February 4, 2019

#5E27499-BG20

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

SUBJECT: Remediation Plan for the Black River 15 10 State Com X 4H Release (2RP-5064), Malaga, New Mexico

Dear Mr. Bratcher:

On behalf of Marathon Oil Permian LLC (Marathon), Souder, Miller & Associates (SMA) has prepared this Remediation Plan that describes the delineation and proposed remediation for a release of liquids related to oil and gas production activities at the Black River 15 10 State Com X 4H site. The site is in Unit A, Section 22, 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 information regarding the release.

Table 1: Release Information and Closure Criteria			
Name	Black River 15 10 State Com X 4H	Company	Marathon Oil Permian LLC
API Number	30-015-43959	Location	32.210579, -104.170769
Incident Number	2RP-5064		
Estimated Date of Release	11/5/2018	Date Reported to NMOCD	11/5/2018
Land Owner	State	Reported To	NMOCD, NMSLO
Source of Release	Separator		
Released Volume	149 bbls	Released Material	Crude oil
Recovered Volume	140 bbls	Net Release	9 bbls
NMOCD Closure Criteria	51-100 feet to groundwater		
SMA Response Dates	11/5/2018 and 1/4/2019		

1.0 Background

On November 5, 2018, a release was discovered at the Black River 15 10 State Com X 4H site due to gasket failure on the separator. A majority of the impacted area was within the lined containment. There was also a light overspray across the pad, and an area of runoff to the east side of the pad that followed a Lucid pipeline ROW. Initial response activities were conducted by Marathon, and included vacuum truck and backhoe activities, which recovered approximately 140 barrels of fluid and approximately 12 cubic yards of contaminated soil, which were hauled to and disposed of at Lea Lands in Hobbs, NM. Figures 1 and 2 illustrate the vicinity and site location, Figure 3 illustrate 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 X 4H is located approximately 6 miles west of Malaga, New Mexico on State land at an elevation of approximately 3230 feet above mean sea level (amsl).

Based upon NMOSE (Appendix B), depth to groundwater in the area is estimated to be 60 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 1/8/2019). The nearest significant watercourse is an unnamed drainage feature, located approximately one mile to the north. Figure 2 illustrates the site with 1000-foot radius 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 groundwater depth of between 51-100 feet bgs. Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

3.0 Release Characterization Activities and Findings

On November 5, 2018, SMA personnel arrived on site in response to the release associated with the Black River 15 10 State Com X 4H. 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.

On January 4, 2019, SMA personnel returned to the site to provide further vertical delineation. A total of twelve sample locations (L1-L12) were investigated using excavated test pits, to depths up to 2 feet bgs. A total of 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. Locations for all samples are depicted on Figure 3.

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 Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Appendix D).

As summarized in Table 3 and demonstrated in Figure 3, results indicate that an area approximately 135 feet by 55 feet by 1 foot deep has been impacted.

4.0 Proposed Soil Remediation Work Plan

SMA proposes excavation and removal of contaminated soil. Initial sampling on the pad, represented by samples L7-L11, demonstrate that surface scraping performed within 24 hours of the event adequately

remediated that overspray area. Impacted areas within the lined containment have been pressure washed and will be inspected and photo documented. The impacted area to the west of the location in the areas of L1, L2, L3, and L4 will be excavated to approximately 1 to 2 feet bgs. The visually impacted area south the excavated area, along the Lucid ROW, will be surface-scraped to six inches bgs. SMA will guide the excavation by collecting composite soil samples for field screening for chloride using an EC meter.

The release area will be excavated to the NMOCD Closure Criteria as demonstrated in the attached Table 2.

SMA proposes to collect confirmation sampling at each sample location within the excavation area (L1-L6, L12) as well as an additional nine sidewall samples as laid out in Figure 3. All samples will be analyzed for chlorides using EPA Method 300.0 and MRO, DRO, and GRO by EPA Method 8015D. Samples L1, L3, L6, SW1, SW3 and SW9 will be analyzed for BTEX using EPA Method 8021B. The confirmation samples will be collected from within the excavation in accordance with the sampling protocol included in Appendix C.

Approximately 900 cubic yards of contaminated soil is projected to be removed and replaced with clean backfill material in order to return the surface to previous contours. The contaminated soil will be transported for disposal at R360 near Hobbs, NM, an NMOCD permitted disposal facility. Upon approval by NMOCD, the projected timeline for completion of remediation activities is approximately 180 days.

5.0 Scope and Limitations

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

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

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:

Heather Patterson
Project Scientist

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

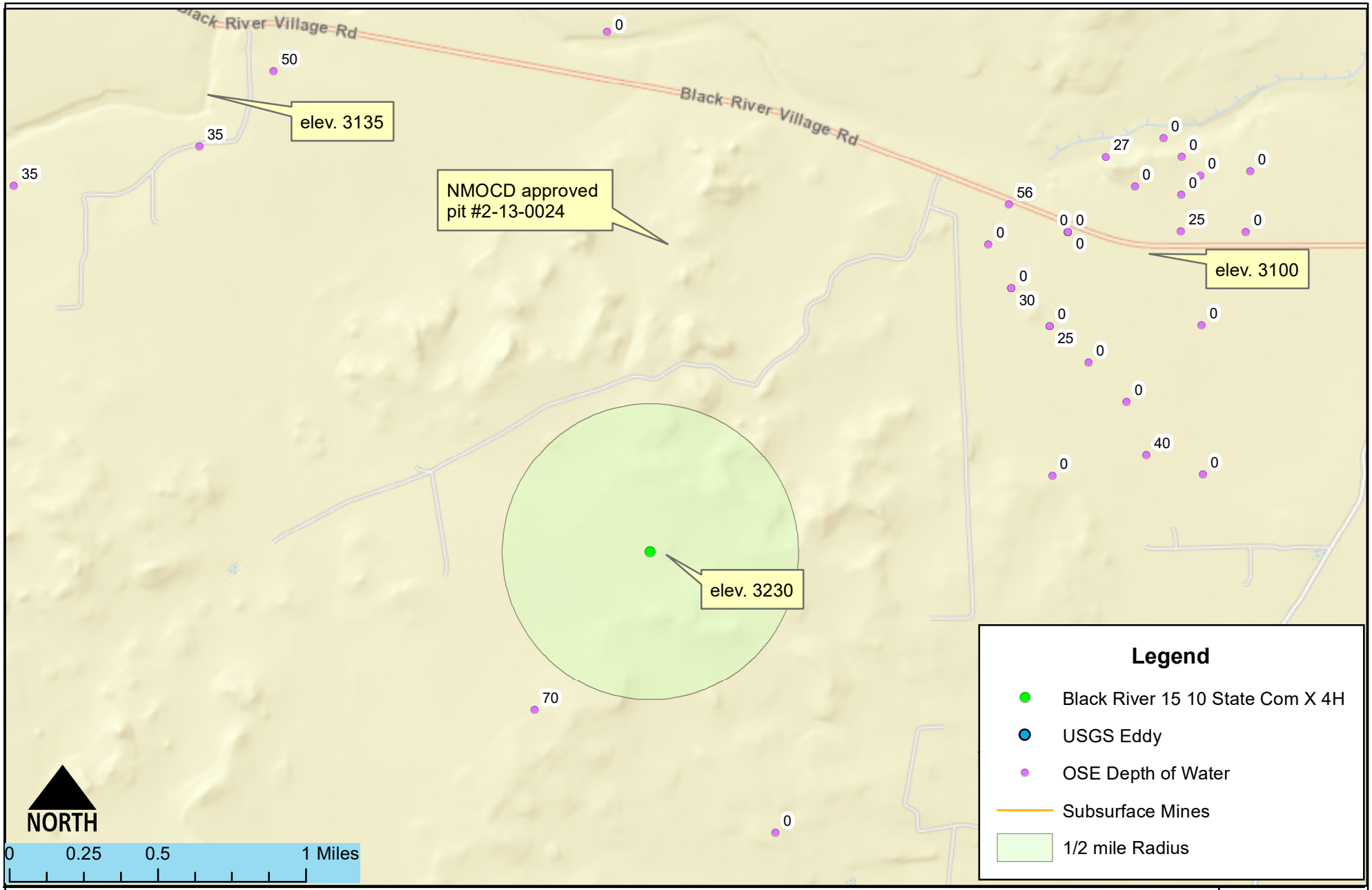
Tables:

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

Appendices:

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

FIGURES



Vicinity and Well Head Protection Map
Black River 15 10 State Com X 4H - Marathon Oil
S 15-T24S-R27E, New Mexico

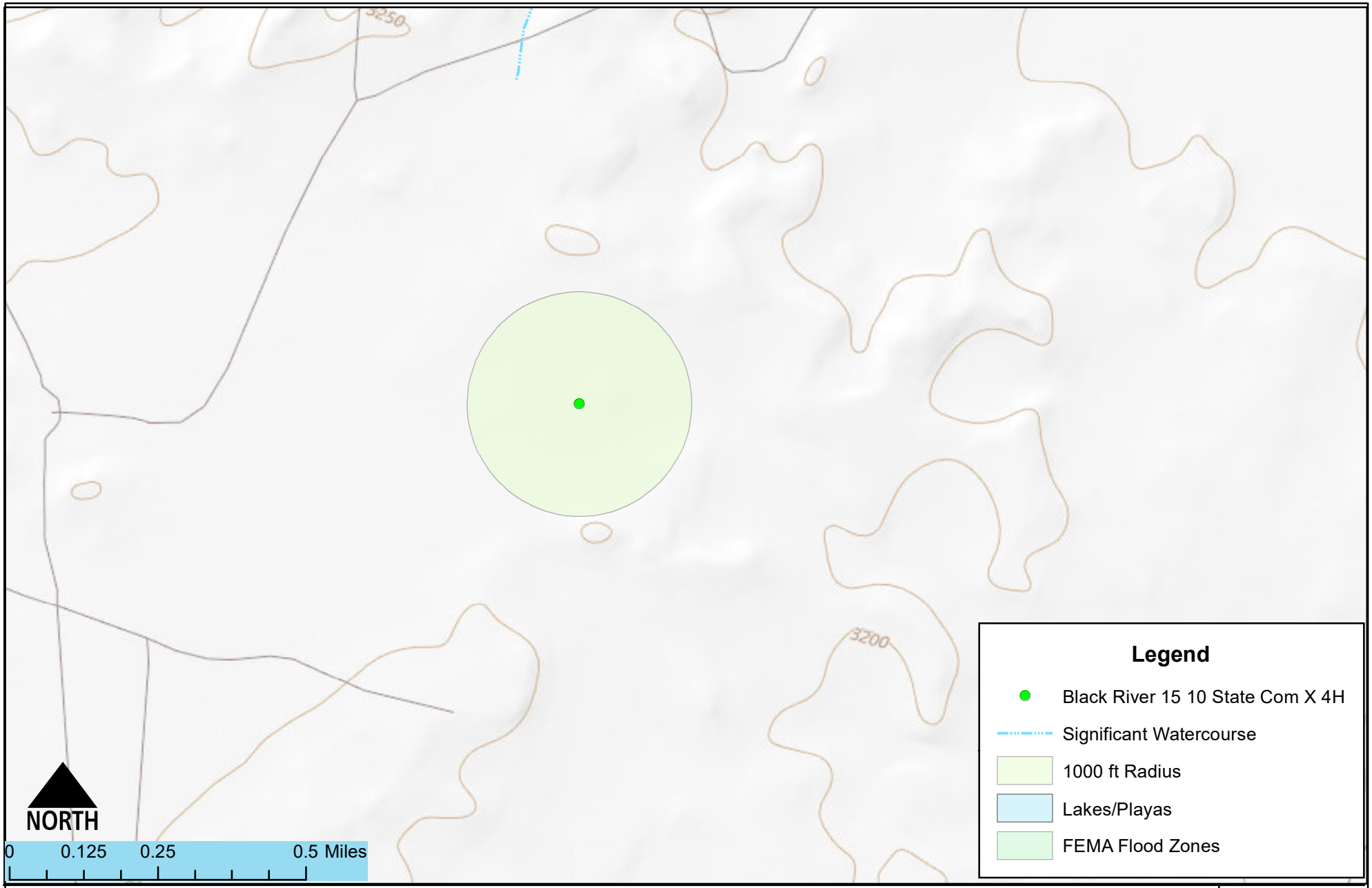
Figure 1

Date Saved: 11/8/2018

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

Drawn Ashley Maxwell
Checked
Approved

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



Surface Water Radius Map
Black River 15 10 State Com X 4H - Marathon Oil
S 15-T24S-R27E, New Mexico

Figure 2

Date Saved: 11/8/2018

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

Drawn Heather Patterson
Checked
Approved

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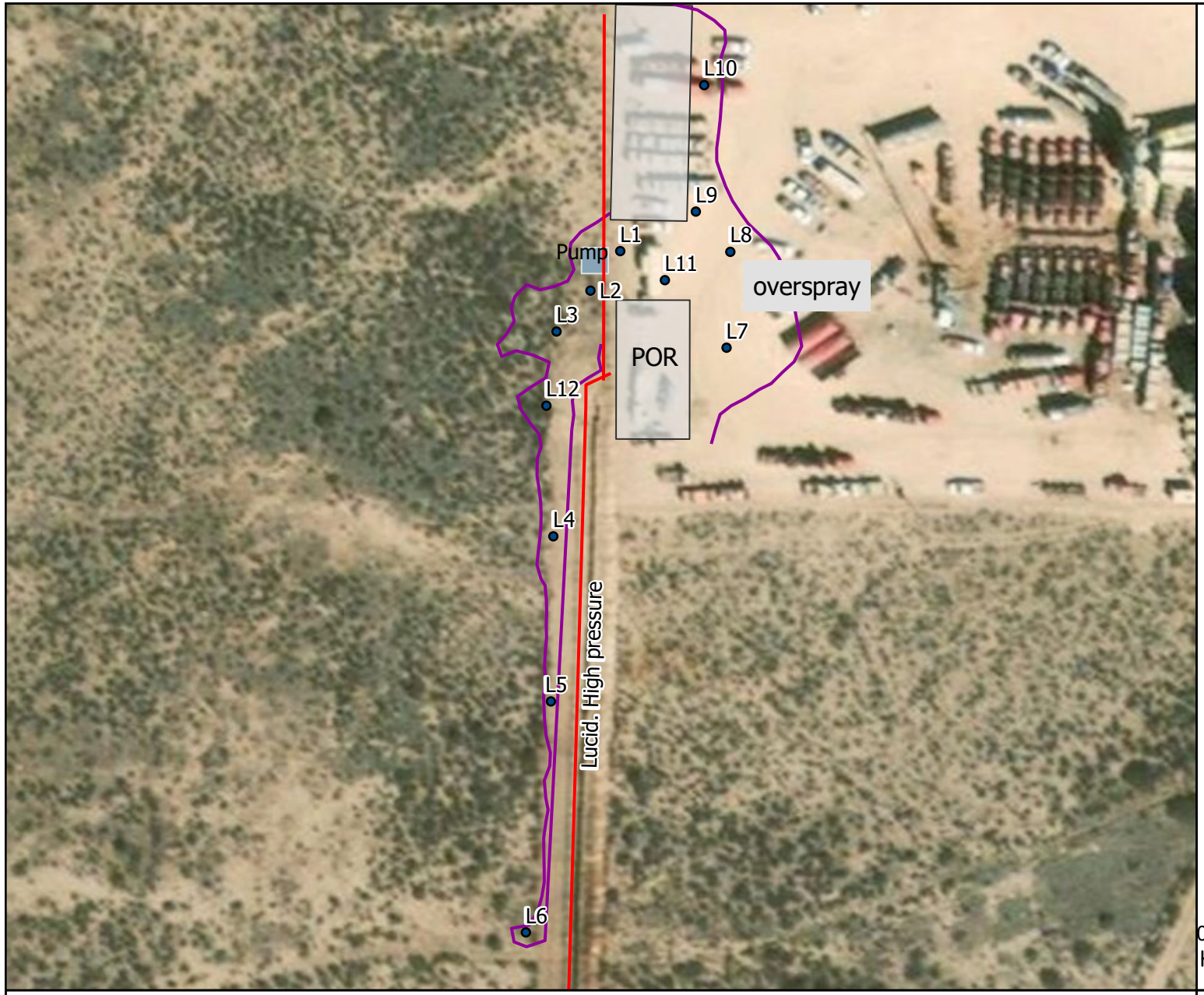

Legend

- Sample Locations
- Pipelines
- Spill Area
- Lined Containment

N

0 48.5 97 194 Feet

Site and Sample location Map
State AA #1- Marathon
Sec 35 T21S R34E, NM

Figure 3a

\\CBO10\Projects\5-Marathon MSA 2019 (5E27950)\GIS\ARCGIS\MARATHON_MIT.aprx

Date Saved: 2/7/2019

Revisions

By:_____ Date:_____ Descr:_____

By:_____ Date:_____ Descr:_____

Drawn *Heather Patterson*
Date 2/7/2019
Checked
Approved

SMA

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Carlsbad, New Mexico 88221
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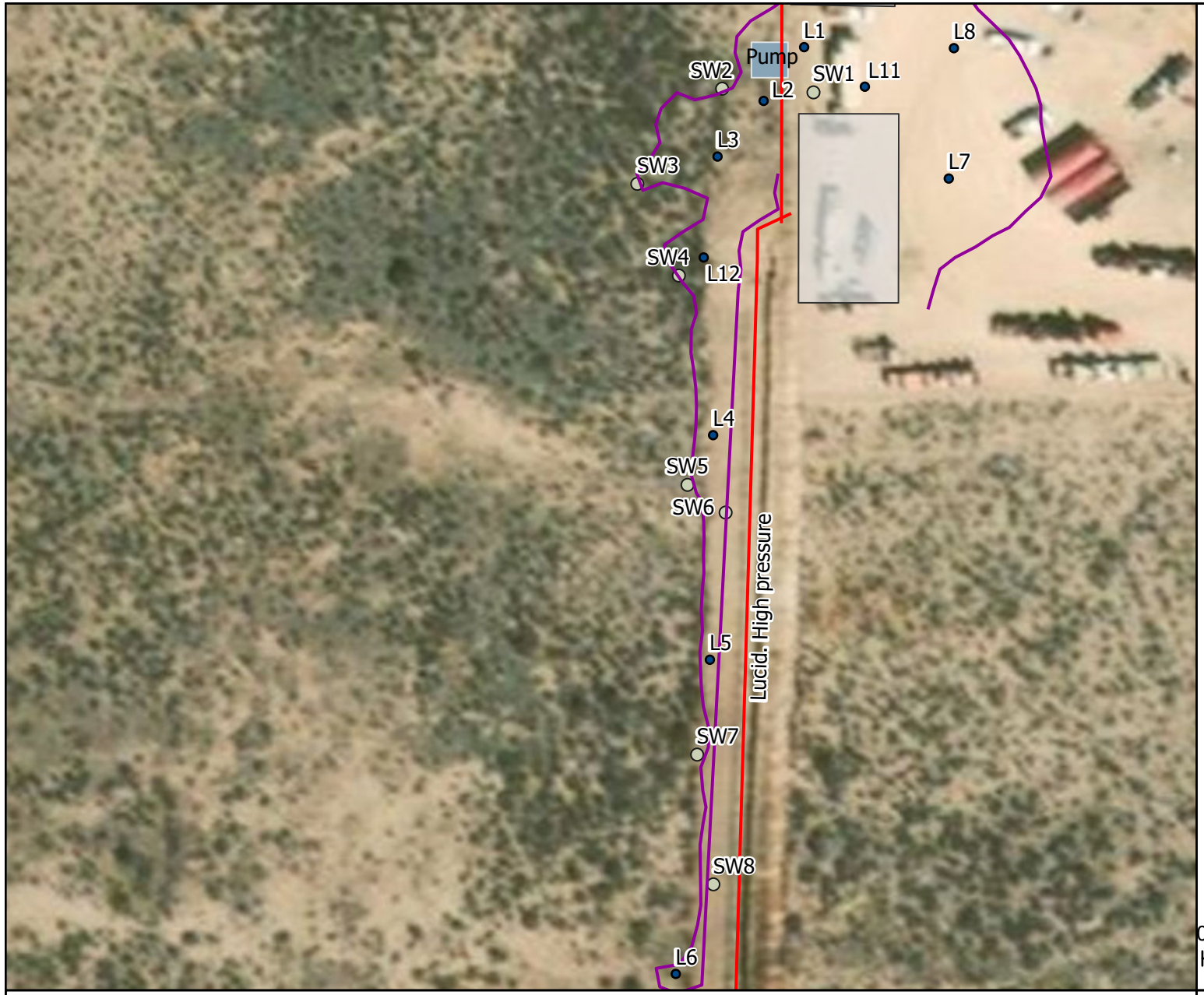

Site and Sample location Map/Proposed Closure Samples
State AA #1- Marathon
Sec 35 T21S R34E, NM

Figure 3b

\\CBO10\Projects\5-Marathon MSA 2019 (5E27950)\GIS\ARCGIS\MARATHON_MIT.aprx

Date Saved: 2/7/2019

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

Drawn Heather Patterson
Date 2/7/2019
Checked
Approved

SMA
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Carlsbad, New Mexico 88221
(575) 689-7040
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TABLES

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	60	NMOSE
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	N/A	NMOSE, USGS Topo Map
Hortizontal Distance to Nearest Significant Watercourse (miles)	1	figure 2, 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'	x	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					
<300' from an occupied permanent residence, school, hospital, institution or church?	no					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	no					
<100' from wetland?	no					
within area overlying a subsurface mine	no					
within an unstable area?	no					
within a 100-year floodplain?	no					

Table 3: Marathon

Summary of Sample Results Black River 15 10 State Com X 4H(2RP-5064)

Sample ID	Sample Date	Depth (feet bgs)	Proposed Action/ 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	1000			2500	600*/10000
L1	11/5/2018	0.5	excavate	14.55	<0.024	360	17000	7900	25260	360
	1/4/2019	1	in-situ	--	--	<4.9	<9.5	<48	<63	--
	1/4/2019	2	in-situ	--	--	<5.0	24	<48	24	--
L2	11/5/2018	0.5	in-situ	<0.23	<0.024	<4.8	<10	<50	<65	300
L3	11/5/2018	0.5	excavate	<0.23	<0.12	360	17000	7800	25160	470
	1/4/2019	2	in-situ	--	--	<4.7	<9.9	<49	<64	--
L4	11/6/2018	0.5	excavate	<0.23	<0.023	<4.7	<9.8	<49	<64	1000
	1/4/2019	1	in-situ	--	--	--	--	--	--	100
L5	11/6/2018	0.5	in-situ	<0.23	<0.024	<4.9	<9.7	<49	<64	270
L6	11/6/2018	0.5	in-situ	<0.23	<0.024	<4.9	<9.9	<50	<65	310
L7	11/6/2018	0.5	in-situ	<0.23	<0.024	<4.8	190	97	287	250
L8	11/6/2018	0.5	in-situ	<0.23	<0.024	<4.8	130	98	228	240
L9	11/6/2018	0.5	in-situ	<0.23	<0.023	<4.6	27	<49	27	87
L10	11/6/2018	0.5	in-situ	<0.23	<0.024	<4.8	<9.9	<49	<64	<30
L11	11/6/2018	0.5	in-situ	<0.23	<0.024	<4.8	21	<48	21	170
L12	1/4/2019	0.5	in-situ	--	--	<4.8	<9.4	<47	<62	210
	1/4/2019	1	in-situ	--	--	<4.7	<9.7	<49	<64	--

"--" = Not Analyzed

* = per Reclamation Standard (19.15.29.13.D(1) NMAC)

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	NAB1832755462
District RP	2RP-5064
Facility ID	
Application ID	pAB1832755014

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)* NAB1832755462
Contact mailing address 4111 Tidwell Road, Carlsbad New Mexico, 88220	

Location of Release Source

Latitude 32.210579 Longitude -104.170769
(NAD 83 in decimal degrees to 5 decimal places)

Site Name BLACK RIVER 15 10 STATE COM X 4H	Site Type Oil and gas drilling facility
Date Release Discovered 11/5/18	API# *(if applicable)* 30-015-43959

Unit Letter	Section	Township	Range	County
A	22	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) 149	Volume Recovered (bbls) 140
☐ 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

At approximately 2:30 am 11/5/18, a 3rd party hauler reported an overspray from the facility. Upon immediate inspection by the Field Operator, it was found that the high pressure separator manway gasket failed. Approximately 149 barrels was released, with 23 barrels traveling offsite affecting a 0.23 acre area.

State of New Mexico
Oil Conservation Division

Incident ID	NAB1832755462
District RP	2RP-5064
Facility ID	
Application ID	pAB1832755014

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? The release exceeded 25 bbls.

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

Maria Pruett, Jim Griswold and Ryan Mann via email on 11/5/18 5:57 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:

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: 11/19/18

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

OCD Only

Received by: Amelia Barrameda Date: 11/23/2018

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 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
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 the Black River 15 10 State Com X 4H Location. 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 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.

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 currier 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.

Marathon — SMA — **Field Screening** — 1 of 3 — HHP

Location Name: Black River 4H — **Date:** 10/26/18 — 11/5/18 – 11/6/18

Sample Name:	Collection Time:	EC (mS)	Temp (°C)	PID Reading /PF	Soil Color	Primary Soil Type	Moisture Level	Other Remarks/Notes:
L1 -6"	11/5/18 2:18	0.33	20.5		Light Dark / Tan **Brown** / Gray Olive / Yellow Red	Gravel Rock / Sand **Silt** / Clay	Dry **Moist** Wet	
L2 -6"	2:24	0.56	18.7		Light **Dark** / Tan **Brown** / Gray Olive / Yellow Red	Gravel Rock / Sand **Silt** / Clay	Dry **Moist** Wet	slight color
L3 -6"	2:35	0.46	18.9		Light Dark / Tan Brown / Gray Olive / Yellow Red	Gravel Rock / Sand Silt / Clay	Dry Moist Wet	
L4 -6"	11/6/18 9:03				Light Dark / Tan Brown / Gray Olive / Yellow Red	Gravel Rock / Sand Silt / Clay	Dry Moist Wet	
L5 -6"	9:20				Light Dark / Tan Brown / Gray Olive / Yellow Red	Gravel Rock / Sand Silt / Clay	Dry Moist Wet	
L6	9:24				Light Dark / Tan Brown / Gray Olive / Yellow Red	Gravel Rock / Sand Silt / Clay	Dry Moist Wet	
L7 6"	10:35	0.31	17.9°		**Light** Dark / Tan **Brown** / Gray **Olive** / Yellow Red	**Gravel** Rock / **Sand** **Silt** / Clay	Dry **Moist** Wet	
L7-1	10:40	0.14	18.3°		Light Dark / Tan Brown / Gray Olive / Yellow Red	Gravel Rock / Sand Silt / Clay	Dry **Moist** Wet	
L7-2	10:48	0.11	19.5°		**Light** Dark / **Tan** Brown / **Gray** Olive / Yellow Red	Gravel Rock / Sand Silt / Clay	**Dry** Moist Wet	

SMA **Field Screening** Marathon HAG

Location Name: Black River 4H

Date: 11/6/18 2 of 3

Sample Name:	Collection Time:	EC (mS)	Temp (°C)	PID Reading /PF	Soil Color	Primary Soil Type	Moisture Level	Other Remarks/Notes:
L8-6"	10:52	0.25	19.6°		Light / Dark / ~~Tan~~ / Brown / Gray / ~~Olive~~ / Yellow / Red (circled: Light, Brown)	Gravel / Rock / Sand / Silt / Clay (circled: Silt)	Dry / Moist / Wet (circled: Moist)	
L8-1 /rock	11:04	0.17	18.2°		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red (circled: Light, Tan)	Gravel / Rock / Sand / Silt / Clay (circled: Sand, Silt)	Dry / Moist / Wet (circled: Moist)	
L8-2	11:10	0.07	18.1°		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red	Gravel / Rock / Sand / Silt / Clay (circled: Rock)	Dry / Moist / Wet (circled: Dry)	Caliche
L9-6"	11:16	0.16	17.8°		Light / Dark / Tan / Brown / Gray / ~~Olive~~ / Yellow / Red (circled: Light, Brown)	Gravel / Rock / Sand / Silt / Clay (circled: Silt)	Dry / Moist / Wet (circled: Moist)	Cobbles
L9-1	11:23	0.20	17.8°		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red	Gravel / Rock / Sand / Silt / Clay	Dry / Moist / Wet	
L9-2	11:34	0.13	17.9°		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red	Gravel / Rock / Sand / Silt / Clay	Dry / Moist / Wet	
L10-6"	11:48	0.10	17.7°		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red	Gravel / Rock / Sand / Silt / Clay	Dry / Moist / Wet	
L10-1	11:63	0.09	18.3°		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red	Gravel / Rock / Sand / Silt / Clay	Dry / Moist / Wet	
L10-2	11:59	0.11	17.8		Light / Dark / Tan / Brown / Gray / Olive / Yellow / Red	Gravel / Rock / Sand / Silt / Clay	Dry / Moist / Wet	

Field Screening

11/6/18

Location Name: Black River 4#

Date: Pg 3 of 3

Sample Name:	Collection Time:	EC (mS)	Temp (°C)	PID Reading /PF	Soil Color	Primary Soil Type	Moisture Level	Other Remarks/Notes:
C11- 6"	12:45	0.29	19.7°		Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
C1# -1	12:53	0.25	18.9°		Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
C11 -2	12:59	0.16	21.0		Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	

Field Screening

Location Name: Black River State com #4H

Date: 01/04/2018

Sample Name:	Collection Time:	EC (mS)	Temp (°C)	PID Reading /PF	Soil Color	Primary Soil Type	Moisture Level	Other Remarks/Notes:
L12-0.5	1005	—	—	0.8	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	Dry ~~Moist~~ Wet	no Hydrocarbon odor
L3-0.5	1008			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; Sand Silt; Clay	~~Dry~~ Moist Wet	no hydrocarbon odor
10 Feet away L1-0.5	1010			0.0	~~Light~~ Dark; Tan Brown; Gray Olive; Yellow Red	Gravel ~~Rock~~; ~~Sand~~ Silt; Clay Caliche	~~Dry~~ Moist Wet	no hydrocarbon odor
L12-1	1121			1.1	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	~~Dry~~ ~~Moist~~ Wet	no hydrocarbon odor
L3-1	1122			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	Dry ~~Moist~~ Wet	no hydrocarbon odor
10 feet away L1-1	1124			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	Dry ~~Moist~~ Wet	no hydrocarbon odor
L12-2	1131			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	Dry ~~Moist~~ Wet	no hydrocarbon odor
L3-2	1133			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	Dry ~~Moist~~ Wet	no hydrocarbon odor
10 feet away L1-2	1134			0.0	Light Dark; Tan ~~Brown~~; Gray Olive; Yellow Red	Gravel Rock; ~~Sand~~ Silt; Clay	~~Dry~~ Moist Wet	no hydrocarbon odor

ASMA Field Screening

Location Name: Black River State Com # 4H

Date: 01/04/2018

Sample Name:	Collection Time:	EC (mS)	Temp (°C)	PID Reading /PF	Soil Color	Primary Soil Type	Moisture Level	Other Remarks/Notes:
Hand dig: 5 feet away L1-1	1202			3.7	Light Dark Tan ~~Brown~~ Gray Olive Yellow Red	Gravel Rock <u>Sand</u> Silt Clay	Dry ~~Moist~~ Wet	no hydrcarbon odor
Hand dig: 5 feet away L1-2	1203			1.6	Light Dark Tan <u>Brown</u> Gray Olive Yellow Red	Gravel Rock ~~Sand~~ Silt Clay	~~Dry~~ Moist Wet	no hydrocarbon odor
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	
					Light Dark Tan Brown Gray Olive Yellow Red	Gravel Rock Sand Silt Clay	Dry Moist Wet	

APPENDIX D

LABORATORY ANALYTICAL REPORTS

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

November 12, 2018

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

RE: Black River 4H OrderNo.: 1811331

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 11 sample(s) on 11/7/2018 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

Analytical Report
Lab Order **1811331**
Date Reported: **11/12/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L1
Project: Black River 4H
Collection Date: 11/5/2018 2:18:00 AM
Lab ID: 1811331-001 **Matrix:** SOIL **Received Date:** 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	360	30		mg/Kg	20	11/9/2018 12:24:21 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	17000	970		mg/Kg	100	11/9/2018 11:15:17 AM	41421
Motor Oil Range Organics (MRO)	7900	4900		mg/Kg	100	11/9/2018 11:15:17 AM	41421
Surr: DNOP	0	50.6-138	S	%Rec	100	11/9/2018 11:15:17 AM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	360	4.8		mg/Kg	1	11/8/2018 10:50:53 AM	41412
Surr: BFB	1740	73.8-119	S	%Rec	1	11/8/2018 10:50:53 AM	41412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/8/2018 10:50:53 AM	41412
Toluene	1.6	0.048		mg/Kg	1	11/8/2018 10:50:53 AM	41412
Ethylbenzene	0.95	0.048		mg/Kg	1	11/8/2018 10:50:53 AM	41412
Xylenes, Total	12	0.095		mg/Kg	1	11/8/2018 10:50:53 AM	41412
Surr: 4-Bromofluorobenzene	331	80-120	S	%Rec	1	11/8/2018 10:50:53 AM	41412

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 4H
Collection Date: 11/5/2018 2:24:00 AM
Lab ID: 1811331-002
Matrix: SOIL
Received Date: 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	300	30		mg/Kg	20	11/9/2018 12:36:46 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/9/2018 11:59:14 AM	41421
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/9/2018 11:59:14 AM	41421
Surr: DNOP	94.9	50.6-138		%Rec	1	11/9/2018 11:59:14 AM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/8/2018 12:48:36 PM	41412
Surr: BFB	97.2	73.8-119		%Rec	1	11/8/2018 12:48:36 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/8/2018 12:48:36 PM	41412
Toluene	ND	0.048		mg/Kg	1	11/8/2018 12:48:36 PM	41412
Ethylbenzene	ND	0.048		mg/Kg	1	11/8/2018 12:48:36 PM	41412
Xylenes, Total	ND	0.096		mg/Kg	1	11/8/2018 12:48:36 PM	41412
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	11/8/2018 12:48:36 PM	41412

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 4H
Collection Date: 11/5/2018 2:35:00 AM
Lab ID: 1811331-003 **Matrix:** SOIL
Received Date: 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	470	30		mg/Kg	20	11/9/2018 1:38:49 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	17000	970		mg/Kg	100	11/9/2018 1:45:24 PM	41421
Motor Oil Range Organics (MRO)	7800	4900		mg/Kg	100	11/9/2018 1:45:24 PM	41421
Surr: DNOP	0	50.6-138	S	%Rec	100	11/9/2018 1:45:24 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	360	24		mg/Kg	5	11/8/2018 9:57:43 AM	41412
Surr: BFB	816	73.8-119	S	%Rec	5	11/8/2018 9:57:43 AM	41412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.12		mg/Kg	5	11/8/2018 9:57:43 AM	41412
Toluene	ND	0.24		mg/Kg	5	11/8/2018 9:57:43 AM	41412
Ethylbenzene	ND	0.24		mg/Kg	5	11/8/2018 9:57:43 AM	41412
Xylenes, Total	ND	0.49		mg/Kg	5	11/8/2018 9:57:43 AM	41412
Surr: 4-Bromofluorobenzene	122	80-120	S	%Rec	5	11/8/2018 9:57:43 AM	41412

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 4H
Collection Date: 11/6/2018 9:03:00 AM
Lab ID: 1811331-004 **Matrix:** SOIL **Received Date:** 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	1000	30		mg/Kg	20	11/9/2018 1:51:13 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	11/9/2018 2:07:26 PM	41421
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/9/2018 2:07:26 PM	41421
Surr: DNOP	91.4	50.6-138		%Rec	1	11/9/2018 2:07:26 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/8/2018 1:58:44 PM	41412
Surr: BFB	90.4	73.8-119		%Rec	1	11/8/2018 1:58:44 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.023		mg/Kg	1	11/8/2018 1:58:44 PM	41412
Toluene	ND	0.047		mg/Kg	1	11/8/2018 1:58:44 PM	41412
Ethylbenzene	ND	0.047		mg/Kg	1	11/8/2018 1:58:44 PM	41412
Xylenes, Total	ND	0.094		mg/Kg	1	11/8/2018 1:58:44 PM	41412
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	11/8/2018 1:58:44 PM	41412

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: L5
Project: Black River 4H
Collection Date: 11/6/2018 9:20:00 AM
Lab ID: 1811331-005 **Matrix:** SOIL
Received Date: 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	270	30		mg/Kg	20	11/9/2018 2:03:37 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/9/2018 2:29:33 PM	41421
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/9/2018 2:29:33 PM	41421
Surr: DNOP	94.2	50.6-138		%Rec	1	11/9/2018 2:29:33 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/8/2018 2:22:00 PM	41412
Surr: BFB	91.9	73.8-119		%Rec	1	11/8/2018 2:22:00 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/8/2018 2:22:00 PM	41412
Toluene	ND	0.049		mg/Kg	1	11/8/2018 2:22:00 PM	41412
Ethylbenzene	ND	0.049		mg/Kg	1	11/8/2018 2:22:00 PM	41412
Xylenes, Total	ND	0.098		mg/Kg	1	11/8/2018 2:22:00 PM	41412
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	11/8/2018 2:22:00 PM	41412

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: L6
Project: Black River 4H
Collection Date: 11/6/2018 9:24:00 AM
Lab ID: 1811331-006 **Matrix:** SOIL **Received Date:** 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	310	30		mg/Kg	20	11/9/2018 2:16:02 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/9/2018 3:13:39 PM	41421
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/9/2018 3:13:39 PM	41421
Surr: DNOP	95.3	50.6-138		%Rec	1	11/9/2018 3:13:39 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/8/2018 2:45:22 PM	41412
Surr: BFB	92.4	73.8-119		%Rec	1	11/8/2018 2:45:22 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	11/8/2018 2:45:22 PM	41412
Toluene	ND	0.049		mg/Kg	1	11/8/2018 2:45:22 PM	41412
Ethylbenzene	ND	0.049		mg/Kg	1	11/8/2018 2:45:22 PM	41412
Xylenes, Total	ND	0.097		mg/Kg	1	11/8/2018 2:45:22 PM	41412
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	11/8/2018 2:45:22 PM	41412

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: L7
Project: Black River 4H
Collection Date: 11/6/2018 10:35:00 AM
Lab ID: 1811331-007
Matrix: SOIL
Received Date: 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	250	30		mg/Kg	20	11/9/2018 2:28:27 PM	41445
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	190	9.8		mg/Kg	1	11/9/2018 3:36:02 PM	41421
Motor Oil Range Organics (MRO)	97	49		mg/Kg	1	11/9/2018 3:36:02 PM	41421
Surr: DNOP	102	50.6-138		%Rec	1	11/9/2018 3:36:02 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/8/2018 3:08:49 PM	41412
Surr: BFB	102	73.8-119		%Rec	1	11/8/2018 3:08:49 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/8/2018 3:08:49 PM	41412
Toluene	ND	0.048		mg/Kg	1	11/8/2018 3:08:49 PM	41412
Ethylbenzene	ND	0.048		mg/Kg	1	11/8/2018 3:08:49 PM	41412
Xylenes, Total	ND	0.096		mg/Kg	1	11/8/2018 3:08:49 PM	41412
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	11/8/2018 3:08:49 PM	41412

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: L8
Project: Black River 4H
Collection Date: 11/6/2018 10:52:00 AM
Lab ID: 1811331-008 **Matrix:** SOIL **Received Date:** 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	240	30		mg/Kg	20	11/9/2018 8:47:18 PM	41452
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	130	9.3		mg/Kg	1	11/9/2018 3:58:04 PM	41421
Motor Oil Range Organics (MRO)	98	46		mg/Kg	1	11/9/2018 3:58:04 PM	41421
Surr: DNOP	121	50.6-138		%Rec	1	11/9/2018 3:58:04 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/8/2018 3:32:22 PM	41412
Surr: BFB	92.6	73.8-119		%Rec	1	11/8/2018 3:32:22 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	11/8/2018 3:32:22 PM	41412
Toluene	ND	0.048		mg/Kg	1	11/8/2018 3:32:22 PM	41412
Ethylbenzene	ND	0.048		mg/Kg	1	11/8/2018 3:32:22 PM	41412
Xylenes, Total	ND	0.095		mg/Kg	1	11/8/2018 3:32:22 PM	41412
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	11/8/2018 3:32:22 PM	41412

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: L9
Project: Black River 4H
Collection Date: 11/6/2018 11:16:00 AM
Lab ID: 1811331-009
Matrix: SOIL
Received Date: 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	87	30		mg/Kg	20	11/9/2018 8:59:42 PM	41452
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	27	9.8		mg/Kg	1	11/9/2018 4:20:11 PM	41421
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/9/2018 4:20:11 PM	41421
Surr: DNOP	106	50.6-138		%Rec	1	11/9/2018 4:20:11 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/8/2018 3:55:58 PM	41412
Surr: BFB	88.7	73.8-119		%Rec	1	11/8/2018 3:55:58 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.023		mg/Kg	1	11/8/2018 3:55:58 PM	41412
Toluene	ND	0.046		mg/Kg	1	11/8/2018 3:55:58 PM	41412
Ethylbenzene	ND	0.046		mg/Kg	1	11/8/2018 3:55:58 PM	41412
Xylenes, Total	ND	0.092		mg/Kg	1	11/8/2018 3:55:58 PM	41412
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	11/8/2018 3:55:58 PM	41412

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: L10
Project: Black River 4H
Collection Date: 11/6/2018 11:48:00 AM
Lab ID: 1811331-010 **Matrix:** SOIL **Received Date:** 11/7/2018 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	11/9/2018 9:36:57 PM	41452
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/9/2018 4:42:15 PM	41421
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/9/2018 4:42:15 PM	41421
Surr: DNOP	92.0	50.6-138		%Rec	1	11/9/2018 4:42:15 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/8/2018 6:16:49 PM	41412
Surr: BFB	89.1	73.8-119		%Rec	1	11/8/2018 6:16:49 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	11/8/2018 6:16:49 PM	41412
Toluene	ND	0.048		mg/Kg	1	11/8/2018 6:16:49 PM	41412
Ethylbenzene	ND	0.048		mg/Kg	1	11/8/2018 6:16:49 PM	41412
Xylenes, Total	ND	0.096		mg/Kg	1	11/8/2018 6:16:49 PM	41412
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	11/8/2018 6:16:49 PM	41412

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: L11
Project: Black River 4H
Collection Date: 11/6/2018 12:45:00 PM
Lab ID: 1811331-011
Matrix: SOIL
Received Date: 11/7/2018 8:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	170	30		mg/Kg	20	11/9/2018 9:49:21 PM	41452
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	21	9.6		mg/Kg	1	11/9/2018 5:04:22 PM	41421
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/9/2018 5:04:22 PM	41421
Surr: DNOP	97.7	50.6-138		%Rec	1	11/9/2018 5:04:22 PM	41421
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/8/2018 6:40:17 PM	41412
Surr: BFB	89.4	73.8-119		%Rec	1	11/8/2018 6:40:17 PM	41412
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	11/8/2018 6:40:17 PM	41412
Toluene	ND	0.048		mg/Kg	1	11/8/2018 6:40:17 PM	41412
Ethylbenzene	ND	0.048		mg/Kg	1	11/8/2018 6:40:17 PM	41412
Xylenes, Total	ND	0.097		mg/Kg	1	11/8/2018 6:40:17 PM	41412
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	11/8/2018 6:40:17 PM	41412

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#: **1811331**
12-Nov-18

Client: Souder, Miller & Associates
Project: Black River 4H

Sample ID	**MB-41452**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**41452**	RunNo:	**55558**					
Prep Date:	**11/9/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850186**	Units:	**mg/Kg**			

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

Sample ID	**LCS-41452**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**41452**	RunNo:	**55558**					
Prep Date:	**11/9/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850187**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.0	90	110			

Sample ID	**MB-41445**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**41445**	RunNo:	**55543**					
Prep Date:	**11/9/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850235**	Units:	**mg/Kg**			

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

Sample ID	**LCS-41445**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**41445**	RunNo:	**55543**					
Prep Date:	**11/9/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850236**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.4	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#: **1811331**

12-Nov-18

Client: Souder, Miller & Associates

Project: Black River 4H

Sample ID	**LCS-41421**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**41421**		RunNo:	**55534**				
Prep Date:	**11/8/2018**	Analysis Date:	**11/9/2018**		SeqNo:	**1849540**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.5	70	130			
Surr: DNOP	3.8		5.000		75.3	50.6	138			

Sample ID	**MB-41421**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**41421**		RunNo:	**55534**				
Prep Date:	**11/8/2018**	Analysis Date:	**11/9/2018**		SeqNo:	**1849541**	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	8.2		10.00		81.5	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#: **1811331**

12-Nov-18

Client: Souder, Miller & Associates

Project: Black River 4H

Sample ID	**MB-41412**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**41412**	RunNo:	**55519**					
Prep Date:	**11/7/2018**	Analysis Date:	**11/8/2018**	SeqNo:	**1848374**	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	940		1000		94.2	73.8	119			

Sample ID	**LCS-41412**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**41412**	RunNo:	**55519**					
Prep Date:	**11/7/2018**	Analysis Date:	**11/8/2018**	SeqNo:	**1848375**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80.1	123			
Surr: BFB	1100		1000		105	73.8	119			

Sample ID	**1811331-001AMS**	SampType:	**MS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**L1**	Batch ID:	**41412**	RunNo:	**55519**					
Prep Date:	**11/7/2018**	Analysis Date:	**11/8/2018**	SeqNo:	**1848378**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	380	4.8	24.04	358.5	93.4	77.8	128			
Surr: BFB	17000		961.5		1760	73.8	119			S

Sample ID	**1811331-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**L1**	Batch ID:	**41412**	RunNo:	**55519**					
Prep Date:	**11/7/2018**	Analysis Date:	**11/8/2018**	SeqNo:	**1848379**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	370	4.9	24.27	358.5	48.5	77.8	128	2.84	20	S
Surr: BFB	16000		970.9		1680	73.8	119	0	0	S

Sample ID	**MB-41429**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**41429**	RunNo:	**55537**					
Prep Date:	**11/8/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850020**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		90.5	73.8	119			

Sample ID	**LCS-41429**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**41429**	RunNo:	**55537**					
Prep Date:	**11/8/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850021**	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:

*	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#: **1811331**

12-Nov-18

Client: Souder, Miller & Associates

Project: Black River 4H

Sample ID	**MB-41412**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**41412**	RunNo:	**55519**					
Prep Date:	**11/7/2018**	Analysis Date:	**11/8/2018**	SeqNo:	**1848394**	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	1.1		1.000		108	80	120			

Sample ID	**LCS-41412**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**41412**	RunNo:	**55519**					
Prep Date:	**11/7/2018**	Analysis Date:	**11/8/2018**	SeqNo:	**1848395**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.6	80	120			
Toluene	0.98	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.98	0.050	1.000	0	97.8	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.8	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	**MB-41429**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**41429**	RunNo:	**55537**					
Prep Date:	**11/8/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850035**	Units:	**%Rec**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	**LCS-41429**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**41429**	RunNo:	**55537**					
Prep Date:	**11/8/2018**	Analysis Date:	**11/9/2018**	SeqNo:	**1850036**	Units:	**%Rec**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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: **1811331** RcptNo: **1**

Received By: **Victoria Zellar** **11/7/2018 8:50:00 AM** Victoria Zellar

Completed By: **Ashley Gallegos** **11/7/2018 9:50:55 AM**

Reviewed By: VVZ 11/7/18

labeled by: IO 11/7/18

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 ☑

IO 11/7/18

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

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 ☐

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	5.6	Good	Yes			

Chain-of-Custody Record

Client: SMA - Cibola

Mailing Address:

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day
☐ Standard ☒ Rush

Project Name: Black River 4 H

Project #:

Project Manager: Austin Weyant

Sampler: Heath Patterson

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.6

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1811331	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-,Cl^-,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
11/5/18	2:18	Soil	L1	402		-001	X		X					X								
11/5/18	2:24		L2			-002	X		X					X								
11/5/18	2:35		L3			-003	X		X					X								
11/6/18	9:03		L4			-004	X		X					X								
	9:20		L5			-005	X		X					X								
	9:24		L6			-006	X		X					X								
	10:35		L7			-007	X		X					X								
	10:52		L8			-008	X		X					X								
	11:14		L9			-009	X		X					X								
	11:48		L10			-010	X		X					X								
	12:45		L11			-011	X		X					X								

Date:	Time:	Relinquished by:	Received by:	Date	Time
11/6/18	1510			11/6/18	1540
Date:	Time:	Relinquished by:	Received by:	Date	Time
11/6/18	1940		Courier 11/7/18 8:50 Victoria Ballar	11/7/18	8:50

Remarks:

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.

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

January 14, 2019

Austin Weyant

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

RE: Black River 4H OrderNo.: 1901248

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 1/9/2019 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

Analytical Report
Lab Order **1901248**
Date Reported: **1/14/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L4-1
Project: Black River 4H
Collection Date: 1/4/2019 11:00:00 AM
Lab ID: 1901248-001 **Matrix:** SOIL **Received Date:** 1/9/2019 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	100	30		mg/Kg	20	1/12/2019 5:37:10 AM	42565

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: L12-0.5
Project: Black River 4H
Collection Date: 1/4/2019 10:05:00 AM
Lab ID: 1901248-002 **Matrix:** SOIL
Received Date: 1/9/2019 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	210	30		mg/Kg	20	1/12/2019 5:49:35 AM	42565
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/10/2019 6:30:48 PM	42516
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/10/2019 6:30:48 PM	42516
Surr: DNOP	113	50.6-138		%Rec	1	1/10/2019 6:30:48 PM	42516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2019 10:40:13 PM	42514
Surr: BFB	100	73.8-119		%Rec	1	1/10/2019 10:40:13 PM	42514

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: L12-1
Project: Black River 4H
Collection Date: 1/4/2019 11:21:00 AM
Lab ID: 1901248-003 **Matrix:** SOIL **Received Date:** 1/9/2019 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/10/2019 6:52:42 PM	42516
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2019 6:52:42 PM	42516
Surr: DNOP	93.4	50.6-138		%Rec	1	1/10/2019 6:52:42 PM	42516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/10/2019 11:03:50 PM	42514
Surr: BFB	100	73.8-119		%Rec	1	1/10/2019 11:03:50 PM	42514

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: L3-2
Project: Black River 4H
Collection Date: 1/4/2019 11:33:00 AM
Lab ID: 1901248-004 **Matrix:** SOIL **Received Date:** 1/9/2019 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/10/2019 7:14:22 PM	42516
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2019 7:14:22 PM	42516
Surr: DNOP	93.6	50.6-138		%Rec	1	1/10/2019 7:14:22 PM	42516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/10/2019 11:27:16 PM	42514
Surr: BFB	96.6	73.8-119		%Rec	1	1/10/2019 11:27:16 PM	42514

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: L1-1
Project: Black River 4H
Collection Date: 1/4/2019 12:02:00 PM
Lab ID: 1901248-005 **Matrix:** SOIL **Received Date:** 1/9/2019 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/10/2019 7:36:15 PM	42516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2019 7:36:15 PM	42516
Surr: DNOP	113	50.6-138		%Rec	1	1/10/2019 7:36:15 PM	42516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2019 11:50:50 PM	42514
Surr: BFB	98.1	73.8-119		%Rec	1	1/10/2019 11:50:50 PM	42514

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: L1-2
Project: Black River 4H
Collection Date: 1/4/2019 12:03:00 PM
Lab ID: 1901248-006 **Matrix:** SOIL **Received Date:** 1/9/2019 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	24	9.7		mg/Kg	1	1/10/2019 7:58:00 PM	42516
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/10/2019 7:58:00 PM	42516
Surr: DNOP	101	50.6-138		%Rec	1	1/10/2019 7:58:00 PM	42516
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/10/2019 2:58:29 PM	42514
Surr: BFB	92.4	73.8-119		%Rec	1	1/10/2019 2:58:29 PM	42514

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#: **1901248**

14-Jan-19

Client: Souder, Miller & Associates

Project: Black River 4H

Sample ID	**MB-42565**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**42565**	RunNo:	**56965**					
Prep Date:	**1/11/2019**	Analysis Date:	**1/12/2019**	SeqNo:	**1905579**	Units:	**mg/Kg**			

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

Sample ID	**LCS-42565**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**42565**	RunNo:	**56965**					
Prep Date:	**1/11/2019**	Analysis Date:	**1/12/2019**	SeqNo:	**1905580**	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#: **1901248**

14-Jan-19

Client: Souder, Miller & Associates

Project: Black River 4H

Sample ID	**LCS-42516**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**42516**		RunNo:	**56890**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1903681**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	70	130			
Surr: DNOP	4.5		5.000		90.1	50.6	138			

Sample ID	**MB-42516**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**42516**		RunNo:	**56890**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1903682**	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	8.5		10.00		85.2	50.6	138			

Sample ID	**1901248-006AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**L1-2**	Batch ID:	**42516**		RunNo:	**56890**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904497**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	79	9.9	49.36	23.53	112	53.5	126			
Surr: DNOP	6.5		4.936		131	50.6	138			

Sample ID	**1901248-006AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**L1-2**	Batch ID:	**42516**		RunNo:	**56890**				
Prep Date:	**1/9/2019**	Analysis Date:	**1/10/2019**		SeqNo:	**1904498**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.7	48.64	23.53	76.7	53.5	126	26.0	21.7	R
Surr: DNOP	5.2		4.864		106	50.6	138	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1901248**

14-Jan-19

Client: Souder, Miller & Associates

Project: Black River 4H

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			

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:	**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	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:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80.1	123			
Surr: BFB	1100		1000		110	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

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: **1901248** RcptNo: 1

Received By: **Victoria Zellar** **1/9/2019 8:45:00 AM** Victoria Zellar

Completed By: **Desiree Dominguez** **1/9/2019 9:52:41 AM** DD

Reviewed By: ENM 1/9/19

LB: LB 1/9/19

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: ____

ENM 1/9/19

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	3.1	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: 5 day turn
☐ Standard ☐ Rush

Project Name: Black River 4H

Project #:

Project Manager: A. Weyant

Sampler: LAA

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.1°c

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. 1901248	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)
1.4	1100	soil	L4-1	4oz		-001							X			
1.4	1005		L12-0.5			-002		X					X			
1.4	11:21		L12-1			-003		X								
1.4	11:33		L3-2			-004		X								
1.4	1202		L1-1			-005		X								
1.4	1203	↓	L1-2	↓		-006		X								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1.7	2:30	Samantha Watson				
1/8/19	1900			Courier	1/8/19	1400
			Victoria Ballan		1/9/19	8:45

Remarks: Marathon

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.