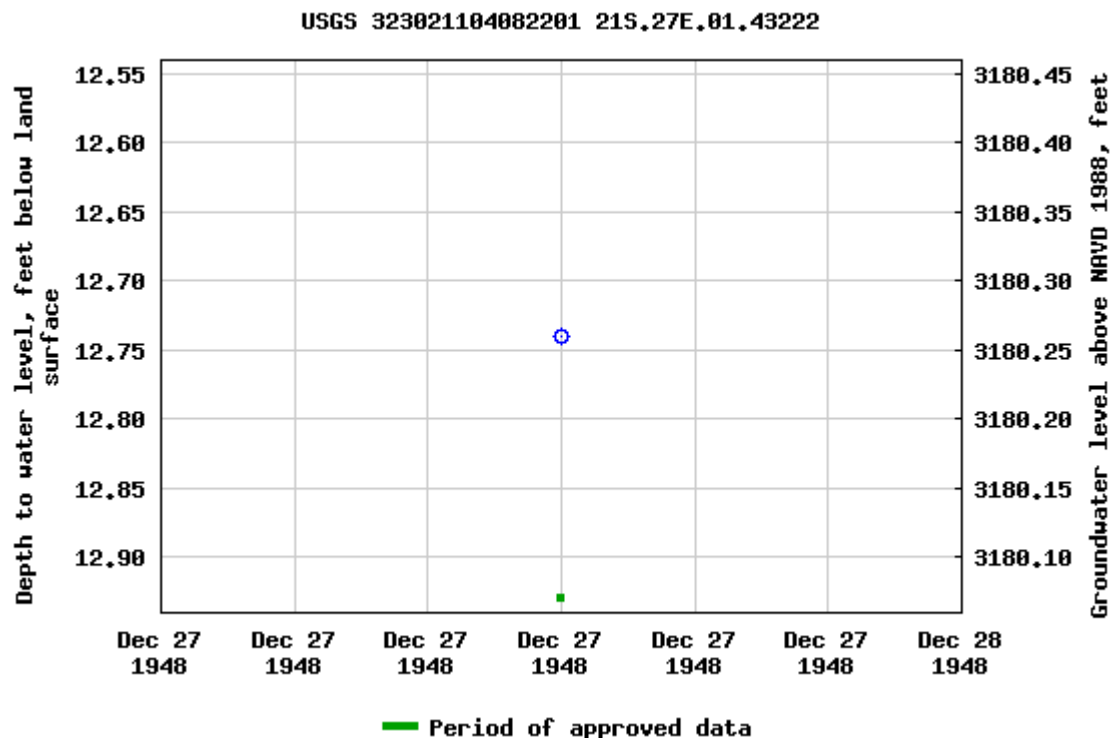
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

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Title: Groundwater for USA: Water Levels

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



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

Page Last Modified: 2020-10-13 18:05:35 EDT

0.68 0.57 nadww01



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Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 323022104082001

Minimum number of levels = 1

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

USGS 323022104082001 21S.27E.01.42333

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°30'22", Longitude 104°08'20" NAD27

Land-surface elevation 3,191 feet above NAVD88

The depth of the well is 65 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

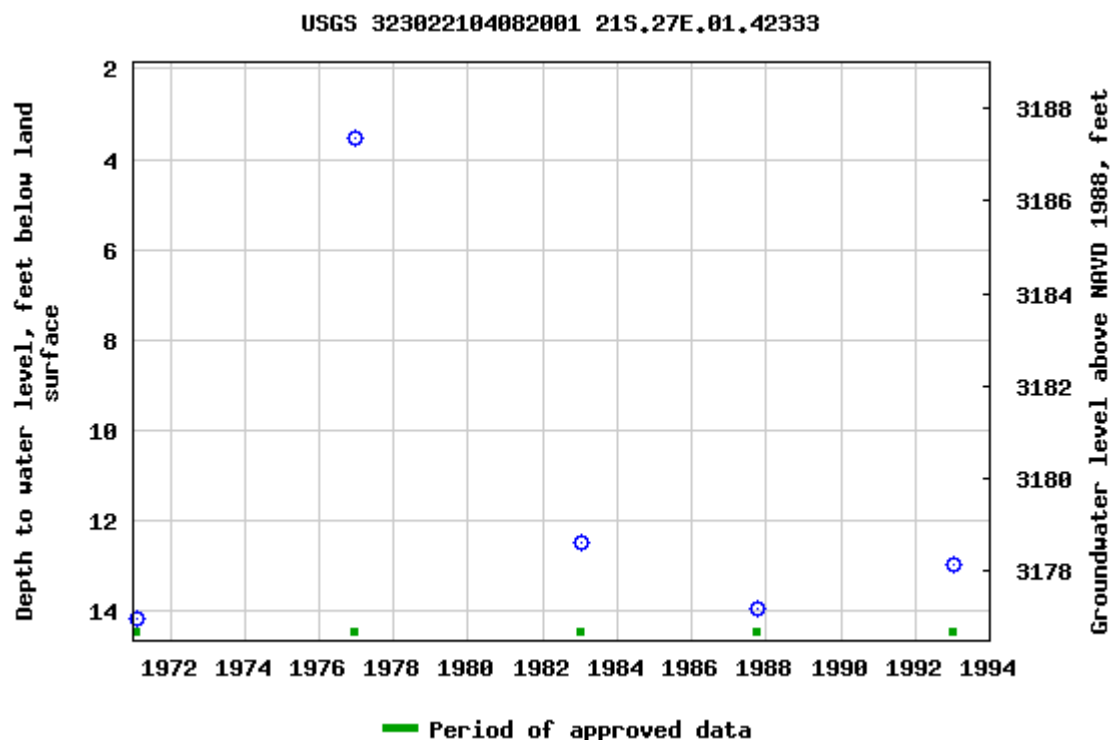
Output formats

[Table of data](#)

[Tab-separated data](#)

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[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

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Title: Groundwater for USA: Water Levels

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



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

Page Last Modified: 2020-10-13 18:06:43 EDT

0.67 0.62 nadww01

APPENDIX C

SAMPLING PROTOCOL & FIELD NOTES



Sampling Protocol

Representatives from SMA chose the Judgmental Sampling Method as described in EPA's Final Sampling Guidance for SW-846, 2002 to adequately quantify contaminant concentrations on Burton Flat Deep Unit 38. The utility of this particular method functions on the sufficient knowledge of the contaminant, which we possess. This design is also useful when identifying the composition of a release, which we have documented. In addition, this sampling design was chosen for this project because of the locations uniform soil type, and the several operational considerations (such as the liner within the battery and the construction of a new facility) that precluded the implementation of a different statistical design.

The soil samples were collected in laboratory supplied containers in accordance with this sampling protocol, immediately placed on ice and sent under standard chain-of-custody protocols to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico for analysis. A total of seven (7) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

Sampling Analysis Field Quality Assurance Procedures

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

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

Burton Flat Deep #38

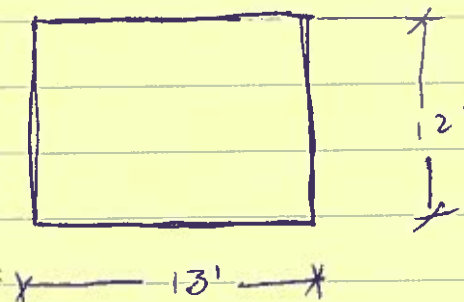
9/16/2020

10:00 Arrived on location and began excavation.

Area was located to the right of the Tank Batteries.

An area $\sim 12' \times 13' \times 1'$ deep was excavated.

Soil type remained uniform throughout excavation, minor caliche was encountered at the half foot level.



9/17/2020

8:00 am. - A total of five (5) closure samples were collected.

One (1) base sample labeled CS1, and four (4) Side Wall samples labeled (SW1-SW4). Closure samples were comprised of five point composite samples.

SW1 was collected on the Northern most portion of the excavation, proceeding clockwise.

SW1 - N, SW2 - E, SW3 - S, SW4 - W.

CS1 was collected at a depth of one (1) foot.

Burton Flat Deep #38 9/30

- Arrived on location and began further excavation required for closure. SW2 was extended by one (1) additional foot. One composite closure sample was collected and field screened for TPH & CI using a PID & EC meter.
- All field screens indicated no hydrocarbons or chlorides were present along seal wall #2.

Field Screens:

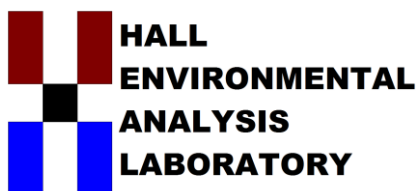
(SW2) PID: 0.08 ppm

CI: 0.05 @ 28.5°C = ND.

Final Dimensions: ~ 13' x 13' x 1'

APPENDIX D

LABORATORY ANALYTICAL REPORTS



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

August 12, 2020

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

RE: Burton Deep Flat

OrderNo.: 2008135

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 15 sample(s) on 8/5/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L1-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:10:00 AM

Lab ID: 2008135-001

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 5:40:02 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/6/2020 6:47:39 PM	54203
Surr: BFB	99.6	70-130		%Rec	1	8/6/2020 6:47:39 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	8/6/2020 11:11:44 PM	54209
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	8/6/2020 11:11:44 PM	54209
Surr: DNOP	105	30.4-154		%Rec	1	8/6/2020 11:11:44 PM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/6/2020 6:47:39 PM	54203
Toluene	ND	0.050		mg/Kg	1	8/6/2020 6:47:39 PM	54203
Ethylbenzene	ND	0.050		mg/Kg	1	8/6/2020 6:47:39 PM	54203
Xylenes, Total	ND	0.10		mg/Kg	1	8/6/2020 6:47:39 PM	54203
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%Rec	1	8/6/2020 6:47:39 PM	54203
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	8/6/2020 6:47:39 PM	54203
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/6/2020 6:47:39 PM	54203
Surr: Toluene-d8	98.9	70-130		%Rec	1	8/6/2020 6:47:39 PM	54203

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

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

Page 1 of 22

Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:16:00 AM

Lab ID: 2008135-002

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 5:52:27 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 7:16:13 PM	54203
Surr: BFB	104	70-130		%Rec	1	8/6/2020 7:16:13 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	8/6/2020 11:21:48 PM	54209
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 11:21:48 PM	54209
Surr: DNOP	90.4	30.4-154		%Rec	1	8/6/2020 11:21:48 PM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/6/2020 7:16:13 PM	54203
Toluene	ND	0.048		mg/Kg	1	8/6/2020 7:16:13 PM	54203
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 7:16:13 PM	54203
Xylenes, Total	ND	0.096		mg/Kg	1	8/6/2020 7:16:13 PM	54203
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	8/6/2020 7:16:13 PM	54203
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/6/2020 7:16:13 PM	54203
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/6/2020 7:16:13 PM	54203
Surr: Toluene-d8	100	70-130		%Rec	1	8/6/2020 7:16:13 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:22:00 AM

Lab ID: 2008135-003

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 6:29:40 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 7:44:48 PM	54203
Surr: BFB	99.1	70-130		%Rec	1	8/6/2020 7:44:48 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/6/2020 11:31:49 PM	54209
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/6/2020 11:31:49 PM	54209
Surr: DNOP	73.3	30.4-154		%Rec	1	8/6/2020 11:31:49 PM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/6/2020 7:44:48 PM	54203
Toluene	ND	0.049		mg/Kg	1	8/6/2020 7:44:48 PM	54203
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 7:44:48 PM	54203
Xylenes, Total	ND	0.098		mg/Kg	1	8/6/2020 7:44:48 PM	54203
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%Rec	1	8/6/2020 7:44:48 PM	54203
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	8/6/2020 7:44:48 PM	54203
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/6/2020 7:44:48 PM	54203
Surr: Toluene-d8	95.1	70-130		%Rec	1	8/6/2020 7:44:48 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-1'

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:28:00 AM

Lab ID: 2008135-004

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	61		mg/Kg	20	8/9/2020 6:42:04 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 8:13:26 PM	54203
Surr: BFB	103	70-130		%Rec	1	8/6/2020 8:13:26 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	8/6/2020 11:41:52 PM	54209
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/6/2020 11:41:52 PM	54209
Surr: DNOP	102	30.4-154		%Rec	1	8/6/2020 11:41:52 PM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/6/2020 8:13:26 PM	54203
Toluene	ND	0.048		mg/Kg	1	8/6/2020 8:13:26 PM	54203
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 8:13:26 PM	54203
Xylenes, Total	ND	0.095		mg/Kg	1	8/6/2020 8:13:26 PM	54203
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	8/6/2020 8:13:26 PM	54203
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	8/6/2020 8:13:26 PM	54203
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/6/2020 8:13:26 PM	54203
Surr: Toluene-d8	100	70-130		%Rec	1	8/6/2020 8:13:26 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-2'

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:32:00 AM

Lab ID: 2008135-005

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 6:54:29 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 8:41:58 PM	54203
Surr: BFB	103	70-130		%Rec	1	8/6/2020 8:41:58 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/6/2020 11:51:57 PM	54209
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2020 11:51:57 PM	54209
Surr: DNOP	69.8	30.4-154		%Rec	1	8/6/2020 11:51:57 PM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/6/2020 8:41:58 PM	54203
Toluene	ND	0.049		mg/Kg	1	8/6/2020 8:41:58 PM	54203
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 8:41:58 PM	54203
Xylenes, Total	ND	0.097		mg/Kg	1	8/6/2020 8:41:58 PM	54203
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%Rec	1	8/6/2020 8:41:58 PM	54203
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/6/2020 8:41:58 PM	54203
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/6/2020 8:41:58 PM	54203
Surr: Toluene-d8	97.0	70-130		%Rec	1	8/6/2020 8:41:58 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:37:00 AM

Lab ID: 2008135-006

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 7:06:53 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2020 9:10:29 PM	54203
Surr: BFB	104	70-130		%Rec	1	8/6/2020 9:10:29 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/7/2020 12:01:57 AM	54209
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/7/2020 12:01:57 AM	54209
Surr: DNOP	135	30.4-154		%Rec	1	8/7/2020 12:01:57 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	8/6/2020 9:10:29 PM	54203
Toluene	ND	0.047		mg/Kg	1	8/6/2020 9:10:29 PM	54203
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2020 9:10:29 PM	54203
Xylenes, Total	ND	0.094		mg/Kg	1	8/6/2020 9:10:29 PM	54203
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	8/6/2020 9:10:29 PM	54203
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	8/6/2020 9:10:29 PM	54203
Surr: Dibromofluoromethane	103	70-130		%Rec	1	8/6/2020 9:10:29 PM	54203
Surr: Toluene-d8	98.9	70-130		%Rec	1	8/6/2020 9:10:29 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-1'

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:42:00 AM

Lab ID: 2008135-007

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 7:19:18 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/6/2020 9:38:57 PM	54203
Surr: BFB	97.4	70-130		%Rec	1	8/6/2020 9:38:57 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/7/2020 12:11:56 AM	54209
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 12:11:56 AM	54209
Surr: DNOP	75.3	30.4-154		%Rec	1	8/7/2020 12:11:56 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/6/2020 9:38:57 PM	54203
Toluene	ND	0.049		mg/Kg	1	8/6/2020 9:38:57 PM	54203
Ethylbenzene	ND	0.049		mg/Kg	1	8/6/2020 9:38:57 PM	54203
Xylenes, Total	ND	0.098		mg/Kg	1	8/6/2020 9:38:57 PM	54203
Surr: 1,2-Dichloroethane-d4	98.0	70-130		%Rec	1	8/6/2020 9:38:57 PM	54203
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	8/6/2020 9:38:57 PM	54203
Surr: Dibromofluoromethane	108	70-130		%Rec	1	8/6/2020 9:38:57 PM	54203
Surr: Toluene-d8	95.6	70-130		%Rec	1	8/6/2020 9:38:57 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-2'

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:46:00 AM

Lab ID: 2008135-008

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 7:31:42 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 10:07:26 PM	54203
Surr: BFB	99.2	70-130		%Rec	1	8/6/2020 10:07:26 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/7/2020 12:21:55 AM	54209
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 12:21:55 AM	54209
Surr: DNOP	56.7	30.4-154		%Rec	1	8/7/2020 12:21:55 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/6/2020 10:07:26 PM	54203
Toluene	ND	0.048		mg/Kg	1	8/6/2020 10:07:26 PM	54203
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 10:07:26 PM	54203
Xylenes, Total	ND	0.096		mg/Kg	1	8/6/2020 10:07:26 PM	54203
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%Rec	1	8/6/2020 10:07:26 PM	54203
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	8/6/2020 10:07:26 PM	54203
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/6/2020 10:07:26 PM	54203
Surr: Toluene-d8	96.8	70-130		%Rec	1	8/6/2020 10:07:26 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:52:00 AM

Lab ID: 2008135-009

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 7:44:06 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/6/2020 10:35:58 PM	54203
Surr: BFB	98.9	70-130		%Rec	1	8/6/2020 10:35:58 PM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/7/2020 12:31:54 AM	54209
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 12:31:54 AM	54209
Surr: DNOP	166	30.4-154	S	%Rec	1	8/7/2020 12:31:54 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/6/2020 10:35:58 PM	54203
Toluene	ND	0.048		mg/Kg	1	8/6/2020 10:35:58 PM	54203
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2020 10:35:58 PM	54203
Xylenes, Total	ND	0.096		mg/Kg	1	8/6/2020 10:35:58 PM	54203
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	8/6/2020 10:35:58 PM	54203
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	8/6/2020 10:35:58 PM	54203
Surr: Dibromofluoromethane	110	70-130		%Rec	1	8/6/2020 10:35:58 PM	54203
Surr: Toluene-d8	101	70-130		%Rec	1	8/6/2020 10:35:58 PM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-1'

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:55:00 AM

Lab ID: 2008135-010

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 8:21:20 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/7/2020 1:55:45 AM	54203
Surr: BFB	101	70-130		%Rec	1	8/7/2020 1:55:45 AM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/7/2020 12:41:51 AM	54209
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/7/2020 12:41:51 AM	54209
Surr: DNOP	96.3	30.4-154		%Rec	1	8/7/2020 12:41:51 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/7/2020 1:55:45 AM	54203
Toluene	ND	0.050		mg/Kg	1	8/7/2020 1:55:45 AM	54203
Ethylbenzene	ND	0.050		mg/Kg	1	8/7/2020 1:55:45 AM	54203
Xylenes, Total	ND	0.099		mg/Kg	1	8/7/2020 1:55:45 AM	54203
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%Rec	1	8/7/2020 1:55:45 AM	54203
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/7/2020 1:55:45 AM	54203
Surr: Dibromofluoromethane	106	70-130		%Rec	1	8/7/2020 1:55:45 AM	54203
Surr: Toluene-d8	97.3	70-130		%Rec	1	8/7/2020 1:55:45 AM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-2'

Project: Burton Deep Flat

Collection Date: 8/3/2020 11:59:00 AM

Lab ID: 2008135-011

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 9:23:23 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2020 2:24:15 AM	54203
Surr: BFB	106	70-130		%Rec	1	8/7/2020 2:24:15 AM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/7/2020 12:51:51 AM	54209
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/7/2020 12:51:51 AM	54209
Surr: DNOP	104	30.4-154		%Rec	1	8/7/2020 12:51:51 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/7/2020 2:24:15 AM	54203
Toluene	ND	0.049		mg/Kg	1	8/7/2020 2:24:15 AM	54203
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2020 2:24:15 AM	54203
Xylenes, Total	ND	0.098		mg/Kg	1	8/7/2020 2:24:15 AM	54203
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	8/7/2020 2:24:15 AM	54203
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	8/7/2020 2:24:15 AM	54203
Surr: Dibromofluoromethane	104	70-130		%Rec	1	8/7/2020 2:24:15 AM	54203
Surr: Toluene-d8	102	70-130		%Rec	1	8/7/2020 2:24:15 AM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L6-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 12:05:00 PM

Lab ID: 2008135-012

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 9:35:48 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/7/2020 2:52:49 AM	54203
Surr: BFB	101	70-130		%Rec	1	8/7/2020 2:52:49 AM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/7/2020 1:01:41 AM	54209
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2020 1:01:41 AM	54209
Surr: DNOP	103	30.4-154		%Rec	1	8/7/2020 1:01:41 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.023		mg/Kg	1	8/7/2020 2:52:49 AM	54203
Toluene	ND	0.047		mg/Kg	1	8/7/2020 2:52:49 AM	54203
Ethylbenzene	ND	0.047		mg/Kg	1	8/7/2020 2:52:49 AM	54203
Xylenes, Total	ND	0.094		mg/Kg	1	8/7/2020 2:52:49 AM	54203
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	8/7/2020 2:52:49 AM	54203
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	8/7/2020 2:52:49 AM	54203
Surr: Dibromofluoromethane	109	70-130		%Rec	1	8/7/2020 2:52:49 AM	54203
Surr: Toluene-d8	98.2	70-130		%Rec	1	8/7/2020 2:52:49 AM	54203

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L6-1'

Project: Burton Deep Flat

Collection Date: 8/3/2020 12:12:00 PM

Lab ID: 2008135-013

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 9:48:13 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2020 3:21:19 AM	54203
Surr: BFB	103	70-130		%Rec	1	8/7/2020 3:21:19 AM	54203
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/7/2020 1:11:40 AM	54209
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/7/2020 1:11:40 AM	54209
Surr: DNOP	121	30.4-154		%Rec	1	8/7/2020 1:11:40 AM	54209
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/7/2020 3:21:19 AM	54203
Toluene	ND	0.049		mg/Kg	1	8/7/2020 3:21:19 AM	54203
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2020 3:21:19 AM	54203
Xylenes, Total	ND	0.097		mg/Kg	1	8/7/2020 3:21:19 AM	54203
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	8/7/2020 3:21:19 AM	54203
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	8/7/2020 3:21:19 AM	54203
Surr: Dibromofluoromethane	107	70-130		%Rec	1	8/7/2020 3:21:19 AM	54203
Surr: Toluene-d8	101	70-130		%Rec	1	8/7/2020 3:21:19 AM	54203

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

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

Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L7-Surface

Project: Burton Deep Flat

Collection Date: 8/3/2020 12:18:00 PM

Lab ID: 2008135-014

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 10:00:37 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2020 3:49:54 AM	54208
Surr: BFB	106	70-130		%Rec	1	8/7/2020 3:49:54 AM	54208
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	140	9.3		mg/Kg	1	8/11/2020 7:55:55 PM	54218
Motor Oil Range Organics (MRO)	450	47		mg/Kg	1	8/11/2020 7:55:55 PM	54218
Surr: DNOP	120	30.4-154		%Rec	1	8/11/2020 7:55:55 PM	54218
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.025		mg/Kg	1	8/7/2020 3:49:54 AM	54208
Toluene	ND	0.049		mg/Kg	1	8/7/2020 3:49:54 AM	54208
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2020 3:49:54 AM	54208
Xylenes, Total	ND	0.098		mg/Kg	1	8/7/2020 3:49:54 AM	54208
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	8/7/2020 3:49:54 AM	54208
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	8/7/2020 3:49:54 AM	54208
Surr: Dibromofluoromethane	101	70-130		%Rec	1	8/7/2020 3:49:54 AM	54208
Surr: Toluene-d8	98.5	70-130		%Rec	1	8/7/2020 3:49:54 AM	54208

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

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

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Analytical Report

Lab Order 2008135

Date Reported: 8/12/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L6-2'

Project: Burton Deep Flat

Collection Date: 8/3/2020 12:25:00 PM

Lab ID: 2008135-015

Matrix: SOIL

Received Date: 8/5/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	8/9/2020 10:13:01 PM	54282
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2020 5:15:35 AM	54208
Surr: BFB	102	70-130		%Rec	1	8/7/2020 5:15:35 AM	54208
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/7/2020 1:20:02 PM	54218
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/7/2020 1:20:02 PM	54218
Surr: DNOP	129	30.4-154		%Rec	1	8/7/2020 1:20:02 PM	54218
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.024		mg/Kg	1	8/7/2020 5:15:35 AM	54208
Toluene	ND	0.049		mg/Kg	1	8/7/2020 5:15:35 AM	54208
Ethylbenzene	ND	0.049		mg/Kg	1	8/7/2020 5:15:35 AM	54208
Xylenes, Total	ND	0.098		mg/Kg	1	8/7/2020 5:15:35 AM	54208
Surr: 1,2-Dichloroethane-d4	99.6	70-130		%Rec	1	8/7/2020 5:15:35 AM	54208
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	8/7/2020 5:15:35 AM	54208
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/7/2020 5:15:35 AM	54208
Surr: Toluene-d8	103	70-130		%Rec	1	8/7/2020 5:15:35 AM	54208

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2008135

12-Aug-20

Client: Souder, Miller & Associates

Project: Burton Deep Flat

Sample ID: MB-54282		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS	Batch ID: 54282			RunNo: 70943						
Prep Date: 8/9/2020	Analysis Date: 8/9/2020			SeqNo: 2471213			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-54282		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS	Batch ID: 54282			RunNo: 70943						
Prep Date: 8/9/2020	Analysis Date: 8/9/2020			SeqNo: 2471214			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2008135

12-Aug-20

Client: Souder, Miller & Associates**Project:** Burton Deep Flat

Sample ID: LCS-54209	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 54209	RunNo: 70894								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469096 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	10	50.00	0	114	70	130			
Surr: DNOP	5.3		5.000		107	30.4	154			

Sample ID: MB-54209	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 54209	RunNo: 70894								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469099 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		118	30.4	154			

Sample ID: MB-54218	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 54218	RunNo: 70908								
Prep Date: 8/6/2020	Analysis Date: 8/7/2020	SeqNo: 2472495 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		109	30.4	154			

Sample ID: LCS-54218	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 54218	RunNo: 70908								
Prep Date: 8/6/2020	Analysis Date: 8/7/2020	SeqNo: 2472496 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	113	70	130			
Surr: DNOP	5.4		5.000		108	30.4	154			

Sample ID: LCS-54255	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 54255	RunNo: 70976								
Prep Date: 8/7/2020	Analysis Date: 8/10/2020	SeqNo: 2472908 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		100	30.4	154			

Qualifiers:

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

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

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

WO#: 2008135

12-Aug-20

Client: Souder, Miller & Associates**Project:** Burton Deep Flat

Sample ID: MB-54255	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 54255		RunNo: 70976							
Prep Date: 8/7/2020	Analysis Date: 8/11/2020		SeqNo: 2472909		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.7		10.00		56.6	30.4	154			

Sample ID: 2008135-014AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: L7-Surface	Batch ID: 54218		RunNo: 70976							
Prep Date: 8/6/2020	Analysis Date: 8/11/2020		SeqNo: 2473678		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	150	10	50.30	143.7	21.5	47.4	136			S
Surr: DNOP	6.4		5.030		128	30.4	154			

Sample ID: 2008135-014AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: L7-Surface	Batch ID: 54218		RunNo: 70976							
Prep Date: 8/6/2020	Analysis Date: 8/11/2020		SeqNo: 2473679		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	200	9.5	47.48	143.7	124	47.4	136	26.8	43.4	
Surr: DNOP	5.7		4.748		120	30.4	154	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

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#: 2008135

12-Aug-20

Client: Souder, Miller & Associates**Project:** Burton Deep Flat

Sample ID: mb-54203	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54203	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469543			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.1	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: lcs-54203	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54203	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469544			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.6	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.50		0.5000		99.6	70	130			

Sample ID: mb-54208	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469567			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.5	70	130			
Surr: 4-Bromofluorobenzene	0.52		0.5000		104	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.49		0.5000		98.4	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

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#: 2008135

12-Aug-20

Client: Souder, Miller & Associates**Project:** Burton Deep Flat

Sample ID: Ics-54208	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469568	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.8	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.8	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.49		0.5000		97.4	70	130			

Sample ID: 2008135-014ams	SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: L7-Surface	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469570	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9560	0	96.0	71.1	115			
Toluene	0.95	0.048	0.9560	0	99.7	79.6	132			
Ethylbenzene	1.0	0.048	0.9560	0	104	83.8	134			
Xylenes, Total	3.1	0.096	2.868	0	108	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.46		0.4780		96.3	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4780		95.9	70	130			
Surr: Dibromofluoromethane	0.49		0.4780		103	70	130			
Surr: Toluene-d8	0.46		0.4780		96.0	70	130			

Sample ID: 2008135-014amsd	SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: L7-Surface	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469571	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9814	0	95.9	71.1	115	2.56	20	
Toluene	0.99	0.049	0.9814	0	101	79.6	132	4.01	20	
Ethylbenzene	1.0	0.049	0.9814	0	103	83.8	134	1.78	20	
Xylenes, Total	3.1	0.098	2.944	0	104	82.4	132	0.651	20	
Surr: 1,2-Dichloroethane-d4	0.49		0.4907		98.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.49		0.4907		99.1	70	130	0	0	
Surr: Dibromofluoromethane	0.53		0.4907		108	70	130	0	0	
Surr: Toluene-d8	0.48		0.4907		97.2	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

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#: 2008135

12-Aug-20

Client: Souder, Miller & Associates

Project: Burton Deep Flat

Sample ID: mb-54203	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54203	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469575 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	520		500.0		104	70	130			

Sample ID: lcs-54203	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54203	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/6/2020	SeqNo: 2469576 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.4	70	130			
Surr: BFB	520		500.0		103	70	130			

Sample ID: mb-54208	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469599 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		102	70	130			

Sample ID: lcs-54208	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469600 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.8	70	130			
Surr: BFB	520		500.0		104	70	130			

Sample ID: 2008135-015ams	SampType: MS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: L6-2'	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469603 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.6	23.23	0	93.2	49.2	122			
Surr: BFB	470		464.7		102	70	130			

Sample ID: 2008135-015amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: L6-2'	Batch ID: 54208	RunNo: 70903								
Prep Date: 8/5/2020	Analysis Date: 8/7/2020	SeqNo: 2469604 Units: mg/Kg								
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

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#: 2008135

12-Aug-20

Client: Souder, Miller & Associates

Project: Burton Deep Flat

Sample ID: 2008135-015amsd		SampType: MSD			TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: L6-2'		Batch ID: 54208			RunNo: 70903					
Prep Date: 8/5/2020		Analysis Date: 8/7/2020			SeqNo: 2469604		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.6	23.19	0	92.4	49.2	122	1.05	20	
Surr: BFB	460		463.8		99.1	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

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 22 of 22



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: 2008135 RptNo: 1

Received By: Juan Rojas 8/5/2020 8:00:00 AM

Completed By: Juan Rojas 8/5/2020 9:22:19 AM

Reviewed By: Em 8/5/20

[Signature]

[Signature]

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°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: *[Signature]*

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	0	Good				
2	0.1	Good				



Analytical Report

Report Summary

Client: Souder Miller Associates - Carlsbad

Samples Received: 8/19/2020

Job Number: 01058-0007

Work Order: P008055

Project Name/Location: Burton Flat Deep #38

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'Walter Hinchman', is written over a light blue rectangular background.

Date: 8/21/20

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc. attests the data reported has not been altered in any way.
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Envirotech, Inc. holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc. holds the Texas TNI certification T104704557-19-2 for the data reported.





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

Project Name: Burton Flat Deep #38
Project Number: 01058-0007
Project Manager: Ashley Maxwell

Reported:
08/21/20 14:49

Sample Summary

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
L7-1'	P008055-01A	Solid	08/14/20	08/19/20	Glass Jar, 4 oz.
L7-2'	P008055-02A	Solid	08/14/20	08/19/20	Glass Jar, 4 oz.

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Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220	Project Name: Burton Flat Deep #38 Project Number: 01058-0007 Project Manager: Ashley Maxwell	Reported: 08/21/20 14:49
--	---	-----------------------------

L7-1'
P008055-01 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg				Batch: 2034019
Benzene	ND	0.0250	1	08/20/20	08/21/20	
Toluene	ND	0.0250	1	08/20/20	08/21/20	
Ethylbenzene	ND	0.0250	1	08/20/20	08/21/20	
p,m-Xylene	ND	0.0500	1	08/20/20	08/21/20	
o-Xylene	ND	0.0250	1	08/20/20	08/21/20	
Total Xylenes	ND	0.0250	1	08/20/20	08/21/20	
Surrogate: 4-Bromochlorobenzene-PID		103 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg				Batch: 2034019
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/20/20	08/21/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.3 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg				Batch: 2034022
Diesel Range Organics (C10-C28)	46.6	25.0	1	08/20/20	08/20/20	
Oil Range Organics (C28-C40)	ND	50.0	1	08/20/20	08/20/20	
Surrogate: n-Nonane		92.2 %	50-200	08/20/20	08/20/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg				Batch: 2034021
Chloride	ND	20.0	1	08/20/20	08/20/20	

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Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep #38	
201 S Halagueno St.	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	08/21/20 14:49

L7-2'
P008055-02 (Solid)

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg				Batch: 2034019
Benzene	ND	0.0250	1	08/20/20	08/21/20	
Toluene	ND	0.0250	1	08/20/20	08/21/20	
Ethylbenzene	ND	0.0250	1	08/20/20	08/21/20	
p,m-Xylene	ND	0.0500	1	08/20/20	08/21/20	
o-Xylene	ND	0.0250	1	08/20/20	08/21/20	
Total Xylenes	ND	0.0250	1	08/20/20	08/21/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg				Batch: 2034019
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/20/20	08/21/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		88.2 %	50-150	08/20/20	08/21/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg				Batch: 2034022
Diesel Range Organics (C10-C28)	ND	25.0	1	08/20/20	08/20/20	
Oil Range Organics (C28-C40)	ND	50.0	1	08/20/20	08/20/20	
<i>Surrogate: n-Nonane</i>		98.1 %	50-200	08/20/20	08/20/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg				Batch: 2034021
Chloride	ND	20.0	1	08/20/20	08/20/20	

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Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep #38	
201 S Halagueno St.	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	08/21/20 14:49

Volatile Organics by EPA 8021B - Quality Control

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

Blank (2034019-BLK1)

Prepared & Analyzed: 08/20/20 1

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

LCS (2034019-BS1)

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

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

Matrix Spike (2034019-MS1)

Source: P008049-01

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

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

Matrix Spike Dup (2034019-MSD1)

Source: P008049-01

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

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

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Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep #38	
201 S Halagueno St.	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	08/21/20 14:49

Nonhalogenated Organics by EPA 8015D - GRO - Quality Control

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

Blank (2034019-BLK1)

Prepared & Analyzed: 08/20/20 1

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

LCS (2034019-BS2)

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

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

Matrix Spike (2034019-MS2)

Source: P008049-01

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

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

Matrix Spike Dup (2034019-MSD2)

Source: P008049-01

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

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

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Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep #38	
201 S Halagueno St.	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	08/21/20 14:49

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

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

Blank (2034022-BLK1)

Prepared & Analyzed: 08/20/20 1

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

LCS (2034022-BS1)

Prepared & Analyzed: 08/20/20 1

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

Matrix Spike (2034022-MS1)

Source: P008049-01

Prepared: 08/20/20 1 Analyzed: 08/21/20 0

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

Matrix Spike Dup (2034022-MSD1)

Source: P008049-01

Prepared: 08/20/20 1 Analyzed: 08/21/20 0

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

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Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep #38	
201 S Halagueno St.	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	08/21/20 14:49

Anions by EPA 300.0/9056A - Quality Control

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

Blank (2034021-BLK1)

Prepared & Analyzed: 08/20/20 1

Chloride	ND	20.0
----------	----	------

LCS (2034021-BS1)

Prepared & Analyzed: 08/20/20 1

Chloride	247	20.0	250	98.6	90-110
----------	-----	------	-----	------	--------

Matrix Spike (2034021-MS1)

Source: P008049-01

Prepared & Analyzed: 08/20/20 1

Chloride	264	20.0	250	ND	106	80-120
----------	-----	------	-----	----	-----	--------

Matrix Spike Dup (2034021-MSD1)

Source: P008049-01

Prepared & Analyzed: 08/20/20 1

Chloride	261	20.0	250	ND	104	80-120	1.18	20
----------	-----	------	-----	----	-----	--------	------	----

QC Summary Report Comment:

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

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

Project Name: Burton Flat Deep #38
Project Number: 01058-0007
Project Manager: Ashley Maxwell

Reported:
08/21/20 14:49

Notes and Definitions

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

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

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

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

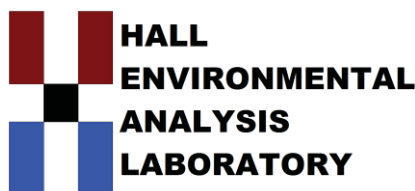
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labadmin@envirotech-inc.com



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

September 29, 2020

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

RE: Burton Flat Deep

OrderNo.: 2009C43

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/22/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2009C43

Date Reported: 9/29/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: CS1

Project: Burton Flat Deep

Collection Date: 9/17/2020 3:10:00 PM

Lab ID: 2009C43-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 1:51:36 PM	55485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	9/23/2020 5:02:10 PM	55363
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/23/2020 5:02:10 PM	55363
Surr: DNOP	101	30.4-154		%Rec	1	9/23/2020 5:02:10 PM	55363
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/24/2020 7:36:45 PM	55361
Surr: BFB	83.9	75.3-105		%Rec	1	9/24/2020 7:36:45 PM	55361
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	9/24/2020 7:36:45 PM	55361
Toluene	ND	0.047		mg/Kg	1	9/24/2020 7:36:45 PM	55361
Ethylbenzene	ND	0.047		mg/Kg	1	9/24/2020 7:36:45 PM	55361
Xylenes, Total	ND	0.093		mg/Kg	1	9/24/2020 7:36:45 PM	55361
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/24/2020 7:36:45 PM	55361

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

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

Analytical Report

Lab Order 2009C43

Date Reported: 9/29/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW1

Project: Burton Flat Deep

Collection Date: 9/17/2020 3:15:00 PM

Lab ID: 2009C43-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 2:53:37 PM	55485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	31	9.6		mg/Kg	1	9/23/2020 5:31:42 PM	55363
Motor Oil Range Organics (MRO)	65	48		mg/Kg	1	9/23/2020 5:31:42 PM	55363
Surr: DNOP	144	30.4-154		%Rec	1	9/23/2020 5:31:42 PM	55363
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/24/2020 8:00:09 PM	55361
Surr: BFB	92.6	75.3-105		%Rec	1	9/24/2020 8:00:09 PM	55361
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/24/2020 8:00:09 PM	55361
Toluene	ND	0.049		mg/Kg	1	9/24/2020 8:00:09 PM	55361
Ethylbenzene	ND	0.049		mg/Kg	1	9/24/2020 8:00:09 PM	55361
Xylenes, Total	ND	0.098		mg/Kg	1	9/24/2020 8:00:09 PM	55361
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/24/2020 8:00:09 PM	55361

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

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

Analytical Report

Lab Order 2009C43

Date Reported: 9/29/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW2

Project: Burton Flat Deep

Collection Date: 9/17/2020 3:20:00 PM

Lab ID: 2009C43-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 3:06:01 PM	55485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	260	47		mg/Kg	5	9/24/2020 3:31:03 PM	55363
Motor Oil Range Organics (MRO)	530	230		mg/Kg	5	9/24/2020 3:31:03 PM	55363
Surr: DNOP	109	30.4-154		%Rec	5	9/24/2020 3:31:03 PM	55363
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/24/2020 8:23:43 PM	55361
Surr: BFB	87.5	75.3-105		%Rec	1	9/24/2020 8:23:43 PM	55361
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	9/24/2020 8:23:43 PM	55361
Toluene	ND	0.046		mg/Kg	1	9/24/2020 8:23:43 PM	55361
Ethylbenzene	ND	0.046		mg/Kg	1	9/24/2020 8:23:43 PM	55361
Xylenes, Total	ND	0.092		mg/Kg	1	9/24/2020 8:23:43 PM	55361
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	9/24/2020 8:23:43 PM	55361

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

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

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Analytical Report

Lab Order 2009C43

Date Reported: 9/29/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW3

Project: Burton Flat Deep

Collection Date: 9/17/2020 3:25:00 PM

Lab ID: 2009C43-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 3:18:26 PM	55485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/23/2020 5:51:39 PM	55363
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/23/2020 5:51:39 PM	55363
Surr: DNOP	103	30.4-154		%Rec	1	9/23/2020 5:51:39 PM	55363
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/24/2020 8:47:03 PM	55361
Surr: BFB	94.3	75.3-105		%Rec	1	9/24/2020 8:47:03 PM	55361
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/24/2020 8:47:03 PM	55361
Toluene	ND	0.049		mg/Kg	1	9/24/2020 8:47:03 PM	55361
Ethylbenzene	ND	0.049		mg/Kg	1	9/24/2020 8:47:03 PM	55361
Xylenes, Total	ND	0.098		mg/Kg	1	9/24/2020 8:47:03 PM	55361
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/24/2020 8:47:03 PM	55361

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

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

Analytical Report

Lab Order 2009C43

Date Reported: 9/29/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: SW4

Project: Burton Flat Deep

Collection Date: 9/17/2020 3:30:00 PM

Lab ID: 2009C43-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	9/28/2020 3:30:51 PM	55485
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/23/2020 6:01:43 PM	55363
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/23/2020 6:01:43 PM	55363
Surr: DNOP	74.4	30.4-154		%Rec	1	9/23/2020 6:01:43 PM	55363
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/24/2020 9:10:23 PM	55361
Surr: BFB	86.7	75.3-105		%Rec	1	9/24/2020 9:10:23 PM	55361
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/24/2020 9:10:23 PM	55361
Toluene	ND	0.048		mg/Kg	1	9/24/2020 9:10:23 PM	55361
Ethylbenzene	ND	0.048		mg/Kg	1	9/24/2020 9:10:23 PM	55361
Xylenes, Total	ND	0.097		mg/Kg	1	9/24/2020 9:10:23 PM	55361
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/24/2020 9:10:23 PM	55361

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2009C43
29-Sep-20

Client: Souder, Miller & Associates
Project: Burton Flat Deep

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

Sample ID: LCS-55485		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 55485		RunNo: 72217						
Prep Date: 9/28/2020		Analysis Date: 9/28/2020		SeqNo: 2532306			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.4	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2009C43

29-Sep-20

Client: Souder, Miller & Associates**Project:** Burton Flat Deep

Sample ID: 2009C43-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: CS1	Batch ID: 55363	RunNo: 72066								
Prep Date: 9/22/2020	Analysis Date: 9/23/2020	SeqNo: 2527069 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	9.9	49.26	17.68	93.8	15	184			
Surr: DNOP	4.9		4.926		99.2	30.4	154			

Sample ID: 2009C43-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: CS1	Batch ID: 55363	RunNo: 72066								
Prep Date: 9/22/2020	Analysis Date: 9/23/2020	SeqNo: 2527070 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.7	48.26	17.68	80.5	15	184	12.3	23.9	
Surr: DNOP	4.0		4.826		82.2	30.4	154	0	0	

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

Sample ID: MB-55363	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 55363	RunNo: 72066								
Prep Date: 9/22/2020	Analysis Date: 9/23/2020	SeqNo: 2527110 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	30.4	154			

Qualifiers:

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2009C43

29-Sep-20

Client: Souder, Miller & Associates

Project: Burton Flat Deep

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

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 9

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

WO#: 2009C43

29-Sep-20

Client: Souder, Miller & Associates**Project:** Burton Flat Deep

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

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

Qualifiers:

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

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



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

Sample Log-In Check List

Client Name: Souder, Miller & Associates

Work Order Number: 2009C43

RcptNo: 1

Received By: Cheyenne Cason 9/22/2020 7:30:00 AM

Completed By: Juan Rojas 9/22/2020 8:35:46 AM

Reviewed By: *[Signature]*

[Signature]

[Signature]

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°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: ENM 9/22/20

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good				
2	4.8	Good				
3	3.7	Good				

Report to:

Ashley Maxwell

201 S Halagueno St.
Carlsbad, NM 88220



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Souder Miller Associates - Carlsbad

Project Name: Burton Flat Deep

Work Order: E010003

Job Number: 01058-0007

Received: 10/1/2020

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/6/20

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

Date Reported: 10/6/20

Ashley Maxwell
201 S Halagueno St.
Carlsbad, NM 88220



Project Name: Burton Flat Deep
Workorder: E010003
Date Received: 10/1/2020 12:00:00AM

Ashley Maxwell,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/1/2020 12:00:00AM, under the Project Name: Burton Flat Deep.

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

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

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

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

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Lopez
Laboratory Administrator
Office: 505-632-1881
rlopez@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep	Reported:
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	10/06/20 11:41

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW2	E010003-01A	Soil	09/30/20	10/01/20	Glass Jar, 4 oz.



Sample Data

Souder Miller Associates - Carl	Project Name:	Burton Flat Deep	Reported: 10/6/2020 11:41:28AM
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	

SW2

E010003-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RS		Batch: 2040021	
Benzene	ND	0.0250	1	10/01/20	10/01/20	
Toluene	ND	0.0250	1	10/01/20	10/01/20	
Ethylbenzene	ND	0.0250	1	10/01/20	10/01/20	
p,m-Xylene	ND	0.0500	1	10/01/20	10/01/20	
o-Xylene	ND	0.0250	1	10/01/20	10/01/20	
Total Xylenes	ND	0.0250	1	10/01/20	10/01/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.4 %	70-130		10/01/20	10/01/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RS		Batch: 2040021	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/01/20	10/01/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	89.1 %	70-130		10/01/20	10/01/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2040020	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/01/20	10/01/20	
Oil Range Organics (C28-C40)	ND	50.0	1	10/01/20	10/01/20	
<i>Surrogate: n-Nonane</i>	94.7 %	50-200		10/01/20	10/01/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: NE		Batch: 2040026	
Chloride	ND	20.0	1	10/01/20	10/01/20	



QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep	Reported:
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	10/6/2020 11:41:28AM

Volatile Organics by EPA 8021B

Analyst: RS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2040021-BLK1)

Prepared: 10/01/20 Analyzed: 10/01/20

Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.00		8.00		100	70-130			

LCS (2040021-BS1)

Prepared: 10/01/20 Analyzed: 10/01/20

Benzene	5.43	0.0250	5.00		109	70-130			
Toluene	5.51	0.0250	5.00		110	70-130			
Ethylbenzene	5.49	0.0250	5.00		110	70-130			
p,m-Xylene	11.1	0.0500	10.0		111	70-130			
o-Xylene	5.55	0.0250	5.00		111	70-130			
Total Xylenes	16.7	0.0250	15.0		111	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.35		8.00		104	70-130			

Matrix Spike (2040021-MS1)

Source: P009104-01 Prepared: 10/01/20 Analyzed: 10/01/20

Benzene	5.24	0.0250	5.00	ND	105	54-133			
Toluene	5.30	0.0250	5.00	ND	106	61-130			
Ethylbenzene	5.28	0.0250	5.00	ND	106	61-133			
p,m-Xylene	10.7	0.0500	10.0	ND	107	63-131			
o-Xylene	5.35	0.0250	5.00	ND	107	63-131			
Total Xylenes	16.0	0.0250	15.0	ND	107	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.34		8.00		104	70-130			

Matrix Spike Dup (2040021-MSD1)

Source: P009104-01 Prepared: 10/01/20 Analyzed: 10/01/20

Benzene	5.30	0.0250	5.00	ND	106	54-133	1.18	20	
Toluene	5.33	0.0250	5.00	ND	107	61-130	0.491	20	
Ethylbenzene	5.31	0.0250	5.00	ND	106	61-133	0.552	20	
p,m-Xylene	10.7	0.0500	10.0	ND	107	63-131	0.439	20	
o-Xylene	5.37	0.0250	5.00	ND	107	63-131	0.306	20	
Total Xylenes	16.1	0.0250	15.0	ND	107	63-131	0.395	20	
Surrogate: 4-Bromochlorobenzene-PID	8.28		8.00		103	70-130			



QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep	Reported:
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	10/6/2020 11:41:28AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2040021-BLK1)

Prepared: 10/01/20 Analyzed: 10/01/20

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.96		8.00		87.0	70-130			

LCS (2040021-BS2)

Prepared: 10/01/20 Analyzed: 10/01/20

Gasoline Range Organics (C6-C10)	44.7	20.0	50.0		89.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.1	70-130			

Matrix Spike (2040021-MS2)

Source: P009104-01 Prepared: 10/01/20 Analyzed: 10/01/20

Gasoline Range Organics (C6-C10)	44.1	20.0	50.0	ND	88.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.05		8.00		88.1	70-130			

Matrix Spike Dup (2040021-MSD2)

Source: P009104-01 Prepared: 10/01/20 Analyzed: 10/01/20

Gasoline Range Organics (C6-C10)	46.4	20.0	50.0	ND	92.8	70-130	5.20	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.98		8.00		87.3	70-130			



QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep	Reported:
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	10/6/2020 11:41:28AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2040020-BLK1)

Prepared: 10/01/20 Analyzed: 10/01/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C40)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.3		50.0		103	50-200			

LCS (2040020-BS1)

Prepared: 10/01/20 Analyzed: 10/01/20

Diesel Range Organics (C10-C28)	435	25.0	500		87.0	38-132			
Surrogate: <i>n</i> -Nonane	49.5		50.0		99.0	50-200			

Matrix Spike (2040020-MS1)

Source: E010002-01 Prepared: 10/01/20 Analyzed: 10/01/20

Diesel Range Organics (C10-C28)	458	25.0	500	ND	91.7	38-132			
Surrogate: <i>n</i> -Nonane	37.5		50.0		75.0	50-200			

Matrix Spike Dup (2040020-MSD1)

Source: E010002-01 Prepared: 10/01/20 Analyzed: 10/01/20

Diesel Range Organics (C10-C28)	444	25.0	500	ND	88.9	38-132	3.12	20	
Surrogate: <i>n</i> -Nonane	35.5		50.0		70.9	50-200			



QC Summary Data

Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep	Reported:
201 S Halagueno St.	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	10/6/2020 11:41:28AM

Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2040026-BLK1)

Prepared: 10/01/20 Analyzed: 10/01/20

Chloride ND 20.0

LCS (2040026-BS1)

Prepared: 10/01/20 Analyzed: 10/01/20

Chloride 250 20.0 250 100 90-110

Matrix Spike (2040026-MS1)

Source: E010002-01 Prepared: 10/01/20 Analyzed: 10/01/20

Chloride 300 20.0 250 44.0 102 80-120

Matrix Spike Dup (2040026-MSD1)

Source: E010002-01 Prepared: 10/01/20 Analyzed: 10/01/20

Chloride 301 20.0 250 44.0 103 80-120 0.363 20

QC Summary Report Comment:

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



Definitions and Notes

Souder Miller Associates - Carlsbad	Project Name:	Burton Flat Deep	
201 S Halagueno St.	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Ashley Maxwell	10/06/20 11:41

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

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

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





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Envirotech Analytical Laboratory

Printed: 10/1/2020 11:25:41AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Souder Miller Associates - Carlsbad	Date Received:	10/01/20 00:00	Work Order ID:	E010003
Phone:	(575) 200-5443	Date Logged In:	10/01/20 10:12	Logged In By:	Alexa Michaels
Email:	ashley.maxwell@soudermiller.com	Due Date:	10/08/20 17:00 (5 day TAT)		

Chain of Custody (COC)

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

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

Carrier: Fed Ex**Comments/Resolution****Sample Turn Around Time (TAT)**

6. Did the COC indicate standard TAT, or Expedited TAT? No

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:

Sample ID?	Yes
Date/Time Collected?	Yes
Collectors name?	No

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

APPENDIX E

PHOTO LOG





120 150 180 210 240

☀ 187°S (T) ● 32°30'11"N, 104°9'11"W ±9ft ▲ 3226ft



30 60 90 120 150

☀ 100°E (T) ● 32°30'11"N, 104°9'11"W ±13ft ▲ 3227ft



300

330

0

30

60

☀ 6°N (T) ● 32°30'10"N, 104°9'11"W ±13ft ▲ 3225ft



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 170770

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 170770
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	2/3/2023