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

April 20, 2018

#5E26084-BG7

NMOCD District II
Mike Bratcher
811 S. First St.
Artesia, NM 88210

SUBJECT: SOIL REMEDIATION CLOSURE REPORT FOR THE LUCID EMMA 8" STEEL LINE RELEASE (2RP-4646), EDDY COUNTY, NEW MEXICO

Dear Mr. Bratcher,

On behalf of Lucid Energy Group (Lucid), Souder, Miller & Associates (SMA) has prepared this CLOSURE REPORT that describes the assessment, initial delineation and remediation for the Emma 8" steel line release. The site is in SECTION 21, TOWNSHIP 19S, RANGE 24E, NMPM, Eddy County, New Mexico, on private land. Figure 1 illustrates the vicinity and location of the site. Table 1 summarizes information regarding the release.

Table 1: Release information and Site Ranking

Name	Emma 8" Steel Line
Company	Lucid Energy Group
RP Number	2RP-4646
API Number	fAB1806440448
Location	32.640143°, -104.592043°
Estimated Date of Release	2/26/2018
Date Reported to NMOCD	2/28/2018
Land Owner	Private
Reported To	NMOCD District II
Source of Release	Pipeline
Released Material	Natural Gas and pipeline fluids
Released Volume	<500 Mcf, <10 bbls
Recovered Volume	0
Net Release	<500 Mcf, <10 bbls
Nearest Waterway	3,000 feet south of North Seven Rivers Draw
Depth to Groundwater	Estimated to be greater than 200'
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	3/5/2018, 3/8/2018, 4/3/2018

1.0 Background

On February 26, 2018, a pipeline leak occurred along the buried, Emma 8” steel pipeline due to corrosion. The release point occurred at the intersection of three pipelines, the 8-inch gas line, a 6-inch water line, and another 6-inch gas line that runs perpendicular to the first two. The pipeline was shut in, excavated for repair, and all potentially impacted soils were stock piled on a liner. The primary impacted area is approximately 15 feet long by 10 feet wide. Liquids also impacted approximately 250 feet along a two track road that parallels the ROW.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 3000 feet south of North Seven Rivers Draw, with an elevation of approximately 3,718 feet above sea level. SMA searched the New Mexico State Engineer’s Office (NMOSE) online water well database for water wells in the vicinity of the release. Seven wells are located within a three-mile radius of the site. An eighth well (RA 09923 with a depth of 25 feet bgs) is listed as located in the area, but a review of all available documents on the NMOSE site show this well is actually located in Chavez county. Supporting documents can be found in Appendix B. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be greater than 200 feet below ground surface (bgs).

Recommended Remediation Action Levels (RRALs) are determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). Below in Table 2 are the remediation standards and the site ranking for this location. Justification for this site ranking is found in Figure 1 and Appendix B.

Table 2.

Soil Remediation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM

Depth to Groundwater	NMOCD Numeric Rank
< 50 BGS = 20	
50' to 99' = 10	
>100' = 0	0
Distance to Nearest Surface Water	**NMOCD Numeric Rank**
< 200' = 20	
200' - 1000' = 10	
>1000' = 0	0
Well Head Protection	**NMOCD Numeric Rank**
<1000' (or <200' domestic) = 20	
> 1000' = 0	0
Total Site Ranking	**0**

3.0 Release Characterization

On March 5, 2018 SMA field personnel assessed the release area. Repair crews were still on location to work on the open pipeline excavation, and SMA was unable to collect samples from the pipeline excavation. However, SMA collected samples from the area down the two-track road at this time. Three discreet sample locations were collected (L1-L3) at depths of 0.5 to 1.0 feet bgs , two of which had elevated chlorides, and on sample, L2, had hydrocarbon impact above NMOCD RRAL’s.

Once repairs were completed, SMA staff returned on March 8, 2018 to sample the open excavation. The excavated area, which was approximately 10 feet deep, was investigated by collecting three bottom hole samples, (BH1-BH3) and four side wall samples (SW1-SW4).

Soil samples were field-screened using an EC meter. All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analyses including chlorides by Method 300.0, volatile organics (BTEX) by Method 8021B, and MRO, DRO, and GRO by EPA Method 8015D. Sample locations are depicted on Figure 2. All field screening and laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

Samples collected from the ROW indicated elevated chlorides in the two nearest the release, and Sample L2, had hydrocarbon impacts above NMOCD RRAL’s. The sample farthest from the release was below all RRAL's, indicating the extent of the flow has been delineated. Samples collected from the excavated area were all within RRAL's for hydrocarbon impacts, but chloride impacts remained, and required further excavation.

4.0 Soil Remediation Summary

On April 3, 2018, after receiving 811 clearance, SMA returned to the site to remediate affected soils. On the two-track runoff area, L1 was excavated to 1-foot bgs, L2 was excavated to 1.5-feet bgs, and L3 was excavated to 2 feet bgs. Due to the presence of multiple buried lines, and a thick bedrock layer, continuation of the open excavation was slow and difficult. However, the excavation was extended to approximately 11 feet bgs on each side of the pipeline (BH1 and BH3), by approximately 0.5 feet by hand beneath the pipeline (BH2), and by 2 feet horizontally on the east and west (SW1 and SW3). Confirmation samples collected from the bottom and sidewalls of the excavation resulted in contaminant levels below RRAL’s as set by NMOCD except for bottom hole #2 (BH2) which was collected from directly beneath the two gas lines at the release point. No further action is recommended at this time.

5.0 Scope and Limitations

The scope of our services consisted of the performance of assessment sampling, verification of release stabilization, regulatory liaison, and preparation of 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 Austin Weyant at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Austin Weyant
Project Scientist

Reviewed by:

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map
Figure 2: Site and Sample Location Map

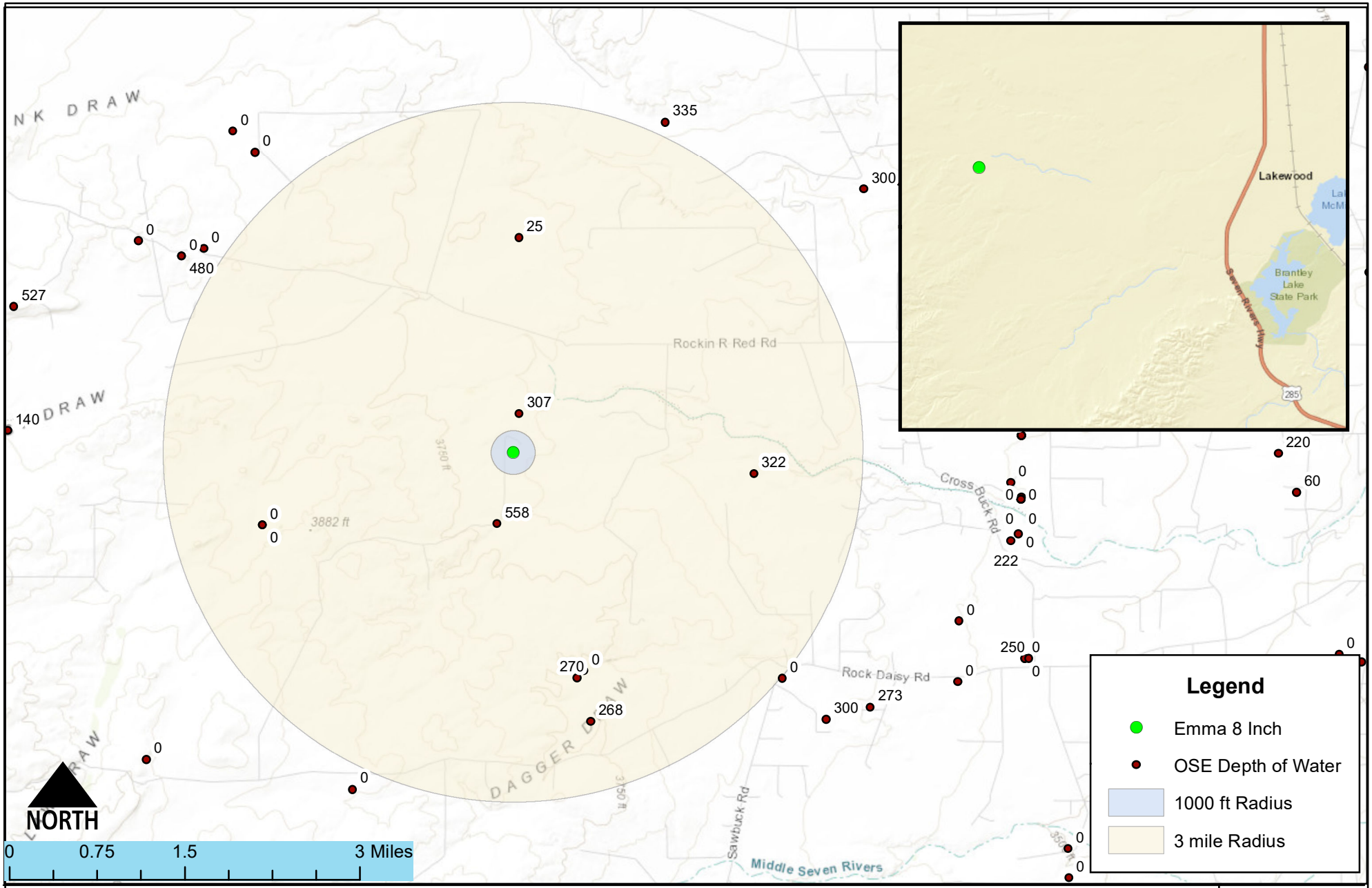
Tables:

Table 3: Summary of Sample Results

Appendices:

Appendix A: Form C141 Initial and Final
Appendix B: NMOSE Wells Report
Appendix C: Laboratory Analytical Reports

FIGURE 1
VICINITY AND NMOSE DATA MAP



Vicinity and Well Head Protection Map
Emma 8" Steel Line Release- Lucid
S 21-T19S-R24E, New Mexico

Figure 1

Date Saved: 2/28/2018

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

Drawn Heather Patterson
Checked
Approved

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

FIGURE 2
SITE AND SAMPLE
LOCATION MAP

Site and Sample Location Map
Emma 8" Steel Line Release- Lucid
S 21-T19S-R24E, New Mexico

Figure 2

Date Saved: 4/16/2018

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

Drawn Heather Patterson
Checked
Approved

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TABLE 3
SUMMARY SAMPLE RESULTS

Emma 8" Steel Line Release Sample Summary

Table 3.

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	**Total TPH** mg/Kg	Cl- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 0				50 mg/Kg	10 mg/Kg				5000 mg/Kg	
L1	3/5/2018	0.5	in-situ	1.74	<0.024	12	<9.7	<49	12	<30
	3/5/2018	1	in-situ	0.58	<0.024	5.4	<9.7	<48	5.4	<30
L2	3/5/2018	0.5	excavated	**72.8**	<0.48	1300	6000	<500	**7300**	5100
	3/5/2018	1	excavated	**95.6**	<0.47	1600	4300	260	**6160**	4300
	3/5/2018	1.5	in-situ	0.4	<0.025	17	290	52	359	480
L3	3/5/2018	0.5	excavated	21.58	<0.24	560	3,800	300	4,660	5100
	3/5/2018	1	excavated	8.26	<0.12	340	1400	100	1840	1800
	4/3/2018	2	in-situ	<0.23	<0.023	<4.7	<9.6	<48	<63	56
BH1	3/8/2018	10	excavated	1.9	<0.047	77	930	130	1137	1600
	4/3/2018	11	in-situ	--	--	--	--	--	--	<30
BH2	3/8/2018	9	excavated	3.11	<0.046	120	1600	230	1950	5600
	4/3/2018	9.5	in-situ	--	--	--	--	--	--	1800
BH3	3/8/2018	10	excavated	4.14	<0.047	140	2000	260	2400	1900
	4/3/2018	10.5	in-situ	--	--	--	--	--	--	270
SW1	3/8/2018	sidewall	excavated	0.23	<0.023	8.7	140	<45	148.7	6300
	4/3/2018	sidewall	in-situ	--	--	--	--	--	--	640
SW2	3/8/2018	sidewall	in-situ	4.6	0.23	63	28	<50	91	<30
SW3	3/8/2018	sidewall	excavated	6.04	<0.05	140	3100	520	3760	23000
	4/3/2018	sidewall	in-situ	--	--	--	--	--	--	<30
SW4	3/8/2018	sidewall	in-situ	<0.23	<0.024	<4.7	<8.6	<43	<57	<30
SP	3/5/2018	spill pile	haul	58.1	<0.24	970	4200	390	**5560**	1500

"--" = Not Analyzed

APPENDIX A
FORM C141 INITIAL AND FINAL

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 01 2018

RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

fAB1806440448
nAB1806440992

Release Notification and Corrective Action

OPERATOR

X Initial Report Final Report

Name of Company: Lucid Energy Delaware #371960	Contact Kerry Egan
Address 201 South Fourth Artesia, NM 88210	Telephone No. 575 513-8988
Facility Name: Emma 8" Steel line	Facility Type: Pipeline ROW

Surface Owner: R. Houghtaling	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	21	19S	24E					EDDY

Latitude 32.640143° **Longitude** -104.592043°

NATURE OF RELEASE

Type of Release: Natural Gas, and pipeline liquids	Volume of Release: <500 Mcf of gas; < 10bbls of pipeline liquids	Volume Recovered: None
Source of Release: Leaking flange in the line.	Date and Hour of Occurrence: 2/26/2018	Date and Hour of Discovery: 2/26/2018
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.* The source of the leak is suspected to have been an 8" steel gas line with internal corrosion. Upon discovery the line was immediately shut in to prevent further loss. The line remains down until repairs can be made.

Describe Area Affected and Cleanup Action Taken.*
The surface area around the source of the leak is approximately 15' x 10'. A portion of the liquids released made it onto a two track road that parallels the pipeline ROW, and ran for several hundred feet along the track. The affected area will be excavated and the two track will have the contamination scrapped off of the surface. Depending on the analysis of soil samples a work plan will be prepared to outline further cleanup action.

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

Signature: Kerry Egan	OIL CONSERVATION DIVISION
Printed Name: Kerry Egan	Approved by Environmental Specialist: Signed By Mike Bratcher
Title: Environmental Compliance Coordinator	Approval Date: 3/5/18 Expiration Date: N/A
E-mail Address: KEgan@lucid-energy.com	Conditions of Approval: See Attached Attached ☐ 2RP-4646
Date: 2/28/2018 Phone: 575 810-6021	

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/1/2018 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4646 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 4/1/2018. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

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
RA 05576		ED		1	4	21	19S	24E	538353	3611992*	513	320	307	13
RA 05676		ED	2	2	3	28	19S	24E	538058	3610471*	1035	600	558	42
RA 09923	R	CH		1	2	16	19S	24E	538334	3614419*	2933	118	25	93
RA 05723		ED		3	3	34	19S	24E	539170	3608353*	3263	310	270	40
RA 04727		ED		1	2	26	19S	24E	541594	3611184*	3348	354	322	32
RA 03084		ED			1	03	20S	24E	539366	3607752*	3895	330	268	62
RA 04245		ED		4	4	35	19S	24E	542005	3608363*	4877	300		
RA 03960		ED		2	2	10	19S	24E	540341	3616025*	4992	440	335	105

Average Depth to Water: **297 feet**

Minimum Depth: **25 feet**

Maximum Depth: **558 feet**

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 538259.7 **Northing (Y):** 3611486.85 **Radius:** 5000

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

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2010 JUL -6 P 2:01

1. GENERAL AND WELL LOCATION

POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
RA-09923	
WELL OWNER NAME(S)	**PHONE (OPTIONAL)**
Troy D Crutchfield & Rita L Crutchfield	
WELL OWNER MAILING ADDRESS	**CITY / STATE / ZIP**
1004 Corralitos Dr	Roswell / NM / 88201

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	33	26	57.00	N
	LONGITUDE	104	30	41.00	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS: 1004 Corralitos Dr

2. OPTIONAL

(2.5 ACRE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION	TOWNSHIP	RANGE
¼	¼	¼	¼		☐ NORTH ☐ SOUTH	☐ EAST ☐ WEST

SUBDIVISION NAME	LOT NUMBER	BLOCK NUMBER	UNIT/TRACT

HYDROGRAPHIC SURVEY	MAP NUMBER	TRACT NUMBER

3. DRILLING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1632	Caleb Curry	Hopper Pump & Drilling Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
6/22/2010	6/23/2010	100	100	38

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 38

DRILLING FLUID: ☑ AIR ☐ MUD ☐ ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
+2	100	8 3/4	pvc	spline	5	.25	.020
						perf 40-60	

4. WATER BEARING STRATA

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	YIELD (GPM)
20	55	35	Sand & Gravel	40+

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA	TOTAL ESTIMATED WELL YIELD (GPM)
caleb curry method	40+

FOR OSE INTERNAL USE — WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER RA 09923	POD NUMBER POD 2	TRN NUMBER 461229
LOCATION 10.24.16.214		PAGE 1 OF 2

DOMESTIC

5. SEAL AND PUMP

TYPE OF PUMP: ☑ SUBMERSIBLE ☐ JET ☐ NO PUMP – WELL NOT EQUIPPED
☐ TURBINE ☐ CYLINDER ☐ OTHER – SPECIFY:

ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT) FROM	DEPTH (FT) TO	BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	25	100	8 3/4	8/16 silica sand		
	0	25	8 3/4	3/8 bentonite grout		

6. GEOLOGIC LOG OF WELL

DEPTH (FT) FROM	DEPTH (FT) TO	THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
0	5	5	topsoil	☐ YES ☑ NO
5	20	15	brown sandy clay	☐ YES ☑ NO
20	55	35	sand & gravel	☑ YES ☐ NO
55	85	30	brown clay	☐ YES ☑ NO
85	90	5	blue clay	☐ YES ☑ NO
90	100	10	red sand	☑ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO
				☐ YES ☐ NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO

WELL TEST
METHOD: ☐ BAILER ☐ PUMP ☐ AIR LIFT ☐ OTHER – SPECIFY:
TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

ADDITIONAL STATEMENTS OR EXPLANATIONS:

8. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER — DATE: 7/6/2010

FOR OSE INTERNAL USE — WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

File No. RA-9923

NEW MEXICO OFFICE OF THE STATE ENGINEER

CHANGE OF OWNERSHIP OF 72-12-1 PERMIT FOR (check one):

[X] Individual	[ ] Corporation

2-37768

1. OWNER OF RECORD (Seller)

Name: Rita L. Crutchfield	Name:	
Phone: 575-973-4336 [ ] Home [X] Cell Phone (Work):	Phone: [ ] Home [ ] Cell Phone (Work):	
a. Owner of Record File No: RA-09923	**b.** Sub-file No.:	**c.** Cause No.:

2. NEW OWNER (Buyer) Note: If more owners need to be listed, attach a separate sheet. Attached? [ ] Yes

Name: Rodney A. LeMay	Name: Mary P. LeMay
Contact or Agent: check here if Agent [ ]	Contact or Agent: check here if Agent [ ]
Mailing Address: 1004 Corralitos Drive	Mailing Address: 1004 Corralitos Drive
City: Roswell	City: Roswell
State: NM Zip Code: 88201	State: NM Zip Code: 88201
Phone: 575-623-3217 [✓] Home [ ] Cell Phone (Work):	Phone: 575-623-3217 [✓] Home [ ] Cell Phone (Work):
E-mail (optional):	E-mail (optional):

Required: Submit warranty deed(s) or other instrument(s) of conveyance properly recorded with the county clerk's office.

3. AMOUNT CONVEYED

Amount of Water (acre-feet per annum): 3.0

4. LIST ALL KNOWN POINT(S) OF DIVERSION (POD) FOR THE 72-12-1 PERMIT CONVEYED

OSE POD No.	Subdivision	Section	Township	Range
	NW1/4 NE/14	16	10S	23E
	(Lot 4, Block 4 of Los Corralitos Subdivision No.3)			

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO 2016 DEC 14 AM 11:22

FOR OSE INTERNAL USE — Change of Ownership, Form wr-02d, Revised 6/14/12

File No.: RA-9923	Trn No.: 600395	Receipt No.: 2-37768
Trans Desc. (optional): COWNE		Sub-Basin: —

5. ADDITIONAL STATEMENTS OR EXPLANATIONS

ACKNOWLEDGEMENT FOR INDIVIDUAL

I, We (name of owner(s)), Rodney A. LeMay and Mary P. LeMay
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Rodney A LeMay
Signature

Mary P LeMay
Signature

State of New Mexico)
ss.
County of Chaves)

This instrument was acknowledged before me this 21 day of November A.D., 2016, by (name of owner(s)):

Rodney A. LeMay and Mary P. LeMay

OFFICIAL SEAL
JESSICA JARAMILLO
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 8/16/2019

Notary Public: Jessica Jaramillo
My commission expires: 8/16/2017

ACKNOWLEDGEMENT FOR CORPORATION

I, We (name of owner(s)), _____
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

_____
Officer Signature

_____
Officer Signature

State of _____)
ss.
County of _____)

This instrument was acknowledged before me this _____ day of _____ A.D., 20 ___, by the following on behalf of said corporation.

2016 DEC 14 AM 8:02
STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

Name of Officer: _____

Title of Officer: _____

Name of Corporation Acknowledging: _____

State of Corporation: _____

Notary Public: _____

My commission expires: _____

FOR OSE INTERNAL USE — Change of Ownership, Form wr-02d, Revised 6/14/12

File No.: RA-9923	Trn No.: 600395	Receipt No.: 0-37768
Trans Desc. (optional): COWNF		Sub-Basin: —

WARRANTY DEED – JOINT TENANTS

GF#1601348

Rita L. Crutchfield, a widow and surviving joint tenant of Troy D. Crutchfield, deceased, for consideration paid,

grants to: Rodney A. LeMay and Mary P. LeMay, husband and wife, as joint tenants

Whose address is: 1084 Corralito Drive
Roswell NM 88201

the following described property situated in Chaves County, New Mexico.

LOT FOUR (4) in BLOCK FOUR (4) of LOS CORRALITOS SUBDIVISION NO. 3, a subdivision in the County of Chaves and State of New Mexico, as shown on the Official Boundary Adjustment Survey of Lots 4 and 5 of Block 4 of Los Corralitos Subdivision No. 3 filed in the Chaves County Clerk's Office on August 8, 2000 and recorded in Book S8 of Survey Records, Chaves County, New Mexico, at Page 33.

SUBJECT to all reservations contained in the Patent and all covenants, easements and restrictions of record and taxes of current year and there after.

With Warranty Covenants

WITNESS our hands and seals this 21 day of November, 2016.

Rita L. Crutchfield

Rita L. Crutchfield

ACKNOWLEDGEMENT FOR NATURAL PERSONS

STATE OF NEW MEXICO)
) ss.
COUNTY OF CHAVES)

This instrument was acknowledged before me this 21 day of November, 2016, by **Rita L. Crutchfield, a widow and surviving joint tenant of Troy D. Crutchfield, deceased.**

My Commission Expires:
8/16/2017

Notary Public

[redacted]

OFFICIAL SEAL
JESSICA JARAMILLO
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 8/16/2017

2016 DEC 14 AM 11:02
STATE OF NEW MEXICO
ROSWELL, NEW MEXICO

STATE OF NEW MEXICO, COUNTY OF CHAVES
FILE FOR RECORD NOV 22, 2016 AT 11:51 O CLOCK AM
Receipt Number: 395876 Fee: $25.00
Book 00775 Page 00381 Pages 1
To Whom Returned: LANDMARK TITLE
WILL PICK UP

Dave Kunko, County Clerk
By Betty Spear Deputy

Tom Blaine, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 600395
File Nbr: RA 09923

Dec. 28, 2016

RODNEY A LEMAY
1004 CORRALITOS DR
ROSWELLL, NM 88201

Greetings:

Enclosed is one original copy of a Change of Ownership of a Water Right submitted to this office for filing. This Change of Ownership is accepted for filing in accordance with Section 72-1-2.1, NMSA 1978 (1996 Supp.), effective May 15, 1996. The acceptance by the State Engineer Office does not constitute validation of the right claimed.

According to Section 72-1-2.1, NMSA 1978 (1996 Supp.), you must record this Change of Ownership with the clerk of the county in which the water is located. The filing shall be public notice of the existence and contents of the instruments so recorded.

Sincerely,

Claudia Guillen
(575)622-6521

Enclosure

chngowrc

Tom Blaine, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 600395
File Nbr: RA 09923

Dec. 28, 2016

MARY P LEMAY
1004 CORRALITOS DR
ROSWELL, NM 88201

Greetings:

Enclosed is one original copy of a Change of Ownership of a Water Right submitted to this office for filing. This Change of Ownership is accepted for filing in accordance with Section 72-1-2.1, NMSA 1978 (1996 Supp.), effective May 15, 1996. The acceptance by the State Engineer Office does not constitute validation of the right claimed.

According to Section 72-1-2.1, NMSA 1978 (1996 Supp.), you must record this Change of Ownership with the clerk of the county in which the water is located. The filing shall be public notice of the existence and contents of the instruments so recorded.

Sincerely,

Claudia Guillen
(575)622-6521

Enclosure

chngowrc

Landmark Title Roswell

2724 N Wilshire
Roswell, NM 88201
Phone: 575-622-534

December 7, 2016

New Mexico State Engineer
1900 West Second Street
Roswell, NM 88201

RE: File # 16-01348
1004 Corralitos Dr, Roswell
RA-09923
Crutchfield to LeMay

To Whom It May Concern:

Pursuant to the above described transaction, enclosed please find the following:

1. Change of Ownership of Water Rights (3 originals)
2. Copy of recorded Warranty Deed from Rita L Crutchfield to Rodney & Mary LeMay (Book 00775, Page 00381)
3. Check #11951 from Landmark Title in the amount of $2.00 for transfers of water rights.

Please return an Original of the Change of Ownership for us to record at the Chaves County Clerk's Office. If you need anything or have any questions, please do not hesitate to contact us.

Sincerely,

Paula G Franco

Paula G Franco
encl

APPENDIX C

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

March 14, 2018

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

RE: Emma 8 OrderNo.: 1803363

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/7/2018 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L1-0.5
Project: Emma 8
Collection Date: 3/5/2018 9:55:00 AM
Lab ID: 1803363-001 **Matrix:** SOIL **Received Date:** 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	3/13/2018 3:02:30 AM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/9/2018 7:12:11 PM	36911
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/9/2018 7:12:11 PM	36911
Surr: DNOP	82.5	70-130		%Rec	1	3/9/2018 7:12:11 PM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	12	4.9		mg/Kg	1	3/8/2018 4:46:22 PM	36891
Surr: BFB	142	15-316		%Rec	1	3/8/2018 4:46:22 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/8/2018 4:46:22 PM	36891
Toluene	0.12	0.049		mg/Kg	1	3/8/2018 4:46:22 PM	36891
Ethylbenzene	0.12	0.049		mg/Kg	1	3/8/2018 4:46:22 PM	36891
Xylenes, Total	1.5	0.098		mg/Kg	1	3/8/2018 4:46:22 PM	36891
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	3/8/2018 4:46:22 PM	36891

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: Emma 8
Collection Date: 3/5/2018 10:05:00 AM
Lab ID: 1803363-002
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	3/13/2018 3:39:43 AM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/9/2018 7:36:34 PM	36911
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/9/2018 7:36:34 PM	36911
Surr: DNOP	98.5	70-130		%Rec	1	3/9/2018 7:36:34 PM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	5.4	4.8		mg/Kg	1	3/8/2018 5:09:32 PM	36891
Surr: BFB	117	15-316		%Rec	1	3/8/2018 5:09:32 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/8/2018 5:09:32 PM	36891
Toluene	ND	0.048		mg/Kg	1	3/8/2018 5:09:32 PM	36891
Ethylbenzene	ND	0.048		mg/Kg	1	3/8/2018 5:09:32 PM	36891
Xylenes, Total	0.58	0.096		mg/Kg	1	3/8/2018 5:09:32 PM	36891
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	3/8/2018 5:09:32 PM	36891

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: L2-0.5
Project: Emma 8
Collection Date: 3/5/2018 10:04:00 AM
Lab ID: 1803363-003
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	5100	300		mg/Kg	200	3/13/2018 7:11:33 PM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	6000	99		mg/Kg	10	3/13/2018 1:19:55 PM	36911
Motor Oil Range Organics (MRO)	ND	500	D	mg/Kg	10	3/13/2018 1:19:55 PM	36911
Surr: DNOP	0	70-130	S	%Rec	10	3/13/2018 1:19:55 PM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1300	96		mg/Kg	20	3/8/2018 5:32:55 PM	36891
Surr: BFB	460	15-316	S	%Rec	20	3/8/2018 5:32:55 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.48		mg/Kg	20	3/8/2018 5:32:55 PM	36891
Toluene	3.7	0.96		mg/Kg	20	3/8/2018 5:32:55 PM	36891
Ethylbenzene	6.1	0.96		mg/Kg	20	3/8/2018 5:32:55 PM	36891
Xylenes, Total	63	1.9		mg/Kg	20	3/8/2018 5:32:55 PM	36891
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	20	3/8/2018 5:32:55 PM	36891

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: L2-1
Project: Emma 8
Collection Date: 3/5/2018 10:09:00 AM
Lab ID: 1803363-004
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	4300	150		mg/Kg	100	3/13/2018 7:23:57 PM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	4300	46		mg/Kg	5	3/13/2018 10:33:56 AM	36911
Motor Oil Range Organics (MRO)	260	230		mg/Kg	5	3/13/2018 10:33:56 AM	36911
Surr: DNOP	109	70-130		%Rec	5	3/13/2018 10:33:56 AM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1600	94		mg/Kg	20	3/8/2018 6:19:30 PM	36891
Surr: BFB	505	15-316	S	%Rec	20	3/8/2018 6:19:30 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.47		mg/Kg	20	3/8/2018 6:19:30 PM	36891
Toluene	5.6	0.94		mg/Kg	20	3/8/2018 6:19:30 PM	36891
Ethylbenzene	8.0	0.94		mg/Kg	20	3/8/2018 6:19:30 PM	36891
Xylenes, Total	82	1.9		mg/Kg	20	3/8/2018 6:19:30 PM	36891
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	20	3/8/2018 6:19:30 PM	36891

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: L2-1.5
Project: Emma 8
Collection Date: 3/5/2018 10:13:00 AM
Lab ID: 1803363-005
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	480	30		mg/Kg	20	3/13/2018 4:41:45 AM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	290	9.4		mg/Kg	1	3/9/2018 8:49:51 PM	36911
Motor Oil Range Organics (MRO)	52	47		mg/Kg	1	3/9/2018 8:49:51 PM	36911
Surr: DNOP	91.2	70-130		%Rec	1	3/9/2018 8:49:51 PM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	17	5.0		mg/Kg	1	3/8/2018 7:06:01 PM	36891
Surr: BFB	204	15-316		%Rec	1	3/8/2018 7:06:01 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	3/8/2018 7:06:01 PM	36891
Toluene	ND	0.050		mg/Kg	1	3/8/2018 7:06:01 PM	36891
Ethylbenzene	ND	0.050		mg/Kg	1	3/8/2018 7:06:01 PM	36891
Xylenes, Total	0.40	0.10		mg/Kg	1	3/8/2018 7:06:01 PM	36891
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	3/8/2018 7:06:01 PM	36891

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: L3-0.5
Project: Emma 8
Collection Date: 3/5/2018 9:50:00 AM
Lab ID: 1803363-006
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	5100	300		mg/Kg	200	3/13/2018 7:36:22 PM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	3800	50		mg/Kg	5	3/13/2018 11:30:02 AM	36911
Motor Oil Range Organics (MRO)	300	250		mg/Kg	5	3/13/2018 11:30:02 AM	36911
Surr: DNOP	108	70-130		%Rec	5	3/13/2018 11:30:02 AM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	560	48		mg/Kg	10	3/8/2018 7:52:50 PM	36891
Surr: BFB	453	15-316	S	%Rec	10	3/8/2018 7:52:50 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.24		mg/Kg	10	3/8/2018 7:52:50 PM	36891
Toluene	0.68	0.48		mg/Kg	10	3/8/2018 7:52:50 PM	36891
Ethylbenzene	1.9	0.48		mg/Kg	10	3/8/2018 7:52:50 PM	36891
Xylenes, Total	19	0.97		mg/Kg	10	3/8/2018 7:52:50 PM	36891
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	10	3/8/2018 7:52:50 PM	36891

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: L3-1
Project: Emma 8
Collection Date: 3/5/2018 10:00:00 AM
Lab ID: 1803363-007
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1800	75		mg/Kg	50	3/13/2018 7:48:47 PM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	1400	20		mg/Kg	2	3/12/2018 1:11:58 PM	36911
Motor Oil Range Organics (MRO)	100	99		mg/Kg	2	3/12/2018 1:11:58 PM	36911
Surr: DNOP	93.6	70-130		%Rec	2	3/12/2018 1:11:58 PM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	340	25		mg/Kg	5	3/8/2018 8:39:39 PM	36891
Surr: BFB	552	15-316	S	%Rec	5	3/8/2018 8:39:39 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.12		mg/Kg	5	3/8/2018 8:39:39 PM	36891
Toluene	0.26	0.25		mg/Kg	5	3/8/2018 8:39:39 PM	36891
Ethylbenzene	ND	0.25		mg/Kg	5	3/8/2018 8:39:39 PM	36891
Xylenes, Total	8.0	0.50		mg/Kg	5	3/8/2018 8:39:39 PM	36891
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	5	3/8/2018 8:39:39 PM	36891

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: SP1
Project: Emma 8
Collection Date: 3/5/2018 10:30:00 AM
Lab ID: 1803363-008
Matrix: SOIL
Received Date: 3/7/2018 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1500	75		mg/Kg	50	3/13/2018 8:01:12 PM	36973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	4200	48		mg/Kg	5	3/13/2018 12:25:07 PM	36911
Motor Oil Range Organics (MRO)	390	240		mg/Kg	5	3/13/2018 12:25:07 PM	36911
Surr: DNOP	107	70-130		%Rec	5	3/13/2018 12:25:07 PM	36911
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	970	49		mg/Kg	10	3/8/2018 9:26:25 PM	36891
Surr: BFB	566	15-316	S	%Rec	10	3/8/2018 9:26:25 PM	36891
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.24		mg/Kg	10	3/8/2018 9:26:25 PM	36891
Toluene	3.3	0.49		mg/Kg	10	3/8/2018 9:26:25 PM	36891
Ethylbenzene	4.8	0.49		mg/Kg	10	3/8/2018 9:26:25 PM	36891
Xylenes, Total	50	0.97		mg/Kg	10	3/8/2018 9:26:25 PM	36891
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	10	3/8/2018 9:26:25 PM	36891

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#: **1803363**

14-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**MB-36973**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**36973**	RunNo:	**49736**					
Prep Date:	**3/12/2018**	Analysis Date:	**3/13/2018**	SeqNo:	**1608868**	Units:	**mg/Kg**			

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

Sample ID	**LCS-36973**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**36973**	RunNo:	**49736**					
Prep Date:	**3/12/2018**	Analysis Date:	**3/13/2018**	SeqNo:	**1608869**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	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#: **1803363**

14-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**LCS-36911**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**36911**		RunNo:	**49665**				
Prep Date:	**3/8/2018**	Analysis Date:	**3/9/2018**		SeqNo:	**1606616**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.8	70	130			
Surr: DNOP	4.0		5.000		80.3	70	130			

Sample ID	**MB-36911**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**36911**		RunNo:	**49665**				
Prep Date:	**3/8/2018**	Analysis Date:	**3/9/2018**		SeqNo:	**1606617**	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	8.9		10.00		88.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1803363**

14-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**MB-36891**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**36891**	RunNo:	**49653**					
Prep Date:	**3/7/2018**	Analysis Date:	**3/8/2018**	SeqNo:	**1605661**	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	970		1000		96.5	15	316			

Sample ID	**LCS-36891**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**36891**	RunNo:	**49653**					
Prep Date:	**3/7/2018**	Analysis Date:	**3/8/2018**	SeqNo:	**1605662**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	75.9	131			
Surr: BFB	1100		1000		113	15	316			

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#: **1803363**

14-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**MB-36891**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**36891**	RunNo:	**49653**					
Prep Date:	**3/7/2018**	Analysis Date:	**3/8/2018**	SeqNo:	**1605685**	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		94.6	80	120			

Sample ID	**LCS-36891**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**36891**	RunNo:	**49653**					
Prep Date:	**3/7/2018**	Analysis Date:	**3/8/2018**	SeqNo:	**1605686**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	77.3	128			
Toluene	1.0	0.050	1.000	0	103	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	101	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	104	81.6	129			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	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: 1803363 | RcptNo: 1

Received By: **Mandy Woods** 3/7/2018 9:50:00 AM

Completed By: **Erin Melendrez** 3/7/2018 11:06:05 AM

Reviewed By: ERE 03/07/18

Labeled By DDS

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: _____

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	1.4	Good	Yes			

Chain-of-Custody Record

Client: SMA - C'bad

Mailing Address:

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day turn
☐ Standard ☐ Rush

Project Name: Emma 8"

Project #:

Project Manager: Austin Wegant

Sampler: Heather Patterson

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.4° - 1.0°(CF) = 1.4°

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. 1803363	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)
3/5/18	9:55	Soil	L1-0.5'	402		-001	X		X					X				
	10:05		L1-1'			-002	X		X					X				
	10:04		L2-0.5'			-003	X		X					X				
	10:09		L2-1'			-004	X		X					X				
	10:13		L2-1.5'			-005	X		X					X				
	9:50		L3-0.5'			-006	X		X					X				
	10:00		L3-1'			-007	X		X					X				
	10:30		SB1			-008	X		X					X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/6/18	1500			3/6/18	1500
3/6/18	1900		Courier 3/7	3/7/18	0950

Remarks: Lucid

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

March 29, 2018

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

RE: Emma 8" OrderNo.: 1803670

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/13/2018 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: SW1
Project: Emma 8"
Collection Date: 3/8/2018 3:05:00 PM
Lab ID: 1803670-001
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	6300	300		mg/Kg	200	3/27/2018 5:53:07 PM	37209
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	140	9.1		mg/Kg	1	3/15/2018 2:22:24 PM	37027
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	3/15/2018 2:22:24 PM	37027
Surr: DNOP	121	70-130		%Rec	1	3/15/2018 2:22:24 PM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	8.7	4.6		mg/Kg	1	3/15/2018 12:21:48 AM	36995
Surr: BFB	157	15-316		%Rec	1	3/15/2018 12:21:48 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/15/2018 12:21:48 AM	36995
Toluene	ND	0.046		mg/Kg	1	3/15/2018 12:21:48 AM	36995
Ethylbenzene	ND	0.046		mg/Kg	1	3/15/2018 12:21:48 AM	36995
Xylenes, Total	0.23	0.092		mg/Kg	1	3/15/2018 12:21:48 AM	36995
Surr: 4-Bromofluorobenzene	120	80-120	S	%Rec	1	3/15/2018 12:21:48 AM	36995

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: SW2
Project: Emma 8"
Collection Date: 3/8/2018 3:11:00 PM
Lab ID: 1803670-002
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	3/23/2018 5:23:40 PM	37209
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	28	10		mg/Kg	1	3/15/2018 2:46:50 PM	37027
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/15/2018 2:46:50 PM	37027
Surr: DNOP	101	70-130		%Rec	1	3/15/2018 2:46:50 PM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	63	9.6		mg/Kg	2	3/15/2018 12:45:18 AM	36995
Surr: BFB	182	15-316		%Rec	2	3/15/2018 12:45:18 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.23	0.048		mg/Kg	2	3/15/2018 12:45:18 AM	36995
Toluene	1.7	0.096		mg/Kg	2	3/15/2018 12:45:18 AM	36995
Ethylbenzene	0.27	0.096		mg/Kg	2	3/15/2018 12:45:18 AM	36995
Xylenes, Total	2.4	0.19		mg/Kg	2	3/15/2018 12:45:18 AM	36995
Surr: 4-Bromofluorobenzene	130	80-120	S	%Rec	2	3/15/2018 12:45:18 AM	36995

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: SW3
Project: Emma 8"
Collection Date: 3/8/2018 3:13:00 PM
Lab ID: 1803670-003
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	23000	750		mg/Kg	500	3/27/2018 6:05:32 PM	37217
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	3100	90		mg/Kg	10	3/15/2018 3:11:23 PM	37027
Motor Oil Range Organics (MRO)	520	450		mg/Kg	10	3/15/2018 3:11:23 PM	37027
Surr: DNOP	0	70-130	S	%Rec	10	3/15/2018 3:11:23 PM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	140	10		mg/Kg	2	3/15/2018 1:08:38 AM	36995
Surr: BFB	437	15-316	S	%Rec	2	3/15/2018 1:08:38 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.050		mg/Kg	2	3/15/2018 1:08:38 AM	36995
Toluene	0.61	0.10		mg/Kg	2	3/15/2018 1:08:38 AM	36995
Ethylbenzene	0.45	0.10		mg/Kg	2	3/15/2018 1:08:38 AM	36995
Xylenes, Total	4.8	0.20		mg/Kg	2	3/15/2018 1:08:38 AM	36995
Surr: 4-Bromofluorobenzene	142	80-120	S	%Rec	2	3/15/2018 1:08:38 AM	36995

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: SW4
Project: Emma 8"
Collection Date: 3/8/2018 3:15:00 PM
Lab ID: 1803670-004
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SRM**	
Chloride	ND	30		mg/Kg	20	3/25/2018 10:58:15 AM	37217
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	3/15/2018 3:35:50 PM	37027
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	3/15/2018 3:35:50 PM	37027
Surr: DNOP	106	70-130		%Rec	1	3/15/2018 3:35:50 PM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/14/2018 9:54:12 AM	36995
Surr: BFB	96.1	15-316		%Rec	1	3/14/2018 9:54:12 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/15/2018 1:32:03 AM	36995
Toluene	ND	0.047		mg/Kg	1	3/15/2018 1:32:03 AM	36995
Ethylbenzene	ND	0.047		mg/Kg	1	3/15/2018 1:32:03 AM	36995
Xylenes, Total	ND	0.095		mg/Kg	1	3/15/2018 1:32:03 AM	36995
Surr: 4-Bromofluorobenzene	129	80-120	S	%Rec	1	3/15/2018 1:32:03 AM	36995

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: BH1-10
Project: Emma 8"
Collection Date: 3/8/2018 3:17:00 PM
Lab ID: 1803670-005
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1600	75		mg/Kg	50	3/27/2018 6:42:45 PM	37217
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	930	20		mg/Kg	2	3/16/2018 8:42:48 AM	37027
Motor Oil Range Organics (MRO)	130	100		mg/Kg	2	3/16/2018 8:42:48 AM	37027
Surr: DNOP	106	70-130		%Rec	2	3/16/2018 8:42:48 AM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	77	9.4		mg/Kg	2	3/15/2018 1:55:16 AM	36995
Surr: BFB	365	15-316	S	%Rec	2	3/15/2018 1:55:16 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	2	3/15/2018 1:55:16 AM	36995
Toluene	0.37	0.094		mg/Kg	2	3/15/2018 1:55:16 AM	36995
Ethylbenzene	0.17	0.094		mg/Kg	2	3/15/2018 1:55:16 AM	36995
Xylenes, Total	1.3	0.19		mg/Kg	2	3/15/2018 1:55:16 AM	36995
Surr: 4-Bromofluorobenzene	142	80-120	S	%Rec	2	3/15/2018 1:55:16 AM	36995

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: BH2-9
Project: Emma 8"
Collection Date: 3/8/2018 3:21:00 PM
Lab ID: 1803670-006
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	5600	300		mg/Kg	200	3/27/2018 6:55:09 PM	37217
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	1600	18		mg/Kg	2	3/16/2018 9:31:53 AM	37027
Motor Oil Range Organics (MRO)	230	92		mg/Kg	2	3/16/2018 9:31:53 AM	37027
Surr: DNOP	119	70-130		%Rec	2	3/16/2018 9:31:53 AM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	120	9.2		mg/Kg	2	3/15/2018 2:18:41 AM	36995
Surr: BFB	424	15-316	S	%Rec	2	3/15/2018 2:18:41 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.046		mg/Kg	2	3/15/2018 2:18:41 AM	36995
Toluene	0.41	0.092		mg/Kg	2	3/15/2018 2:18:41 AM	36995
Ethylbenzene	0.30	0.092		mg/Kg	2	3/15/2018 2:18:41 AM	36995
Xylenes, Total	2.4	0.18		mg/Kg	2	3/15/2018 2:18:41 AM	36995
Surr: 4-Bromofluorobenzene	147	80-120	S	%Rec	2	3/15/2018 2:18:41 AM	36995

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: BH3-10
Project: Emma 8"
Collection Date: 3/8/2018 3:25:00 PM
Lab ID: 1803670-007
Matrix: SOIL
Received Date: 3/13/2018 9:40:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1900	75		mg/Kg	50	3/27/2018 7:07:34 PM	37217
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	2000	38		mg/Kg	4	3/16/2018 10:20:30 AM	37027
Motor Oil Range Organics (MRO)	260	190		mg/Kg	4	3/16/2018 10:20:30 AM	37027
Surr: DNOP	112	70-130		%Rec	4	3/16/2018 10:20:30 AM	37027
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	140	9.4		mg/Kg	2	3/15/2018 2:42:09 AM	36995
Surr: BFB	566	15-316	S	%Rec	2	3/15/2018 2:42:09 AM	36995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.047		mg/Kg	2	3/15/2018 2:42:09 AM	36995
Toluene	0.61	0.094		mg/Kg	2	3/15/2018 2:42:09 AM	36995
Ethylbenzene	0.33	0.094		mg/Kg	2	3/15/2018 2:42:09 AM	36995
Xylenes, Total	3.2	0.19		mg/Kg	2	3/15/2018 2:42:09 AM	36995
Surr: 4-Bromofluorobenzene	150	80-120	S	%Rec	2	3/15/2018 2:42:09 AM	36995

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#: **1803670**

29-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8"

Sample ID	**MB-37209**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37209**	RunNo:	**50034**					
Prep Date:	**3/23/2018**	Analysis Date:	**3/23/2018**	SeqNo:	**1620548**	Units:	**mg/Kg**			

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

Sample ID	**LCS-37209**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37209**	RunNo:	**50034**					
Prep Date:	**3/23/2018**	Analysis Date:	**3/23/2018**	SeqNo:	**1620549**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.9	90	110			

Sample ID	**MB-37217**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37217**	RunNo:	**50064**					
Prep Date:	**3/23/2018**	Analysis Date:	**3/25/2018**	SeqNo:	**1621314**	Units:	**mg/Kg**			

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

Sample ID	**LCS-37217**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37217**	RunNo:	**50064**					
Prep Date:	**3/23/2018**	Analysis Date:	**3/25/2018**	SeqNo:	**1621315**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.3	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#: **1803670**

29-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8"

Sample ID	**LCS-37027**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**37027**		RunNo:	**49816**				
Prep Date:	**3/14/2018**	Analysis Date:	**3/15/2018**		SeqNo:	**1612106**	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	101	70	130			
Surr: DNOP	5.3		5.000		107	70	130			

Sample ID	**MB-37027**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**37027**		RunNo:	**49816**				
Prep Date:	**3/14/2018**	Analysis Date:	**3/15/2018**		SeqNo:	**1612107**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		111	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1803670**

29-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8"

Sample ID	**MB-36995**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**36995**	RunNo:	**49775**					
Prep Date:	**3/13/2018**	Analysis Date:	**3/14/2018**	SeqNo:	**1611145**	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		95.4	15	316			

Sample ID	**LCS-36995**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**36995**	RunNo:	**49775**					
Prep Date:	**3/13/2018**	Analysis Date:	**3/14/2018**	SeqNo:	**1611146**	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	95.2	75.9	131			
Surr: BFB	1000		1000		102	15	316			

Sample ID	**RB**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**G49776**	RunNo:	**49776**					
Prep Date:		Analysis Date:	**3/14/2018**	SeqNo:	**1611239**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		95.7	15	316			

Sample ID	**2.5UG GRO LCS**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**G49776**	RunNo:	**49776**					
Prep Date:		Analysis Date:	**3/14/2018**	SeqNo:	**1611240**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		114	15	316			

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#: **1803670**

29-Mar-18

Client: Souder, Miller & Associates

Project: Emma 8"

Sample ID	**MB-36995**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**36995**	RunNo:	**49775**					
Prep Date:	**3/13/2018**	Analysis Date:	**3/14/2018**	SeqNo:	**1611192**	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	0.92		1.000		92.1	80	120			

Sample ID	**LCS-36995**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**36995**	RunNo:	**49775**					
Prep Date:	**3/13/2018**	Analysis Date:	**3/14/2018**	SeqNo:	**1611193**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	77.3	128			
Toluene	1.0	0.050	1.000	0	103	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	102	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	104	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.1	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

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: 1803670 | RcptNo: 1

Received By: **Mandy Woods** 3/13/2018 9:40:00 AM

Completed By: **Erin Melendrez** 3/13/2018 10:32:20 AM

Reviewed By: DDS 3/13/18 MW 3/13/18

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 ☐	

# 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	3.6	Good	Yes			

Chain-of-Custody Record

Client: SMA - C'bad

Mailing Address:

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day turn
☐ Standard ☐ Rush

Project Name: Emma 8"

Project #:

Project Manager: Austin Weygant

Sampler: Heather Patterson

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.1°

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. 1803670	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)	6081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
3/8/18	3:05	Soil	SW1	402		-001	X		X					X				
	3:11		SW2			-002	X		X					X				
	3:13		SW3			-003	X		X					X				
	3:15		SW4			-004	X		X					X				
	3:17		BH1 -10			-005	X		X					X				
	3:21		BH2 -9			-006	X		X					X				
	3:25		BH3 -10			-007	X		X					X				

Date	Time	Relinquished by:	Received by:	Date	Time
3/12/18	1400			3/12/18	1400
3/12/18	1900		3/13/18 courier	3/13/18	0940

Remarks: Lucid

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

April 16, 2018

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

RE: Emma 8 OrderNo.: 1804322

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/5/2018 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L3-2
Project: Emma 8
Collection Date: 4/3/2018 10:37:00 AM
Lab ID: 1804322-001 **Matrix:** SOIL **Received Date:** 4/5/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	56	30		mg/Kg	20	4/10/2018 8:37:05 PM	37522
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/10/2018 9:13:49 PM	37482
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/10/2018 9:13:49 PM	37482
Surr: DNOP	75.0	70-130		%Rec	1	4/10/2018 9:13:49 PM	37482
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/9/2018 8:41:20 PM	37472
Surr: BFB	93.5	15-316		%Rec	1	4/9/2018 8:41:20 PM	37472
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	4/9/2018 8:41:20 PM	37472
Toluene	ND	0.047		mg/Kg	1	4/9/2018 8:41:20 PM	37472
Ethylbenzene	ND	0.047		mg/Kg	1	4/9/2018 8:41:20 PM	37472
Xylenes, Total	ND	0.094		mg/Kg	1	4/9/2018 8:41:20 PM	37472
Surr: 4-Bromofluorobenzene	86.8	80-120		%Rec	1	4/9/2018 8:41:20 PM	37472

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: SW1
Project: Emma 8
Collection Date: 4/3/2018 10:54:00 AM
Lab ID: 1804322-002
Matrix: SOIL
Received Date: 4/5/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	640	30		mg/Kg	20	4/10/2018 9:39:06 PM	37522

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: BH3-10.5
Project: Emma 8
Collection Date: 4/3/2018 11:11:00 AM
Lab ID: 1804322-003 **Matrix:** SOIL **Received Date:** 4/5/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	270	30		mg/Kg	20	4/10/2018 9:51:30 PM	37522

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: SW3
Project: Emma 8
Collection Date: 4/3/2018 11:33:00 AM
Lab ID: 1804322-004
Matrix: SOIL
Received Date: 4/5/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/10/2018 10:03:54 PM	37522

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: BH2-9.5
Project: Emma 8
Collection Date: 4/3/2018 11:57:00 AM
Lab ID: 1804322-005 **Matrix:** SOIL **Received Date:** 4/5/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1800	75		mg/Kg	50	4/12/2018 3:32:48 PM	37522

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: BH1-11
Project: Emma 8
Collection Date: 4/3/2018 12:11:00 PM
Lab ID: 1804322-006
Matrix: SOIL
Received Date: 4/5/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	4/10/2018 10:28:43 PM	37522

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#: **1804322**

16-Apr-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**MB-37522**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**37522**	RunNo:	**50455**					
Prep Date:	**4/10/2018**	Analysis Date:	**4/10/2018**	SeqNo:	**1636135**	Units:	**mg/Kg**			

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

Sample ID	**LCS-37522**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**37522**	RunNo:	**50455**					
Prep Date:	**4/10/2018**	Analysis Date:	**4/10/2018**	SeqNo:	**1636136**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.4	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#: **1804322**

16-Apr-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**LCS-37482**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**37482**		RunNo:	**50425**				
Prep Date:	**4/9/2018**	Analysis Date:	**4/10/2018**		SeqNo:	**1635884**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.8	70	130			
Surr: DNOP	4.7		5.000		93.1	70	130			

Sample ID	**MB-37482**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**37482**		RunNo:	**50425**				
Prep Date:	**4/9/2018**	Analysis Date:	**4/10/2018**		SeqNo:	**1635886**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1804322**

16-Apr-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**MB-37472**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**37472**	RunNo:	**50404**					
Prep Date:	**4/6/2018**	Analysis Date:	**4/9/2018**	SeqNo:	**1634431**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.7	15	316			

Sample ID	**LCS-37472**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**37472**	RunNo:	**50404**					
Prep Date:	**4/6/2018**	Analysis Date:	**4/9/2018**	SeqNo:	**1634432**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	75.9	131			
Surr: BFB	1100		1000		106	15	316			

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#: **1804322**

16-Apr-18

Client: Souder, Miller & Associates

Project: Emma 8

Sample ID	**MB-37472**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**37472**	RunNo:	**50404**					
Prep Date:	**4/6/2018**	Analysis Date:	**4/9/2018**	SeqNo:	**1634466**	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	0.86		1.000		85.9	80	120			

Sample ID	**LCS-37472**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**37472**	RunNo:	**50404**					
Prep Date:	**4/6/2018**	Analysis Date:	**4/9/2018**	SeqNo:	**1634467**	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	94.3	77.3	128			
Toluene	0.93	0.050	1.000	0	92.8	79.2	125			
Ethylbenzene	0.91	0.050	1.000	0	91.2	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	93.0	81.6	129			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.6	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
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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: 1804322 RcptNo: 1

Received By: Erin Melendrez 4/5/2018 10:15:00 AM

Completed By: Ashley Gallegos 4/5/2018 3:42:43 PM

Reviewed By: MS 04/05/18

Labeled by: SRR 04/05/18

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 ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by:

SRR 04/05/18

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address:

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day turn
☒ Standard ☐ Rush

Project Name: Emma 8"

Project #:

Project Manager: Austin Wegant

Sampler: Heather Patterson

On Ice: ☒ Yes ☐ No

Sample Temperature: 0.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1804329	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)
4/3/18	10:37	Soil	L3-2	4oz		-001	X		X					X				
	10:54		SW1			-002								X				
	11:11		BH3-10.5			-003								X				
	11:33		SW3			-004								X				
	11:57		BH2-9.5			-005								X				
	12:11		BH1-11			-006								X				

Date: 4/4/18 Time: 0900 Relinquished by:

Received by: Date: 4/4/18 Time: 0900

Date: 4/4/18 Time: 1900 Relinquished by:

Received by: courier 4/5/18 ENM Date: 4/5/18 Time: 1015

Remarks: Lucid

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.