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

March 7, 2019

#5E27499-BG29

NMOCD District 2
Mr. Mike Bratcher
811 S. First Street
Artesia, New Mexico 88210

SUBJECT: Remediation Closure Report for the Black River 15 10 State Com #3H Release (2RP-5095), Malaga, Eddy County, New Mexico

Dear Mr. Bratcher:

On behalf of Marathon Oil Permian LLC (Marathon), 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 Black River 15 10 State Com #3H site. The site is in Unit O, Section 15, Township 24S, Range 27E, Eddy County, New Mexico, on State 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	Black River 15 10 State Com #3H	Company	Marathon Oil Permian LLC
API Number	30-025-43960	Location	32.21068961° -104.17662202°
Incident Number	2RP-5095		
Estimated Date of Release	November 18, 2018	Date Reported to NMOCD	November 18, 2018
Land Owner	State	Reported To	NMOCD, State Land Office
Source of Release	Flare		
Released Volume	0.56 bbls	Released Material	Crude Oil
Recovered Volume	0 bbls	Net Release	0.56 bbls
NMOCD Closure Criteria	51-100 feet to groundwater		
SMA Response Dates	December 15, 2018 and January 2, 2019		

1.0 Background

On November 18, 2018, a release was discovered at the Black River 15 10 State Com #3H site due to a small fire from the flare. The heater treater hi-leveled allowing fluids to travel down the flare line and exit the flare. The fire was observed around the perimeter of the flare and self-extinguished. Initial response activities were conducted by the operator, and included site stabilization. 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 Black River 15 10 State Com #3H is located approximately six (6) miles west of Malaga, New Mexico on State land at an elevation of approximately 3,229 feet above mean sea level (amsl).

Based upon water well data (Appendix B), depth to groundwater in the area is estimated to be seventy (70) feet below grade surface (bgs). There are no known water sources within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 1/18/2019). The nearest significant watercourse is Beaman Tank, located approximately one (1) mile to the west. Figure 2 illustrates the site to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of between 51-100 feet bgs. The site has been restored to meet the standards of Table I of 19.15.29.12 NMAC.

Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

3.0 Release Characterization and Remediation Activities

On December 15, 2018, SMA personnel arrived on site in response to the release associated with Black River 15 10 State Com #3H. SMA performed site delineation activities by collecting soil samples around the release site and throughout the visibly stained area. Soil samples were field-screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 2000 photoionization detector (PID).

A total of four (4) sample locations (L1-L4) were investigated using a hand-auger, to depths up to 6 inches bgs. A total of four (4) 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.

On January 2, 2019, SMA returned to the site to guide the excavation of contaminated soil. SMA guided the excavation activities by collecting soil samples for field screening. Samples were screened for hydrocarbon using a PID. The walls and base were excavated until field screening results indicated that the NMOCD Closure Criteria would be met. The final excavated area measured approximately 50 feet by 50 feet by 1-foot deep. NMOCD was notified on December 31, 2018 that closure sampling was anticipated to occur on January 2, 2019.

A total of eight (8) composite samples (CS1-CS4 and CSW1-CSW4) were collected as confirmation that the release has been remediated. Four samples (CS1-CS4) were collected from the bottom of the excavation at depth/s of one-foot bgs, and four sidewall samples (CSW1-CSW4) were collected from each cardinal direction of the sidewalls. The samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA

Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Appendix D).

Figure 3 shows the extent of the excavation and sample locations. Laboratory results are summarized in Table 3. Laboratory reports are included in Appendix D. All results are below the NMOCD Closure Criteria for this site; SMA recommends no further action for release 2RP-5095.

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 an NMOCD permitted disposal facility.

5.0 Scope and Limitations

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

If there are any questions regarding this report, please contact either Heather Patterson at 575-200-5343 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Ashley Maxwell
Project Scientist

Reviewed by:

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

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

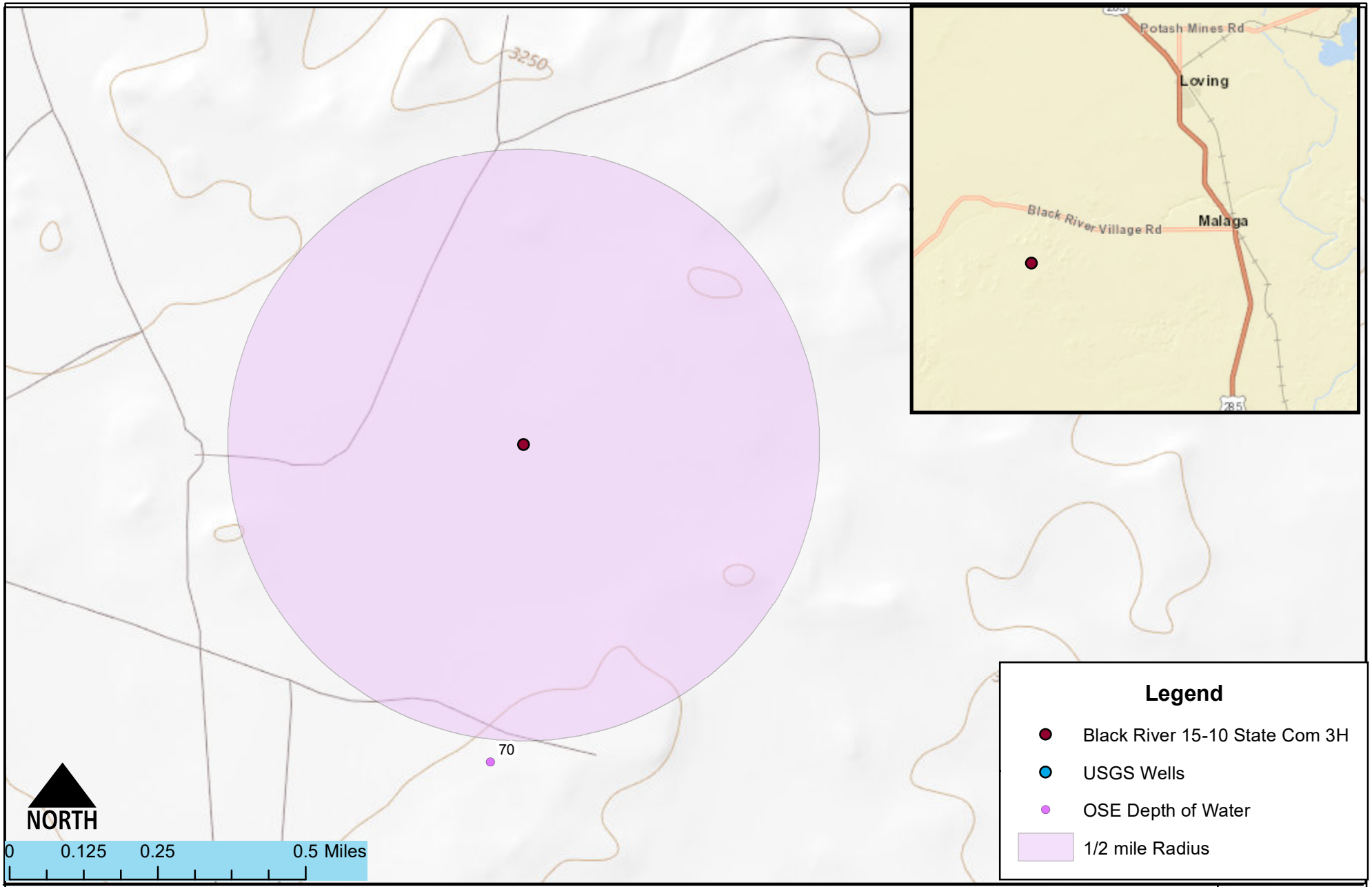
Tables:

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

Appendices:

Appendix A: Form C141
Appendix B: Well Water Data
Appendix C: Field Notes and Photo Documentation
Appendix D: Laboratory Analytical Reports

FIGURES



Vicinity and Well Head Protection Map
Black River 15-10 State Com 3H - Marathon
S 15-T24S-R27E, New Mexico

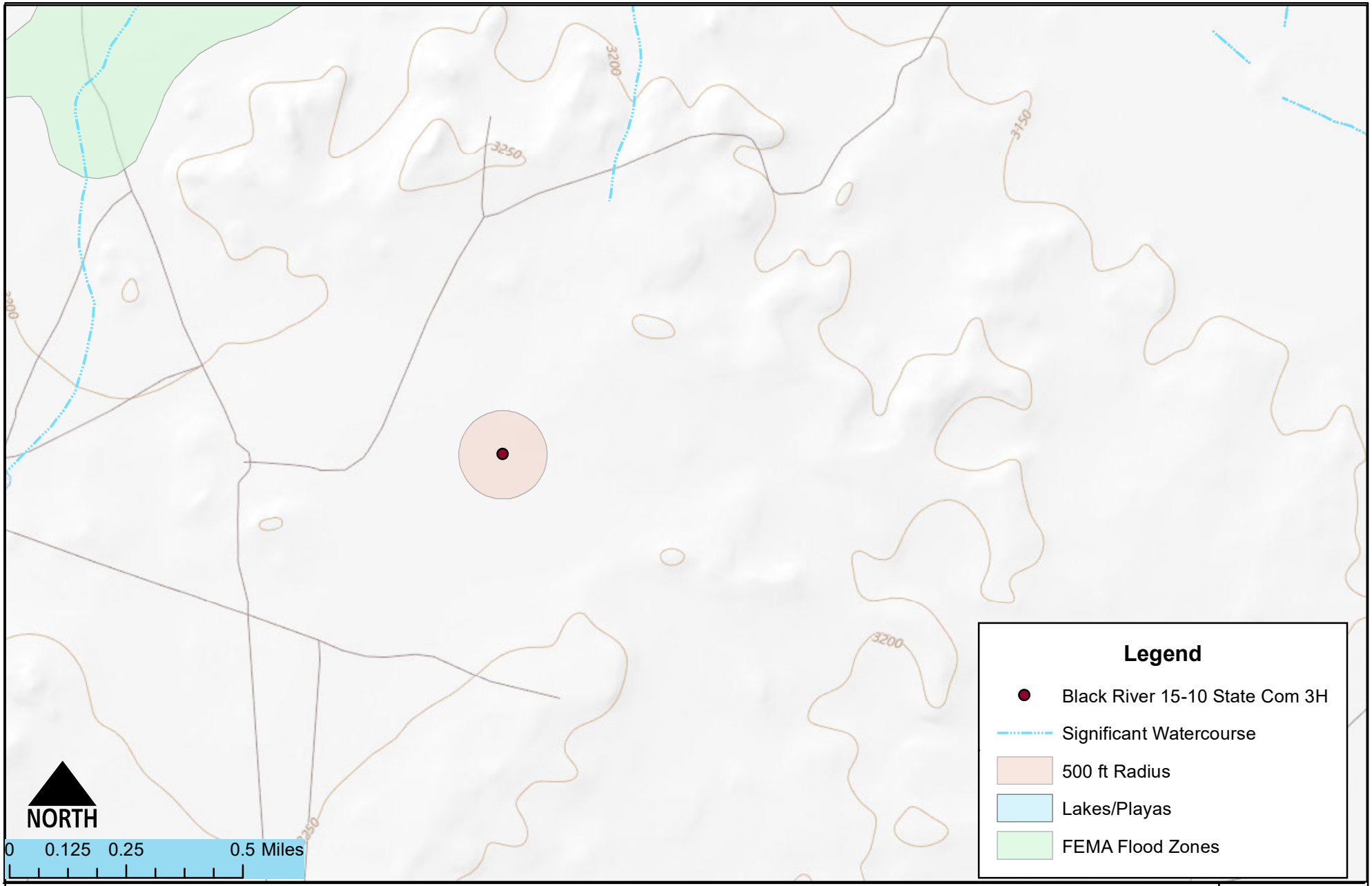
Figure 1

Date Saved: 12/5/2018

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

Drawn Heather Patterson
Checked
Approved

SMA
201 South Halagueña Street
Carlsbad, New Mexico 88221
(575) 689-7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains



Surface Water Protection Map
Black River 15-10 State Com 3H - Marathon
S 15-T24S-R27E, New Mexico

Figure 2

Date Saved: 12/5/2018

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

Drawn Heather Patterson
Checked
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Carlsbad, New Mexico 88221
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Site and Sample Location Map
Black River 15-10 State Com 3H - Marathon
S 15-T24S-R27E, New Mexico

Figure 3

Date Saved: 1/14/2019

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

Drawn Heather Patterson
Checked
Approved

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TABLES

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	70	NMOSE
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	3,304	Figure 1, NMOSE
Hortizontal Distance to Nearest Significant Watercourse (ft)	1 mile	Figure 1, USGS 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		600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'		20000	2500	1000	50	10
Surface Water	**yes or no**	**if yes, then**				
<300' from continuously flowing watercourse or other significant watercourse?	No	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	No					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	No					
<1000' from fresh water well or spring?	No					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	No					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	No					
<100' from wetland?	No					
within area overlying a subsurface mine	No					
within an unstable area?	No					
within a 100-year floodplain?	No					

Table 3:
Summary of Sample Results

Marathon Oil Permian LLC
Black River 15 10 State Com 3H (2RP-5095)

Sample ID	Sample Date	Depth (feet bgs)	Action Taken	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	**Total TPH** mg/Kg	Cl- mg/Kg
NMOCD Closure Criteria				50	10	1,000			2,500	10,000
L1	12/15/2018	Surface	Excavate	64.8	4.5	280	980	1,600	2,860	<30
L2	12/15/2018	Surface	Excavate	15.43	0.43	77	770	1,200	2,047	83
L3	12/15/2018	Surface	Excavate	21.67	0.77	100	1,200	1,100	2,400	<30
L4	12/15/2018	Surface	Excavate	9.83	0.23	51	8,800	7,600	16,451	<30
CS1	1/2/2019	1	in-situ	<0.220	<0.024	<4.9	<9.7	<48	<62.6	<30
CS2	1/2/2019	1	in-situ	<0.215	<0.024	<4.8	<9.3	<47	<61.1	<30
CS3	1/5/2019	1	in-situ	<0.220	<0.024	<4.9	<9.5	<47	<61.4	110
CS4	1/5/2019	1	in-situ	<0.224	<0.025	<5.0	130	87	217	31
CSW1	1/5/2019	0-1	in-situ	<0.210	<0.023	<4.7	<9.4	<47	<61.1	<30
CSW2	1/5/2019	0-1	in-situ	<0.210	<0.023	<4.7	11	<46	11	<30
CSW3	1/5/2019	0-1	in-situ	<0.211	<0.023	<4.6	51	<49	51	<30
CSW4	1/5/2019	0-1	in-situ	<0.213	<0.024	<4.7	430	930	1,360	<30

"--" = Not Analyzed

APPENDIX A
FORM C141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAB1834529793
District RP	2RP-5095
Facility ID	
Application ID	pAB1834529506

Release Notification

Responsible Party

Responsible Party Marathon Oil Permian LLC	OGRID 372098
Contact Name Callie Karrigan	Contact Telephone 575-297-0956
Contact email cnkarrigan@marathonoil.com	Incident # *(assigned by OCD)* NAB1834529793
Contact mailing address 4111 Tidwell Road, Carlsbad New Mexico, 88220	

Location of Release Source

Latitude 32.21024910 Longitude 10417741950
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Black River 15-10 State Com 3H	Site Type Oil and gas drilling facility
Date Release Discovered 11/18/18	API# *(if applicable)* 30-015-43960

Unit Letter	Section	Township	Range	County
O	15	24S	27E	Eddy

Surface Owner: ☑ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☑ Crude Oil	Volume Released (bbls) 0.56	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Operator reported a small fire from the flare at the Black River 15-10 State Com 3X. The heater treater hi leveled, allowing fluids to travel down the flare line and exit the flare. A small fire was observed around the perimeter of the flare and self extinguished.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1834529793
District RP	2RP-5095
Facility ID	
Application ID	pAB1834529506

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Release resulted in a small fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Yes, Maria Pruett, Jim Griswold and Ryan Mann by Callie Karrigan via email 11/18/18 5:50 pm

Initial Response

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

- ☑ The source of the release has been stopped.
- ☑ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☐ All free liquids and recoverable materials have been removed and managed appropriately.

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

There were no recoverable liquids as the liquids ignited upon hitting the ground.

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

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

Printed Name: Callie Karrigan Title: HES Professional

Signature: Callie Karrigan Date: 11/30/18

email: cnkarrigan@marathonoil.com Telephone: 575-297-0956

OCD Only

Received by: Amalia Bustamante Date: 12/11/2018

State of New Mexico
Oil Conservation Division

Incident ID	nAB1834529793
District RP	2RP-5095
Facility ID	
Application ID	pAB1834529506

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?	70 (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.

State of New Mexico
Oil Conservation Division

Incident ID	nAB1834529793
District RP	2RP-5095
Facility ID	
Application ID	pAB1834529506

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: __Callie Karrigan_____ Title: _____HES Professional_____

Signature:_____*Callie Karrigan* _____ Date: ___3/8/2019_____

email: ___cnkarrigan@marathonoil.com_____ Telephone: ___575-297-0956_____

OCD Only

Received by: _____ Date**:** _____

State of New Mexico
Oil Conservation Division

Incident ID	nAB1834529793
District RP	2RP-5095
Facility ID	
Application ID	pAB1834529506

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: _____Callie Karrigan_____ Title: _____HES Professional_____

Signature: *Callie Karrigan*_____ Date: __3/8/2019_____

email: __cnkarrigan@marathonoil.com_____ Telephone: _____575-297-0956_____

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
GROUND WATER DATA

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 Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 01452	C	ED				22	24S	27E	577435	3563175*	925	95	70	25

Average Depth to Water: **70 feet**

Minimum Depth: **70 feet**

Maximum Depth: **70 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 577595.25 **Northing (Y):** 3564086.68 **Radius:** 1610

***UTM location was derived from PLSS - see Help**

APPENDIX C

FIELD NOTES & PHOTO DOCUMENTATION

Field Screening

Location Name: Black River 15 10 State Com #3H

Date: 01-02-2018

Sample Name:	Collection Time:	EC (mS)	Temp (°C)	PID Reading /PF	Soil Color	Primary Soil Type	Moisture Level	Other Remarks/Notes:
CS1	1610			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CS2	1612			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CS3	1614			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CS4	1616			3.6	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CSW 1	1618			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CSW 2	1620			2.7	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CSW 3	1622			12.3	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
CSW 4	1624			49.8	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no HC odor
					Light Dark; Tan Brown; Gray Olive; Yellow Red	Gravel Rock; Sand Silt; Clay	Dry Moist Wet	

Photo Log

Photo Taken January 2, 2019

Facing west

32.21133, -104.17662

Photo Taken January 2, 2019

Facing North

32.21112, -104.176887

APPENDIX D

LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 26, 2018

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Black River 15 10 3H OrderNo.: 1812995

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/18/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L1
Project: Black River 15 10 3H
Collection Date: 12/15/2018 9:10:00 AM
Lab ID: 1812995-001 **Matrix:** SOIL **Received Date:** 12/18/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/21/2018 3:26:52 AM	42247
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	980	97		mg/Kg	10	12/21/2018 1:00:36 PM	42209
Motor Oil Range Organics (MRO)	1600	490		mg/Kg	10	12/21/2018 1:00:36 PM	42209
Surr: DNOP	0	50.6-138	S	%Rec	10	12/21/2018 1:00:36 PM	42209
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	280	47		mg/Kg	10	12/19/2018 9:53:19 PM	42178
Surr: BFB	143	73.8-119	S	%Rec	10	12/19/2018 9:53:19 PM	42178
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	4.5	0.24		mg/Kg	10	12/19/2018 9:53:19 PM	42178
Toluene	36	0.47		mg/Kg	10	12/19/2018 9:53:19 PM	42178
Ethylbenzene	8.3	0.47		mg/Kg	10	12/19/2018 9:53:19 PM	42178
Xylenes, Total	16	0.94		mg/Kg	10	12/19/2018 9:53:19 PM	42178
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	10	12/19/2018 9:53:19 PM	42178

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L2
Project: Black River 15 10 3H
Collection Date: 12/15/2018 9:15:00 AM
Lab ID: 1812995-002 **Matrix:** SOIL
Received Date: 12/18/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	83	30		mg/Kg	20	12/21/2018 4:04:05 AM	42247
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	770	98		mg/Kg	10	12/21/2018 1:44:41 PM	42209
Motor Oil Range Organics (MRO)	1200	490		mg/Kg	10	12/21/2018 1:44:41 PM	42209
Surr: DNOP	0	50.6-138	S	%Rec	10	12/21/2018 1:44:41 PM	42209
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	77	24		mg/Kg	5	12/20/2018 9:04:22 PM	42178
Surr: BFB	144	73.8-119	S	%Rec	5	12/20/2018 9:04:22 PM	42178
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.43	0.12		mg/Kg	5	12/20/2018 9:04:22 PM	42178
Toluene	6.2	0.24		mg/Kg	5	12/20/2018 9:04:22 PM	42178
Ethylbenzene	2.7	0.24		mg/Kg	5	12/20/2018 9:04:22 PM	42178
Xylenes, Total	6.1	0.49		mg/Kg	5	12/20/2018 9:04:22 PM	42178
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	5	12/20/2018 9:04:22 PM	42178

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L3
Project: Black River 15 10 3H
Collection Date: 12/15/2018 9:20:00 AM
Lab ID: 1812995-003 **Matrix:** SOIL **Received Date:** 12/18/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/21/2018 4:41:19 AM	42247
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	1200	94		mg/Kg	10	12/21/2018 2:28:53 PM	42209
Motor Oil Range Organics (MRO)	1100	470		mg/Kg	10	12/21/2018 2:28:53 PM	42209
Surr: DNOP	0	50.6-138	S	%Rec	10	12/21/2018 2:28:53 PM	42209
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	100	48		mg/Kg	10	12/19/2018 11:50:26 PM	42186
Surr: BFB	117	73.8-119		%Rec	10	12/19/2018 11:50:26 PM	42186
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.77	0.24		mg/Kg	10	12/19/2018 11:50:26 PM	42186
Toluene	9.5	0.48		mg/Kg	10	12/19/2018 11:50:26 PM	42186
Ethylbenzene	3.6	0.48		mg/Kg	10	12/19/2018 11:50:26 PM	42186
Xylenes, Total	7.8	0.97		mg/Kg	10	12/19/2018 11:50:26 PM	42186
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	10	12/19/2018 11:50:26 PM	42186

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L4
Project: Black River 15 10 3H
Collection Date: 12/15/2018 9:25:00 AM
Lab ID: 1812995-004 **Matrix:** SOIL **Received Date:** 12/18/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/21/2018 4:53:44 AM	42247
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	8800	97		mg/Kg	10	12/21/2018 11:07:35 AM	42209
Motor Oil Range Organics (MRO)	7600	490		mg/Kg	10	12/21/2018 11:07:35 AM	42209
Surr: DNOP	0	50.6-138	S	%Rec	10	12/21/2018 11:07:35 AM	42209
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	51	9.9		mg/Kg	2	12/20/2018 9:27:49 PM	42186
Surr: BFB	173	73.8-119	S	%Rec	2	12/20/2018 9:27:49 PM	42186
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.23	0.049		mg/Kg	2	12/20/2018 9:27:49 PM	42186
Toluene	3.8	0.099		mg/Kg	2	12/20/2018 9:27:49 PM	42186
Ethylbenzene	1.8	0.099		mg/Kg	2	12/20/2018 9:27:49 PM	42186
Xylenes, Total	4.0	0.20		mg/Kg	2	12/20/2018 9:27:49 PM	42186
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	2	12/20/2018 9:27:49 PM	42186

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812995**

26-Dec-18

Client: Souder, Miller & Associates

Project: Black River 15 10 3H

Sample ID	**MB-42247**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**42247**	RunNo:	**56495**					
Prep Date:	**12/20/2018**	Analysis Date:	**12/21/2018**	SeqNo:	**1890415**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-42247**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**42247**	RunNo:	**56495**					
Prep Date:	**12/20/2018**	Analysis Date:	**12/21/2018**	SeqNo:	**1890416**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812995**

26-Dec-18

Client: Souder, Miller & Associates

Project: Black River 15 10 3H

Sample ID	**MB-42209**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**42209**		RunNo:	**56431**				
Prep Date:	**12/19/2018**	Analysis Date:	**12/20/2018**		SeqNo:	**1890230**	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	50.6	138			

Sample ID	**LCS-42209**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**42209**		RunNo:	**56431**				
Prep Date:	**12/19/2018**	Analysis Date:	**12/20/2018**		SeqNo:	**1890231**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	119	70	130			
Surr: DNOP	5.4		5.000		109	50.6	138			

Sample ID	**LCS-42209**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**42209**		RunNo:	**56431**				
Prep Date:	**12/19/2018**	Analysis Date:	**12/21/2018**		SeqNo:	**1890696**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	10	50.00	0	116	70	130			
Surr: DNOP	5.9		5.000		118	50.6	138			

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812995**

26-Dec-18

Client: Souder, Miller & Associates

Project: Black River 15 10 3H

Sample ID	**MB-42178**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**42178**		RunNo:	**56473**				
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**		SeqNo:	**1888352**	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	950		1000		94.7	73.8	119			

Sample ID	**LCS-42178**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**42178**		RunNo:	**56473**				
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**		SeqNo:	**1888353**	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	97.8	80.1	123			
Surr: BFB	1000		1000		101	73.8	119			

Sample ID	**MB-42186**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**42186**		RunNo:	**56473**				
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**		SeqNo:	**1888375**	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	920		1000		92.0	73.8	119			

Sample ID	**LCS-42186**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**42186**		RunNo:	**56473**				
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**		SeqNo:	**1888376**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.8	80.1	123			
Surr: BFB	1100		1000		107	73.8	119			

Sample ID	**MB-42210**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**42210**		RunNo:	**56489**				
Prep Date:	**12/19/2018**	Analysis Date:	**12/20/2018**		SeqNo:	**1889749**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	880		1000		87.8	73.8	119			

Sample ID	**LCS-42210**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**42210**		RunNo:	**56489**				
Prep Date:	**12/19/2018**	Analysis Date:	**12/20/2018**		SeqNo:	**1889750**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	73.8	119			

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812995**

26-Dec-18

Client: Souder, Miller & Associates

Project: Black River 15 10 3H

Sample ID	**MB-42178**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**42178**	RunNo:	**56473**					
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**	SeqNo:	**1888393**	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	0.98		1.000		98.1	80	120			

Sample ID	**LCS-42178**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**42178**	RunNo:	**56473**					
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**	SeqNo:	**1888394**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.1	80	120			
Toluene	0.98	0.050	1.000	0	98.1	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.7	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.2	80	120			

Sample ID	**MB-42186**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**42186**	RunNo:	**56473**					
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**	SeqNo:	**1888413**	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	0.95		1.000		95.4	80	120			

Sample ID	**LCS-42186**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**42186**	RunNo:	**56473**					
Prep Date:	**12/18/2018**	Analysis Date:	**12/19/2018**	SeqNo:	**1888414**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.6	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	80	120			

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812995**

26-Dec-18

Client: Souder, Miller & Associates

Project: Black River 15 10 3H

Sample ID **1812995-004AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **L4** Batch ID: **42186** RunNo: **56489**

Prep Date: **12/18/2018** Analysis Date: **12/20/2018** SeqNo: **1889776** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.048	0.9579	0.2328	93.7	63.9	127			
Toluene	5.7	0.096	0.9579	3.779	204	69.9	131			S
Ethylbenzene	3.3	0.096	0.9579	1.818	156	71	132			S
Xylenes, Total	7.8	0.19	2.874	3.962	135	71.8	131			S
Surr: 4-Bromofluorobenzene	2.2		1.916		115	80	120			

Sample ID **1812995-004AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **L4** Batch ID: **42186** RunNo: **56489**

Prep Date: **12/18/2018** Analysis Date: **12/20/2018** SeqNo: **1889777** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9833	0.2328	90.9	63.9	127	0.321	20	
Toluene	5.8	0.098	0.9833	3.779	204	69.9	131	0.898	20	S
Ethylbenzene	3.5	0.098	0.9833	1.818	168	71	132	4.58	20	S
Xylenes, Total	8.2	0.20	2.950	3.962	144	71.8	131	4.87	20	S
Surr: 4-Bromofluorobenzene	2.3		1.967		116	80	120	0	0	

Sample ID **MB-42210** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **42210** RunNo: **56489**

Prep Date: **12/19/2018** Analysis Date: **12/20/2018** SeqNo: **1889786** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		91.6	80	120			

Sample ID **LCS-42210** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **42210** RunNo: **56489**

Prep Date: **12/19/2018** Analysis Date: **12/20/2018** SeqNo: **1889787** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **SMA-CARLSBAD** Work Order Number: **1812995** RcptNo: **1**

Received By: **Victoria Zellar** **12/18/2018 8:50:00 AM** Victoria Zellar

Completed By: **Jazzmine Burkhead** **12/18/2018 10:07:26 AM** Jazzmine Burkhead

Reviewed By: DAD 12/18/18

Labeled by: MY 12/18/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
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 ☐	

MY 12/18

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

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

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 Day Turn
☐ Standard ☐ Rush

Project Name: Black River 15-10 3H

Project #:

Project Manager: Austin Weyant

Sampler: C. Parker

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 4.7c

JAG 12/18/18

HEAL No. 1812925

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type		BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/15/18	0910	Soil	L1	4oz		-001	X	X					X			
	0915		L2			-002	X	X					X			
	0920		L3			-003	X	X					X			
	0925		L4			-004	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
		Cash Parker			12/17/18	1400
12/17/18	1900		Victoria Gillan	Courier	12/18/18	850

Remarks: Marathon

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

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

January 11, 2019

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Black River State Com #3H OrderNo.: 1901147

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 8 sample(s) on 1/5/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS 1
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:10:00 PM
Lab ID: 1901147-001 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	30		mg/Kg	20	1/10/2019 1:52:01 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/9/2019 4:17:24 PM	42496
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/9/2019 4:17:24 PM	42496
Surr: DNOP	92.8	50.6-138		%Rec	1	1/9/2019 4:17:24 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2019 11:59:01 AM	42491
Surr: BFB	91.5	73.8-119		%Rec	1	1/9/2019 11:59:01 AM	42491
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	1/9/2019 11:59:01 AM	42491
Toluene	ND	0.049		mg/Kg	1	1/9/2019 11:59:01 AM	42491
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2019 11:59:01 AM	42491
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2019 11:59:01 AM	42491
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	1/9/2019 11:59:01 AM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS 2
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:12:00 PM
Lab ID: 1901147-002 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	30		mg/Kg	20	1/10/2019 2:04:26 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/9/2019 5:23:13 PM	42496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2019 5:23:13 PM	42496
Surr: DNOP	95.1	50.6-138		%Rec	1	1/9/2019 5:23:13 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/9/2019 1:09:46 PM	42491
Surr: BFB	92.0	73.8-119		%Rec	1	1/9/2019 1:09:46 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	1/9/2019 1:09:46 PM	42491
Toluene	ND	0.048		mg/Kg	1	1/9/2019 1:09:46 PM	42491
Ethylbenzene	ND	0.048		mg/Kg	1	1/9/2019 1:09:46 PM	42491
Xylenes, Total	ND	0.095		mg/Kg	1	1/9/2019 1:09:46 PM	42491
Surr: 4-Bromofluorobenzene	93.7	80-120		%Rec	1	1/9/2019 1:09:46 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS 3
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:14:00 PM
Lab ID: 1901147-003 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	110	30		mg/Kg	20	1/10/2019 2:16:50 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/9/2019 5:45:11 PM	42496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2019 5:45:11 PM	42496
Surr: DNOP	90.8	50.6-138		%Rec	1	1/9/2019 5:45:11 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/9/2019 2:20:16 PM	42491
Surr: BFB	88.7	73.8-119		%Rec	1	1/9/2019 2:20:16 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	1/9/2019 2:20:16 PM	42491
Toluene	ND	0.049		mg/Kg	1	1/9/2019 2:20:16 PM	42491
Ethylbenzene	ND	0.049		mg/Kg	1	1/9/2019 2:20:16 PM	42491
Xylenes, Total	ND	0.098		mg/Kg	1	1/9/2019 2:20:16 PM	42491
Surr: 4-Bromofluorobenzene	90.6	80-120		%Rec	1	1/9/2019 2:20:16 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CS 4
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:16:00 PM
Lab ID: 1901147-004 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	31	30		mg/Kg	20	1/10/2019 2:29:15 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	130	9.7		mg/Kg	1	1/9/2019 6:06:59 PM	42496
Motor Oil Range Organics (MRO)	87	49		mg/Kg	1	1/9/2019 6:06:59 PM	42496
Surr: DNOP	97.3	50.6-138		%Rec	1	1/9/2019 6:06:59 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/9/2019 2:43:39 PM	42491
Surr: BFB	89.2	73.8-119		%Rec	1	1/9/2019 2:43:39 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.025		mg/Kg	1	1/9/2019 2:43:39 PM	42491
Toluene	ND	0.050		mg/Kg	1	1/9/2019 2:43:39 PM	42491
Ethylbenzene	ND	0.050		mg/Kg	1	1/9/2019 2:43:39 PM	42491
Xylenes, Total	ND	0.099		mg/Kg	1	1/9/2019 2:43:39 PM	42491
Surr: 4-Bromofluorobenzene	90.6	80-120		%Rec	1	1/9/2019 2:43:39 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW 1
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:18:00 PM
Lab ID: 1901147-005 **Matrix:** SOIL
Received Date: 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	1/10/2019 3:06:28 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/9/2019 6:28:58 PM	42496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2019 6:28:58 PM	42496
Surr: DNOP	90.3	50.6-138		%Rec	1	1/9/2019 6:28:58 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/9/2019 3:07:15 PM	42491
Surr: BFB	91.5	73.8-119		%Rec	1	1/9/2019 3:07:15 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/9/2019 3:07:15 PM	42491
Toluene	ND	0.047		mg/Kg	1	1/9/2019 3:07:15 PM	42491
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2019 3:07:15 PM	42491
Xylenes, Total	ND	0.093		mg/Kg	1	1/9/2019 3:07:15 PM	42491
Surr: 4-Bromofluorobenzene	93.7	80-120		%Rec	1	1/9/2019 3:07:15 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW 2
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:20:00 PM
Lab ID: 1901147-006 **Matrix:** SOIL
Received Date: 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	1/10/2019 3:18:52 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	11	9.3		mg/Kg	1	1/9/2019 6:50:48 PM	42496
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/9/2019 6:50:48 PM	42496
Surr: DNOP	76.9	50.6-138		%Rec	1	1/9/2019 6:50:48 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/9/2019 3:30:43 PM	42491
Surr: BFB	88.5	73.8-119		%Rec	1	1/9/2019 3:30:43 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/9/2019 3:30:43 PM	42491
Toluene	ND	0.047		mg/Kg	1	1/9/2019 3:30:43 PM	42491
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2019 3:30:43 PM	42491
Xylenes, Total	ND	0.093		mg/Kg	1	1/9/2019 3:30:43 PM	42491
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	1/9/2019 3:30:43 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW 3
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:22:00 PM
Lab ID: 1901147-007 **Matrix:** SOIL
Received Date: 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	30		mg/Kg	20	1/10/2019 3:31:16 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	51	9.8		mg/Kg	1	1/9/2019 7:12:34 PM	42496
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2019 7:12:34 PM	42496
Surr: DNOP	83.9	50.6-138		%Rec	1	1/9/2019 7:12:34 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/9/2019 5:27:59 PM	42491
Surr: BFB	90.1	73.8-119		%Rec	1	1/9/2019 5:27:59 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.023		mg/Kg	1	1/9/2019 5:27:59 PM	42491
Toluene	ND	0.046		mg/Kg	1	1/9/2019 5:27:59 PM	42491
Ethylbenzene	ND	0.046		mg/Kg	1	1/9/2019 5:27:59 PM	42491
Xylenes, Total	ND	0.092		mg/Kg	1	1/9/2019 5:27:59 PM	42491
Surr: 4-Bromofluorobenzene	91.5	80-120		%Rec	1	1/9/2019 5:27:59 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: CSW 4
Project: Black River State Com #3H
Collection Date: 1/2/2019 4:24:00 PM
Lab ID: 1901147-008 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CJS**
Chloride	ND	30		mg/Kg	20	1/10/2019 4:08:30 PM	42529
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	430	9.8		mg/Kg	1	1/9/2019 7:34:15 PM	42496
Motor Oil Range Organics (MRO)	930	49		mg/Kg	1	1/9/2019 7:34:15 PM	42496
Surr: DNOP	99.2	50.6-138		%Rec	1	1/9/2019 7:34:15 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/9/2019 5:51:25 PM	42491
Surr: BFB	104	73.8-119		%Rec	1	1/9/2019 5:51:25 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	1/9/2019 5:51:25 PM	42491
Toluene	ND	0.047		mg/Kg	1	1/9/2019 5:51:25 PM	42491
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2019 5:51:25 PM	42491
Xylenes, Total	ND	0.095		mg/Kg	1	1/9/2019 5:51:25 PM	42491
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	1/9/2019 5:51:25 PM	42491

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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901147**

11-Jan-19

Client: Souder, Miller & Associates

Project: Black River State Com #3H

Sample ID	**MB-42529**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**42529**	RunNo:	**56924**					
Prep Date:	**1/10/2019**	Analysis Date:	**1/10/2019**	SeqNo:	**1904618**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-42529**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**42529**	RunNo:	**56924**					
Prep Date:	**1/10/2019**	Analysis Date:	**1/10/2019**	SeqNo:	**1904619**	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.	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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901147**

11-Jan-19

Client: Souder, Miller & Associates

Project: Black River State Com #3H

Sample ID **MB-42496**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **42496**	RunNo: **56853**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1902954** 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	9.7		10.00		96.8	50.6	138			

Sample ID **LCS-42496**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **42496**	RunNo: **56853**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1902975** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	70	130			
Surr: DNOP	4.6		5.000		91.3	50.6	138			

Sample ID **1901147-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **CS 1**	Batch ID: **42496**	RunNo: **56853**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1903208** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.4	47.17	0	92.1	53.5	126			
Surr: DNOP	4.2		4.717		88.1	50.6	138			

Sample ID **1901147-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **CS 1**	Batch ID: **42496**	RunNo: **56853**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1903209** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.56	0	95.1	53.5	126	10.0	21.7	
Surr: DNOP	4.5		5.056		88.8	50.6	138	0	0	

Qualifiers:

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1901147**
11-Jan-19

Client: Souder, Miller & Associates
Project: Black River State Com #3H

Sample ID	**MB-42491**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42491**			RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**			SeqNo: **1903162**		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	980		1000		98.0	73.8	119			

Sample ID	**LCS-42491**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42491**			RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**			SeqNo: **1903163**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80.1	123			
Surr: BFB	1100		1000		110	73.8	119			

Sample ID	**1901147-001AMS**	SampType: **MS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**CS 1**	Batch ID: **42491**			RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**			SeqNo: **1903165**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.63	0	110	77.8	128			
Surr: BFB	1000		985.2		105	73.8	119			

Sample ID	**1901147-001AMSD**	SampType: **MSD**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**CS 1**	Batch ID: **42491**			RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**			SeqNo: **1903166**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.8	24.22	0	110	77.8	128	1.44	20	
Surr: BFB	1000		969.0		108	73.8	119	0	0	

Sample ID	**MB-42518**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42518**			RunNo: **56885**					
Prep Date:	**1/9/2019**	Analysis Date: **1/10/2019**			SeqNo: **1904141**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.3	73.8	119			

Sample ID	**LCS-42518**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42518**			RunNo: **56885**					
Prep Date:	**1/9/2019**	Analysis Date: **1/10/2019**			SeqNo: **1904142**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	73.8	119			

Qualifiers:

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901147**

11-Jan-19

Client: Souder, Miller & Associates

Project: Black River State Com #3H

Sample ID	**MB-42514**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**42514**		RunNo:	**56885**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904148**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.1	73.8	119			

Sample ID	**LCS-42514**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**42514**		RunNo:	**56885**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904149**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	73.8	119			

Qualifiers:

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QC SUMMARY REPORT

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WO#: **1901147**

11-Jan-19

Client: Souder, Miller & Associates

Project: Black River State Com #3H

Sample ID	**MB-42491**	SampType: **MBLK**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **42491**		RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**		SeqNo: **1903187**		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		99.9	80	120			

Sample ID	**LCS-42491**	SampType: **LCS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **42491**		RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**		SeqNo: **1903188**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.96	0.050	1.000	0	96.2	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	**1901147-002AMS**	SampType: **MS**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**CS 2**	Batch ID: **42491**		RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**		SeqNo: **1903191**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9560	0	94.8	63.9	127			
Toluene	0.95	0.048	0.9560	0.01018	98.8	69.9	131			
Ethylbenzene	0.96	0.048	0.9560	0	101	71	132			
Xylenes, Total	2.9	0.096	2.868	0.02740	101	71.8	131			
Surr: 4-Bromofluorobenzene	0.88		0.9560		92.0	80	120			

Sample ID	**1901147-002AMSD**	SampType: **MSD**		TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**CS 2**	Batch ID: **42491**		RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**		SeqNo: **1903192**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9524	0	90.6	63.9	127	4.91	20	
Toluene	0.92	0.048	0.9524	0.01018	95.7	69.9	131	3.48	20	
Ethylbenzene	0.93	0.048	0.9524	0	98.2	71	132	2.74	20	
Xylenes, Total	2.8	0.095	2.857	0.02740	98.4	71.8	131	2.81	20	
Surr: 4-Bromofluorobenzene	0.90		0.9524		94.8	80	120	0	0	

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901147**

11-Jan-19

Client: Souder, Miller & Associates

Project: Black River State Com #3H

Sample ID	**MB-42518**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**PBS**	Batch ID:	**42518**		RunNo:	**56885**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904170**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			

Sample ID	**LCS-42518**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**LCSS**	Batch ID:	**42518**		RunNo:	**56885**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904171**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	**MB-42514**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**PBS**	Batch ID:	**42514**		RunNo:	**56885**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904177**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		95.8	80	120			

Sample ID	**LCS-42514**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**LCSS**	Batch ID:	**42514**		RunNo:	**56885**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904178**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		96.0	80	120			

Qualifiers:

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **SMA-CARLSBAD** Work Order Number: **1901147** RcptNo: **1**

Received By: **Anne Thorne** **1/5/2019 11:50:00 AM**

Completed By: **Erin Melendrez** **1/7/2019 9:23:10 AM**

Reviewed By: VVZ 1/7/19
LB; DAD 1/7/19

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
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: DAD 1/7/19

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	1.9	Good	Yes			

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☑ Rush 5 day

Project Name: Black River State Com #3H

Project #:

Project Manager: Austin Weyant

Sampler: Lynn A. Acosta

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 2.3-CF-0.4=1.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1901147	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/2/18	1610	Soil	CS1	4oz		-001	X	X					X			
1/2/18	1612		CS2			-002	X	X					X			
1/2/18	1614		CS3			-003	X	X					X			
1/2/18	1616		CS4			-004	X	X					X			
1/2/18	1618		CSW1			-005	X	X					X			
1/2/18	1620		CSW2			-006	X	X					X			
1/2/18	1622		CSW3			-007	X	X					X			
1/2/18	1624	↓	CSW4	↓		-008	X	X					X			
DAD 1/7/19																

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1.3.19	8:05	Samantha Watson			1/4/19	1400
1/4/19	1900				01/05/19	1150

Remarks: Maratnon Oil

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