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

March 14, 2018

#5E26784-BG7

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

SUBJECT: SOIL REMEDIATION WORK PLAN FOR THE INCIDENT AT THE NASH UNIT #005, EDDY COUNTY, NEW MEXICO

Dear Mr. Bratcher:

On behalf of XTO Energy Inc (XTO), Souder, Miller & Associates (SMA) has prepared this WORK PLAN that describes the assessment, initial delineation and proposed remediation for a release associated with the Nash Unit #005. The site is in UNIT I, SECTION 13, TOWNSHIP 23S, RANGE 29E, NMPM, Eddy County, New Mexico, on Federal land. Figure 1 illustrates the vicinity and location of the site. Table 1 summarizes the release information

Table 1.

Table 1: Release information and Site Ranking	
Name	Nash Unit #005
Company	XTO Energy Inc
Incident Number	2RP-4598
API Number	30-015-21800
Location	32.3040924, -103.930748
Estimated Date of Release	1/17/2018
Date Reported to NMOCD	2/1/2018
Land Owner	BLM
Reported To	NMOCD District II
Source of Release	Poly flowline
Released Material	Produced Water/Oil
Released Volume	12 bbl
Recovered Volume	2 bbl
Net Release	10 bbl
Nearest Waterway	Laguna Salado is approximately 3850 feet west of location
Depth to Groundwater	Estimated to be 37 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	20
SMA Response Dates	1/22/2018, 2/8/2018

1.0 Background

A leak formed on the poly line at the point where is connects to the steel line that comes off the well head. The release flowed west in a narrow path approximately 300 feet long, beginning from the steel line and ending in the pasture on the west side.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 9.5 miles east of Loving, New Mexico at an elevation of approximately 3,015 feet above sea level. SMA retained an outside engineering firm to confirm depth to groundwater was less than 50 feet bgs. It was concluded that groundwater is estimated to be 37 feet below ground surface (bgs).

Recommended Remediation Action Levels (RRALs) were determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). 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	20
50' to 99' = 10	
>100' = 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	**20**

3.0 Release Characterization

On January 22, 2018, SMA field personnel assessed the release area. Soil samples were field-screened using an electrical conductivity meter (EC). Several sample locations were augured by hand to a maximum depth of 1 foot bgs. Samples were collected to characterize the release and 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 analysis for MRO, DRO, and GRO by EPA Method 8015D, BTEX by EPA Method 8021, and Chlorides by EPA Method 300.

Sample locations are depicted on Figure 2. Field screening and laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

4.0 Proposed Soil Remediation Work Plan

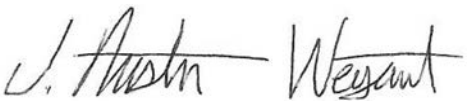
SMA proposes to excavate sample location L1 to 2 feet bgs, leaving a 3-foot buffer for the surface steel line near the well head. Sample location L2 and L3 will be excavated 4 feet bgs, and a bentonite impregnated liner will be placed. L4 will be excavated 1-foot bgs, and the pooling area of L5 will be excavated to at least 5 feet bgs and will be extended until the petroflag unit indicates TPH levels have been met. A bottom hole laboratory confirmation sample will be collected from L5 to ensure RRAL's have been met. SMA will continuously guide the excavation activities by collecting soil samples for field screening with a mobile EC unit (EPA 4500). Contaminated soils will be removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil will be transported for proper disposal at an NMOCD permitted disposal facility. Closure samples will be collected at the final depth of excavation and from the sidewalls. Upon confirmation of remediation, SMA will submit a closure report to NMOCD.

5.0 Scope and Limitations

The scope of our services consisted of performing assessment sampling, verifying release stabilization, regulatory liaison, and preparing this work plan. Work will be 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:

R. Jay Vanlandingham
Senior Geoscientist

ATTACHMENTS:

Figures:

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

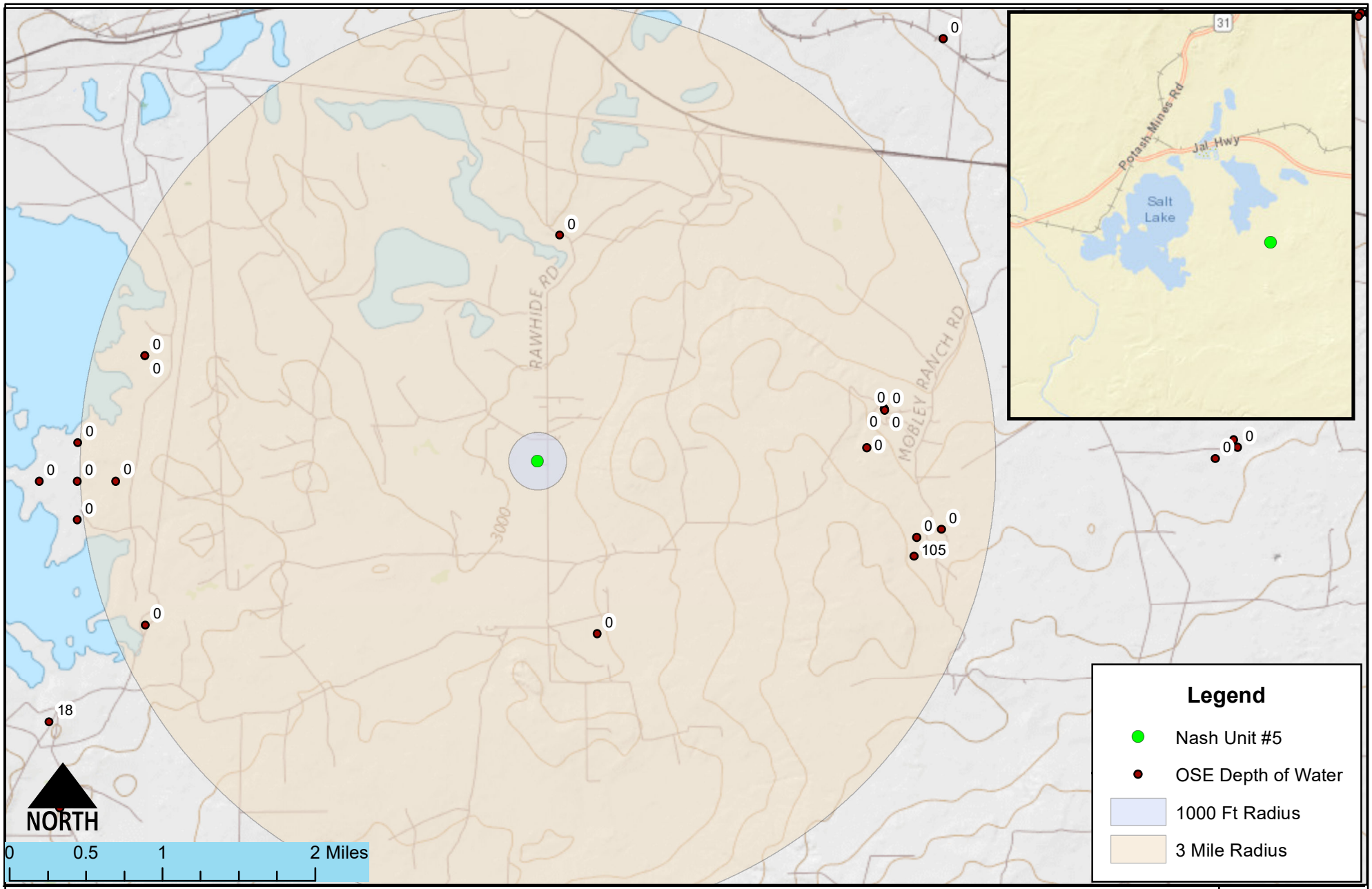
Tables:

Table 3: Summary of Sample Results

Appendices:

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

FIGURE 1
VICINITY AND NMOSE DATA MAP



Vicinity and Well Head Protection Map
Nash Unit #5 - XTO
S 13-T23S-R29E, New Mexico

Figure 1

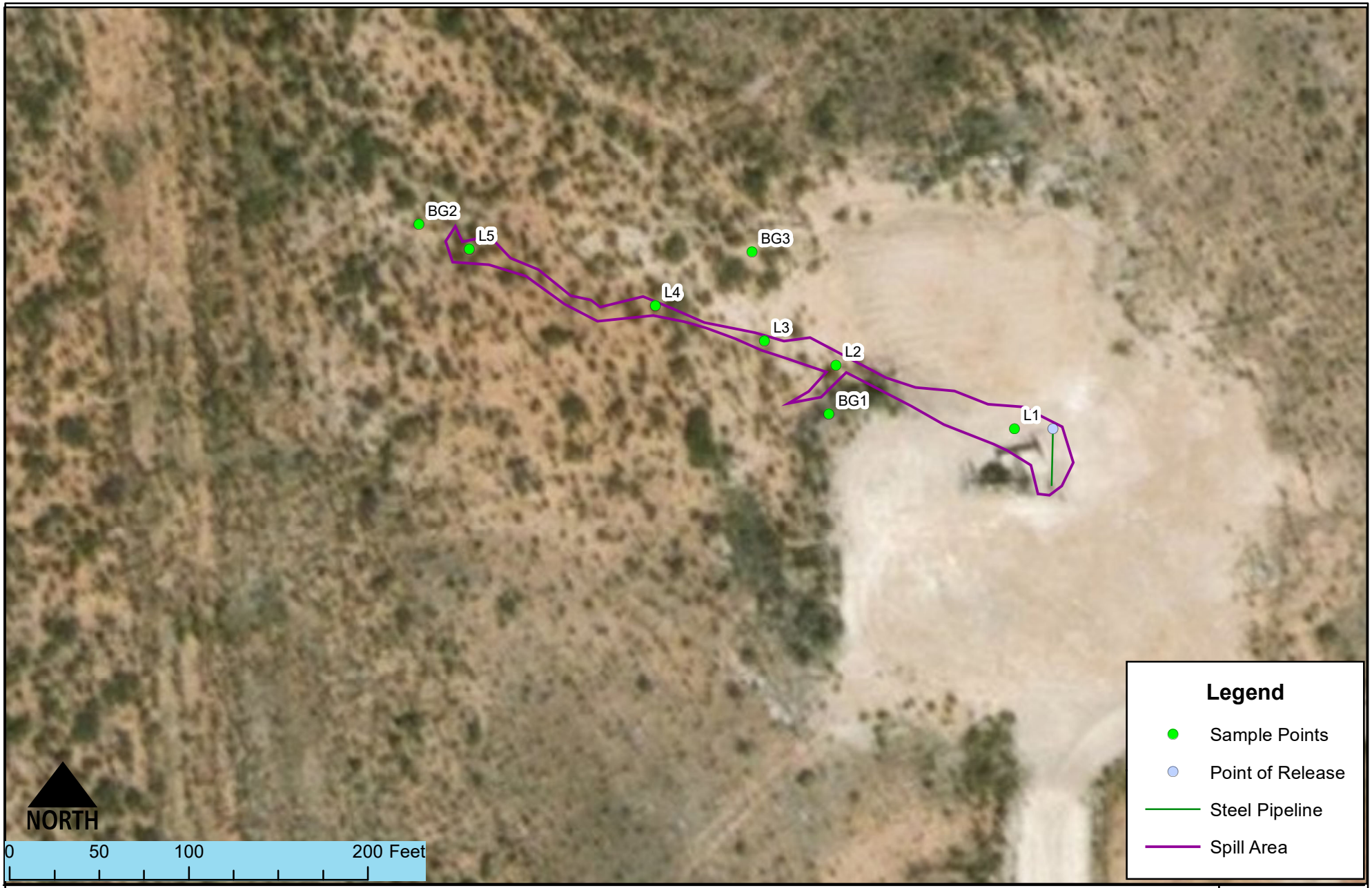
Date Saved: 1/24/2018

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

Drawn Heather Patterson
Checked
Approved

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

FIGURE 2
SITE AND SAMPLE LOCATION MAP



Site and Sample Location Map
Nash Unit #5 - XTO
S 13-T23S-R29E, New Mexico

Figure 2

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

Date Saved: 3/16/2018

Drawn Heather Patterson
Checked
Approved

SMA
201 South Halaguena Street
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TABLE 3
SUMMARY SAMPLE RESULTS

Nash Unit #5

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 20				50 mg/Kg	10 mg/Kg				100 mg/Kg	
L1	1/22/2018	0.5	excavate	<0.096	<0.024	<4.8	540	360	**900**	8600
	1/22/2018	1	excavate	<0.093	<0.023	<4.6	200	150	**350**	4700
	2/8/2018	2	excavate	--	--	<5.0	20	<49	20	3800
	2/8/2018	3	in-situ	--	--	--	--	--	--	100
L2	1/22/2018	0.5	excavate	2.24	<0.024	53	1500	860	**2413**	4200
	1/22/2018	1	excavate	0.396	<0.023	11	400	920	**1331**	1600
	2/8/2018	2	excavate	--	--	<4.8	67	110	**177**	1200
	2/8/2018	4	excavate	--	--	<4.8	17	<50	17	1900
	2/8/2018	6	in-situ	--	--	--	--	--	--	1900
	2/8/2018	8	in-situ	--	--	--	--	--	--	1100
	2/8/2018	10	in-situ	--	--	--	--	--	--	480
L3	1/22/2018	0.5	excavate	0.85	<0.023	17	100	240	**357**	1400
	1/22/2018	1	excavate	--	--	--	--	--	--	1200
	2/8/2018	2	excavate	--	--	<4.9	<9.7	<49	<63.6	1700
	2/8/2018	4	excavate	--	--	--	--	--	--	1600
	2/8/2018	6	in-situ	--	--	--	--	--	--	1800
	2/8/2018	8	in-situ	--	--	--	--	--	--	1100
	2/8/2018	10	in-situ	--	--	--	--	--	--	600
	2/8/2018	12	in-situ	--	--	--	--	--	--	1200
L4	1/22/2018	1	excavate	--	--	--	--	--	--	1200
	2/8/2018	2	in-situ	<0.224	<0.025	<5.0	47	<49	47	290
L5	1/22/2018	0.5	excavate	**144**	<1.2	2900	35000	14000	**51900**	35
	1/22/2018	1	excavate	**64.3**	<0.49	1300	11000	4000	**16300**	67
	2/8/2018	2	excavate	<0.219	<0.024	<4.9	<9.6	<48	<62.5	--
	2/8/2018	3	excavate	--	--	290	4700	2000	**6990**	--
	2/8/2018	5	excavate	--	--	37	580	250	**867**	--
	2/8/2018	6	excavate	--	--	5.2	370	190	**565.2**	--
BG1	1/22/2018	1	background	--	--	--	--	--	--	190
BG2	1/22/2018	1	background	--	--	--	--	--	--	<30
BG3	2/8/2018	5	background	--	--	--	--	--	--	480

orange line denotes liner placement to be excavated

exceeds RRAL's

"--" = Not Analyzed

APPENDIX A
FORM C141 INITIAL

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 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 April 3, 2017

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

Release Notification and Corrective Action

nAB1803634813

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy 5380	Contact: Amy Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No: 575-689-3380
Facility Name: Nash Unit #005	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No: 30-015-21800

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	13	23S	29E	2350	South	330	East	Eddy

Latitude 32.304197° **Longitude** -103.930741° NAD83

NATURE OF RELEASE

Type of Release Produced water and crude oil	Volume of Release 12 bbls	Volume Recovered 2 bbls
Source of Release Poly flow line	Date and Hour of Occurrence 1/17/2018, unknown	Date and Hour of Discovery 1/17/2018 10:45 AM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour: N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

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

Describe Cause of Problem and Remedial Action Taken.*
Leak formed on poly line near its connection to steel line due to ice plug. Well was shut in for repairs.

Describe Area Affected and Cleanup Action Taken.*
Fluids impacted well pad and spread approximately 300 feet into west pasture. Standing fluids were recovered. An environmental contractor has been retained to assist with remediation and delineation sampling was initiated.

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:	OIL CONSERVATION DIVISION
Printed Name: Amy C. Ruth	Approved by Environmental Specialist:
Title: Environmental Coordinator	Approval Date: 2/5/18 Expiration Date: N/A
E-mail Address: Amy_Ruth@xtoenergy.com	Conditions of Approval: see attached Attached ☒ 2RP-4598
Date: 2/1/2018 Phone: 575-689-3380	

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **2/1/18** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4598 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 II office in Artesia on or before 3/1/18. 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	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02486	C	ED	3	2	3	19	23S	30E	601304	3572832*	1930	350		
C 04018 POD1	CUB	ED	2	2	1	21	23S	30E	604664	3573868	4081	380	179	201
C 03478 POD1	C	ED	3	2	1	21	23S	30E	604638	3573670	4098	230	105	125
C 02794		ED		4	3	10	23S	29E	596518	3575731*	4278	100		
C 02795		ED		4	3	10	23S	29E	596518	3575731*	4278	200		
C 02715		ED	4	1	3	15	23S	29E	596221	3574411*	4443	400		
C 02797		ED		2	3	22	23S	29E	596540	3572895*	4477	200		
C 02718		ED	4	4	2	16	23S	29E	595816	3574812*	4844	400		
C 02717		ED	4	2	4	16	23S	29E	595817	3574407*	4847	400		
C 02716		ED	4	4	4	16	23S	29E	595818	3574002*	4883	400		

Average Depth to Water: **142 feet**

Minimum Depth: **105 feet**

Maximum Depth: **179 feet**

Record Count: 10

UTMNAD83 Radius Search (in meters):

Easting (X): 600658 **Northing (Y):** 3574651.61 **Radius:** 5000

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

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

February 07, 2018

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

RE: Nash Unit 5 OrderNo.: 1801B19

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 10 sample(s) on 1/24/2018 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: Nash Unit 5
Collection Date: 1/22/2018 11:10:00 AM
Lab ID: 1801B19-001
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	8600	300		mg/Kg	200	1/30/2018 2:37:04 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	540	9.4		mg/Kg	1	1/28/2018 2:32:58 AM	36208
Motor Oil Range Organics (MRO)	360	47		mg/Kg	1	1/28/2018 2:32:58 AM	36208
Surr: DNOP	115	70-130		%Rec	1	1/28/2018 2:32:58 AM	36208
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/27/2018 2:13:39 AM	36205
Surr: BFB	98.5	15-316		%Rec	1	1/27/2018 2:13:39 AM	36205
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	1/27/2018 2:13:39 AM	36205
Benzene	ND	0.024		mg/Kg	1	1/27/2018 2:13:39 AM	36205
Toluene	ND	0.048		mg/Kg	1	1/27/2018 2:13:39 AM	36205
Ethylbenzene	ND	0.048		mg/Kg	1	1/27/2018 2:13:39 AM	36205
Xylenes, Total	ND	0.096		mg/Kg	1	1/27/2018 2:13:39 AM	36205
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	1/27/2018 2:13:39 AM	36205

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: Nash Unit 5
Collection Date: 1/22/2018 10:50:00 AM
Lab ID: 1801B19-002
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	4800	300		mg/Kg	200	1/30/2018 3:51:31 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	200	9.4		mg/Kg	1	1/28/2018 3:38:03 AM	36208
Motor Oil Range Organics (MRO)	150	47		mg/Kg	1	1/28/2018 3:38:03 AM	36208
Surr: DNOP	110	70-130		%Rec	1	1/28/2018 3:38:03 AM	36208
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/27/2018 3:47:30 AM	36205
Surr: BFB	92.9	15-316		%Rec	1	1/27/2018 3:47:30 AM	36205
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	1/27/2018 3:47:30 AM	36205
Benzene	ND	0.023		mg/Kg	1	1/27/2018 3:47:30 AM	36205
Toluene	ND	0.046		mg/Kg	1	1/27/2018 3:47:30 AM	36205
Ethylbenzene	ND	0.046		mg/Kg	1	1/27/2018 3:47:30 AM	36205
Xylenes, Total	ND	0.093		mg/Kg	1	1/27/2018 3:47:30 AM	36205
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/27/2018 3:47:30 AM	36205

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: Nash Unit 5
Collection Date: 1/22/2018 10:43:00 AM
Lab ID: 1801B19-003
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	4200	150		mg/Kg	100	1/30/2018 4:03:55 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	1500	100		mg/Kg	10	1/28/2018 4:43:13 AM	36208
Motor Oil Range Organics (MRO)	860	510		mg/Kg	10	1/28/2018 4:43:13 AM	36208
Surr: DNOP	0	70-130	S	%Rec	10	1/28/2018 4:43:13 AM	36208
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	53	4.7		mg/Kg	1	1/27/2018 4:10:55 AM	36205
Surr: BFB	379	15-316	S	%Rec	1	1/27/2018 4:10:55 AM	36205
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	1/27/2018 4:10:55 AM	36205
Benzene	ND	0.024		mg/Kg	1	1/27/2018 4:10:55 AM	36205
Toluene	0.16	0.047		mg/Kg	1	1/27/2018 4:10:55 AM	36205
Ethylbenzene	0.38	0.047		mg/Kg	1	1/27/2018 4:10:55 AM	36205
Xylenes, Total	1.7	0.095		mg/Kg	1	1/27/2018 4:10:55 AM	36205
Surr: 4-Bromofluorobenzene	136	80-120	S	%Rec	1	1/27/2018 4:10:55 AM	36205

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: Nash Unit 5
Collection Date: 1/22/2018 10:59:00 AM
Lab ID: 1801B19-004
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1600	75		mg/Kg	50	1/30/2018 4:16:19 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	400	95		mg/Kg	10	1/29/2018 10:58:59 AM	36208
Motor Oil Range Organics (MRO)	920	470		mg/Kg	10	1/29/2018 10:58:59 AM	36208
Surr: DNOP	0	70-130	S	%Rec	10	1/29/2018 10:58:59 AM	36208
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	11	4.6		mg/Kg	1	1/27/2018 4:34:25 AM	36205
Surr: BFB	142	15-316		%Rec	1	1/27/2018 4:34:25 AM	36205
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.091		mg/Kg	1	1/27/2018 4:34:25 AM	36205
Benzene	ND	0.023		mg/Kg	1	1/27/2018 4:34:25 AM	36205
Toluene	0.051	0.046		mg/Kg	1	1/27/2018 4:34:25 AM	36205
Ethylbenzene	0.065	0.046		mg/Kg	1	1/27/2018 4:34:25 AM	36205
Xylenes, Total	0.28	0.091		mg/Kg	1	1/27/2018 4:34:25 AM	36205
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	1	1/27/2018 4:34:25 AM	36205

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: Nash Unit 5
Collection Date: 1/22/2018 11:17:00 AM
Lab ID: 1801B19-005
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1400	75		mg/Kg	50	1/30/2018 4:28:43 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	100	9.1		mg/Kg	1	1/29/2018 11:47:27 AM	36208
Motor Oil Range Organics (MRO)	240	46		mg/Kg	1	1/29/2018 11:47:27 AM	36208
Surr: DNOP	92.8	70-130		%Rec	1	1/29/2018 11:47:27 AM	36208
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	17	4.6		mg/Kg	1	1/27/2018 4:57:53 AM	36205
Surr: BFB	147	15-316		%Rec	1	1/27/2018 4:57:53 AM	36205
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	1/27/2018 4:57:53 AM	36205
Benzene	ND	0.023		mg/Kg	1	1/27/2018 4:57:53 AM	36205
Toluene	0.18	0.046		mg/Kg	1	1/27/2018 4:57:53 AM	36205
Ethylbenzene	0.15	0.046		mg/Kg	1	1/27/2018 4:57:53 AM	36205
Xylenes, Total	0.52	0.093		mg/Kg	1	1/27/2018 4:57:53 AM	36205
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	1/27/2018 4:57:53 AM	36205

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: Nash Unit 5
Collection Date: 1/22/2018 11:20:00 AM
Lab ID: 1801B19-006
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1200	30		mg/Kg	20	1/30/2018 4:41:08 PM	36261

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L4-1'
Project: Nash Unit 5
Collection Date: 1/22/2018 11:22:00 AM
Lab ID: 1801B19-007
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1200	75		mg/Kg	50	1/30/2018 4:53:33 PM	36261

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-0.5'
Project: Nash Unit 5
Collection Date: 1/22/2018 11:10:00 AM
Lab ID: 1801B19-008
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	34	30		mg/Kg	20	1/30/2018 5:05:58 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	35000	990		mg/Kg	100	1/29/2018 12:35:57 PM	36208
Motor Oil Range Organics (MRO)	14000	4900		mg/Kg	100	1/29/2018 12:35:57 PM	36208
Surr: DNOP	0	70-130	S	%Rec	100	1/29/2018 12:35:57 PM	36208
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	2900	240		mg/Kg	50	1/26/2018 10:30:14 AM	36205
Surr: BFB	298	15-316		%Rec	50	1/26/2018 10:30:14 AM	36205
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	4.8		mg/Kg	50	1/26/2018 10:30:14 AM	36205
Benzene	ND	1.2		mg/Kg	50	1/26/2018 10:30:14 AM	36205
Toluene	20	2.4		mg/Kg	50	1/26/2018 10:30:14 AM	36205
Ethylbenzene	26	2.4		mg/Kg	50	1/26/2018 10:30:14 AM	36205
Xylenes, Total	98	4.8		mg/Kg	50	1/26/2018 10:30:14 AM	36205
Surr: 4-Bromofluorobenzene	116	80-120		%Rec	50	1/26/2018 10:30:14 AM	36205

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-1'
Project: Nash Unit 5
Collection Date: 1/22/2018 11:12:00 AM
Lab ID: 1801B19-009
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	67	30		mg/Kg	20	1/30/2018 5:18:23 PM	36261
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	11000	200		mg/Kg	20	2/6/2018 3:12:56 PM	36289
Motor Oil Range Organics (MRO)	4000	980		mg/Kg	20	2/6/2018 3:12:56 PM	36289
Surr: DNOP	0	70-130	S	%Rec	20	2/6/2018 3:12:56 PM	36289
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	1300	98	D	mg/Kg	20	2/1/2018 9:27:40 PM	36284
Surr: BFB	422	15-316	SD	%Rec	20	2/1/2018 9:27:40 PM	36284
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.49	D	mg/Kg	20	2/1/2018 9:27:40 PM	36284
Toluene	7.3	0.98	D	mg/Kg	20	2/1/2018 9:27:40 PM	36284
Ethylbenzene	12	0.98	D	mg/Kg	20	2/1/2018 9:27:40 PM	36284
Xylenes, Total	45	2.0	D	mg/Kg	20	2/1/2018 9:27:40 PM	36284
Surr: 4-Bromofluorobenzene	123	80-120	SD	%Rec	20	2/1/2018 9:27:40 PM	36284

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: BG 1-1'
Project: Nash Unit 5
Collection Date: 1/22/2018 11:07:00 AM
Lab ID: 1801B19-010
Matrix: SOIL
Received Date: 1/24/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	190	30		mg/Kg	20	1/30/2018 5:30:47 PM	36261

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#: **1801B19**

07-Feb-18

Client: Souder, Miller & Associates

Project: Nash Unit 5

Sample ID	**MB-36261**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**36261**	RunNo:	**48793**					
Prep Date:	**1/30/2018**	Analysis Date:	**1/30/2018**	SeqNo:	**1570157**	Units:	**mg/Kg**			

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

Sample ID	**LCS-36261**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**36261**	RunNo:	**48793**					
Prep Date:	**1/30/2018**	Analysis Date:	**1/30/2018**	SeqNo:	**1570158**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	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#: **1801B19**

07-Feb-18

Client: Souder, Miller & Associates

Project: Nash Unit 5

Sample ID	**LCS-36208**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**36208**		RunNo:	**48716**				
Prep Date:	**1/25/2018**	Analysis Date:	**1/26/2018**		SeqNo:	**1567286**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.4	70	130			
Surr: DNOP	4.1		5.000		81.8	70	130			

Sample ID	**MB-36208**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**36208**		RunNo:	**48716**				
Prep Date:	**1/25/2018**	Analysis Date:	**1/26/2018**		SeqNo:	**1567287**	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	8.8		10.00		88.4	70	130			

Sample ID	**LCS-36289**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**36289**		RunNo:	**48828**				
Prep Date:	**1/31/2018**	Analysis Date:	**2/1/2018**		SeqNo:	**1571276**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.1	70	130			
Surr: DNOP	4.6		5.000		92.7	70	130			

Sample ID	**MB-36289**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**36289**		RunNo:	**48828**				
Prep Date:	**1/31/2018**	Analysis Date:	**2/1/2018**		SeqNo:	**1571277**	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	8.7		10.00		87.1	70	130			

Sample ID	**LCS-36366**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**36366**		RunNo:	**48919**				
Prep Date:	**2/6/2018**	Analysis Date:	**2/6/2018**		SeqNo:	**1574281**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.9	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#: **1801B19**
07-Feb-18

Client: Souder, Miller & Associates
Project: Nash Unit 5

Sample ID	**MB-36366**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**36366**	RunNo:	**48919**					
Prep Date:	**2/6/2018**	Analysis Date:	**2/6/2018**	SeqNo:	**1574282**	Units:	**%Rec**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.4	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#: **1801B19**

07-Feb-18

Client: Souder, Miller & Associates

Project: Nash Unit 5

Sample ID	**MB-36205**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**36205**		RunNo:	**48738**				
Prep Date:	**1/25/2018**	Analysis Date:	**1/26/2018**		SeqNo:	**1567794**	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	830		1000		83.1	15	316			

Sample ID	**LCS-36205**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**36205**		RunNo:	**48738**				
Prep Date:	**1/25/2018**	Analysis Date:	**1/26/2018**		SeqNo:	**1567795**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	75.9	131			
Surr: BFB	1000		1000		102	15	316			

Sample ID	**LCS-36284**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**36284**		RunNo:	**48855**				
Prep Date:	**1/31/2018**	Analysis Date:	**2/1/2018**		SeqNo:	**1572275**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.4	75.9	131			
Surr: BFB	1100		1000		107	15	316			

Sample ID	**MB-36284**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**36284**		RunNo:	**48855**				
Prep Date:	**1/31/2018**	Analysis Date:	**2/1/2018**		SeqNo:	**1572276**	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	900		1000		89.6	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#: **1801B19**

07-Feb-18

Client: Souder, Miller & Associates

Project: Nash Unit 5

Sample ID	**MB-36205**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**36205**	RunNo:	**48738**					
Prep Date:	**1/25/2018**	Analysis Date:	**1/26/2018**	SeqNo:	**1567836**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.3	80	120			

Sample ID	**LCS-36205**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**36205**	RunNo:	**48738**					
Prep Date:	**1/25/2018**	Analysis Date:	**1/26/2018**	SeqNo:	**1567837**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.10	1.000	0	89.6	70.1	121			
Benzene	0.96	0.025	1.000	0	96.2	77.3	128			
Toluene	0.97	0.050	1.000	0	97.3	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	95.9	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	98.3	81.6	129			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	80	120			

Sample ID	**LCS-36284**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**36284**	RunNo:	**48855**					
Prep Date:	**1/31/2018**	Analysis Date:	**2/1/2018**	SeqNo:	**1572312**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	105	77.3	128			
Toluene	1.0	0.050	1.000	0	105	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	104	80.7	127			
Xylenes, Total	3.2	0.10	3.000	0	107	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	**MB-36284**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**36284**	RunNo:	**48855**					
Prep Date:	**1/31/2018**	Analysis Date:	**2/1/2018**	SeqNo:	**1572313**	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		94.7	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: 1801B19 RcptNo: 1

Received By: Isaiah Ortiz 1/24/2018 9:45:00 AM

Completed By: Erin Melendrez 1/24/2018 2:37:06 PM

Reviewed By: DDS 1/24/18

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	0.1	Good	Yes			

Chain-of-Custody Record

Client: SMA - carlsbad

Mailing Address:

Phone #: on file.

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush 5 day

Project Name: Nash Unit #5

Project #:

Project Manager: Austin Weyant

Sampler: MRS Hnip.

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1801BA	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)
1/22/18	11:10	soil	L1-0.5'	402.		-001	X		X					X								
	10:50		L1-1'			-002	X		X					X								
	10:43		L2-0.5'			-003	X		X					X								
	10:57		L2-1'			-004	X		X					X								
	11:17		L3-0.5'			-005	X		X					X								
	11:20		L3-1'			-006								X								
	11:22		L4-1'			-007								X								
	11:10		L5-0.5'			-008	X		X					X								
	11:12		L5-1'			-009	X		X	JC 1-31-18				X								
	11:07		BG1-1'			-010				per Heather Hankerson				Y								

Date:	Time:	Relinquished by:	Received by:	Date	Time
				1/23/18	0830
1/23/18	1900		Courier	1/24/18	945

Remarks: XTO

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

February 21, 2018

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

RE: Nash 5 OrderNo.: 1802746

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 16 sample(s) on 2/13/2018 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: L1-2
Project: Nash 5
Collection Date: 2/8/2018 9:19:00 AM
Lab ID: 1802746-001
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	3800	150		mg/Kg	100	2/19/2018 3:39:50 PM	36564
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	20	9.7		mg/Kg	1	2/14/2018 1:48:30 PM	36497
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/14/2018 1:48:30 PM	36497
Surr: DNOP	88.0	70-130		%Rec	1	2/14/2018 1:48:30 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/14/2018 7:14:41 PM	36511
Surr: BFB	92.2	15-316		%Rec	1	2/14/2018 7:14:41 PM	36511

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: L1-3
Project: Nash 5
Collection Date: 2/8/2018 9:27:00 AM
Lab ID: 1802746-002
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	100	30		mg/Kg	20	2/16/2018 1:44:24 PM	36564

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L2-2
Project: Nash 5
Collection Date: 2/8/2018 11:00:00 AM
Lab ID: 1802746-003
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1200	75		mg/Kg	50	2/19/2018 3:52:15 PM	36564
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	67	9.5		mg/Kg	1	2/15/2018 1:14:24 PM	36497
Motor Oil Range Organics (MRO)	110	48		mg/Kg	1	2/15/2018 1:14:24 PM	36497
Surr: DNOP	90.2	70-130		%Rec	1	2/15/2018 1:14:24 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/14/2018 7:38:04 PM	36511
Surr: BFB	87.9	15-316		%Rec	1	2/14/2018 7:38:04 PM	36511

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: L2-4
Project: Nash 5
Collection Date: 2/8/2018 11:05:00 AM
Lab ID: 1802746-004 **Matrix:** SOIL **Received Date:** 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1900	75		mg/Kg	50	2/19/2018 4:04:40 PM	36564
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	17	10		mg/Kg	1	2/15/2018 2:09:46 PM	36497
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/15/2018 2:09:46 PM	36497
Surr: DNOP	87.1	70-130		%Rec	1	2/15/2018 2:09:46 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/14/2018 8:01:22 PM	36511
Surr: BFB	87.4	15-316		%Rec	1	2/14/2018 8:01:22 PM	36511

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: L2-6
Project: Nash 5
Collection Date: 2/8/2018 11:08:00 AM
Lab ID: 1802746-005
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1900	75		mg/Kg	50	2/19/2018 4:17:05 PM	36564

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: L2-8
Project: Nash 5
Collection Date: 2/8/2018 11:12:00 AM
Lab ID: 1802746-006
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1100	30		mg/Kg	20	2/16/2018 2:58:51 PM	36564

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L3-2
Project: Nash 5
Collection Date: 2/8/2018 10:05:00 AM
Lab ID: 1802746-007
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1700	75		mg/Kg	50	2/20/2018 4:43:25 PM	36564
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/14/2018 3:12:25 PM	36497
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/14/2018 3:12:25 PM	36497
Surr: DNOP	87.0	70-130		%Rec	1	2/14/2018 3:12:25 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/14/2018 8:24:46 PM	36511
Surr: BFB	88.4	15-316		%Rec	1	2/14/2018 8:24:46 PM	36511

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: L3-4
Project: Nash 5
Collection Date: 2/8/2018 10:09:00 AM
Lab ID: 1802746-008
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1600	75		mg/Kg	50	2/20/2018 4:55:50 PM	36564

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: L3-6
Project: Nash 5
Collection Date: 2/8/2018 10:10:00 AM
Lab ID: 1802746-009
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1800	75		mg/Kg	50	2/20/2018 5:08:15 PM	36564

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L4-2
Project: Nash 5
Collection Date: 2/8/2018 10:00:00 AM
Lab ID: 1802746-010
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	290	30		mg/Kg	20	2/16/2018 3:48:30 PM	36564
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	47	9.7		mg/Kg	1	2/14/2018 3:40:27 PM	36497
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/14/2018 3:40:27 PM	36497
Surr: DNOP	81.4	70-130		%Rec	1	2/14/2018 3:40:27 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/14/2018 8:48:07 PM	36511
Surr: BFB	90.9	15-316		%Rec	1	2/14/2018 8:48:07 PM	36511
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	2/14/2018 8:48:07 PM	36511
Toluene	ND	0.050		mg/Kg	1	2/14/2018 8:48:07 PM	36511
Ethylbenzene	ND	0.050		mg/Kg	1	2/14/2018 8:48:07 PM	36511
Xylenes, Total	ND	0.099		mg/Kg	1	2/14/2018 8:48:07 PM	36511
Surr: 4-Bromofluorobenzene	88.6	80-120		%Rec	1	2/14/2018 8:48:07 PM	36511

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: BG3-5
Project: Nash 5
Collection Date: 2/8/2018 11:50:00 AM
Lab ID: 1802746-011
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	480	30		mg/Kg	20	2/16/2018 4:00:55 PM	36564

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: BG2-1
Project: Nash 5
Collection Date: 1/22/2018 11:30:00 AM
Lab ID: 1802746-012
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	30		mg/Kg	20	2/16/2018 4:13:20 PM	36564

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-2
Project: Nash 5
Collection Date: 2/8/2018 9:40:00 AM
Lab ID: 1802746-013
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/14/2018 4:08:08 PM	36497
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/14/2018 4:08:08 PM	36497
Surr: DNOP	76.6	70-130		%Rec	1	2/14/2018 4:08:08 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/14/2018 9:11:27 PM	36511
Surr: BFB	83.4	15-316		%Rec	1	2/14/2018 9:11:27 PM	36511
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	2/14/2018 9:11:27 PM	36511
Toluene	ND	0.049		mg/Kg	1	2/14/2018 9:11:27 PM	36511
Ethylbenzene	ND	0.049		mg/Kg	1	2/14/2018 9:11:27 PM	36511
Xylenes, Total	ND	0.097		mg/Kg	1	2/14/2018 9:11:27 PM	36511
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	2/14/2018 9:11:27 PM	36511

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-3
Project: Nash 5
Collection Date: 2/8/2018 9:42:00 AM
Lab ID: 1802746-014
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	4700	99		mg/Kg	10	2/15/2018 3:04:46 PM	36497
Motor Oil Range Organics (MRO)	2000	490		mg/Kg	10	2/15/2018 3:04:46 PM	36497
Surr: DNOP	0	70-130	S	%Rec	10	2/15/2018 3:04:46 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	290	24		mg/Kg	5	2/14/2018 9:34:49 PM	36511
Surr: BFB	502	15-316	S	%Rec	5	2/14/2018 9:34:49 PM	36511

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-5
Project: Nash 5
Collection Date: 2/8/2018 9:45:00 AM
Lab ID: 1802746-015
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	580	9.8		mg/Kg	1	2/15/2018 4:00:01 PM	36497
Motor Oil Range Organics (MRO)	250	49		mg/Kg	1	2/15/2018 4:00:01 PM	36497
Surr: DNOP	93.7	70-130		%Rec	1	2/15/2018 4:00:01 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	37	4.7		mg/Kg	1	2/14/2018 11:08:04 PM	36511
Surr: BFB	439	15-316	S	%Rec	1	2/14/2018 11:08:04 PM	36511

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L5-6
Project: Nash 5
Collection Date: 2/8/2018 9:50:00 AM
Lab ID: 1802746-016
Matrix: SOIL
Received Date: 2/13/2018 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	370	9.8		mg/Kg	1	2/15/2018 4:55:21 PM	36497
Motor Oil Range Organics (MRO)	190	49		mg/Kg	1	2/15/2018 4:55:21 PM	36497
Surr: DNOP	91.2	70-130		%Rec	1	2/15/2018 4:55:21 PM	36497
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	5.2	5.0		mg/Kg	1	2/14/2018 11:54:37 PM	36511
Surr: BFB	126	15-316		%Rec	1	2/14/2018 11:54:37 PM	36511

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#: **1802746**
21-Feb-18

Client: Souder, Miller & Associates
Project: Nash 5

Sample ID	**MB-36564**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**36564**	RunNo:	**49182**					
Prep Date:	**2/16/2018**	Analysis Date:	**2/16/2018**	SeqNo:	**1587449**	Units:	**mg/Kg**			

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

Sample ID	**LCS-36564**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**36564**	RunNo:	**49182**					
Prep Date:	**2/16/2018**	Analysis Date:	**2/16/2018**	SeqNo:	**1587450**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	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#: **1802746**

21-Feb-18

Client: Souder, Miller & Associates

Project: Nash 5

Sample ID	**LCS-36497**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**36497**		RunNo:	**49120**				
Prep Date:	**2/13/2018**	Analysis Date:	**2/14/2018**		SeqNo:	**1583411**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.8	70	130			
Surr: DNOP	4.3		5.000		86.9	70	130			

Sample ID	**MB-36497**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**36497**		RunNo:	**49120**				
Prep Date:	**2/13/2018**	Analysis Date:	**2/14/2018**		SeqNo:	**1583412**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.3	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#: **1802746**

21-Feb-18

Client: Souder, Miller & Associates

Project: Nash 5

Sample ID	**MB-36511**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**36511**	RunNo:	**49134**					
Prep Date:	**2/13/2018**	Analysis Date:	**2/14/2018**	SeqNo:	**1583849**	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		96.6	15	316			

Sample ID	**LCS-36511**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**36511**	RunNo:	**49134**					
Prep Date:	**2/13/2018**	Analysis Date:	**2/14/2018**	SeqNo:	**1583850**	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	112	75.9	131			
Surr: BFB	1100		1000		105	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#: **1802746**

21-Feb-18

Client: Souder, Miller & Associates

Project: Nash 5

Sample ID	**MB-36511**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**36511**	RunNo:	**49134**					
Prep Date:	**2/13/2018**	Analysis Date:	**2/14/2018**	SeqNo:	**1583882**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	80	120			

Sample ID	**LCS-36511**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**36511**	RunNo:	**49134**					
Prep Date:	**2/13/2018**	Analysis Date:	**2/14/2018**	SeqNo:	**1583883**	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	99.6	77.3	128			
Toluene	0.98	0.050	1.000	0	97.8	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	96.2	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.8	81.6	129			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	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: 1802746 RcptNo: 1

Received By: Sophia Campuzano 2/13/2018 9:45:00 AM

Completed By: Ashley Gallegos 2/13/2018 12:54:29 PM

Reviewed By: DDS 2/13/18

Labeled By: SRe 02/13/18

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	5.3	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: Nash #5

Project #:

Project Manager: Austin Weyant

Sampler: Heather Patterson

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.3

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. 1802746	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)
2/8/18	9:19	Soil	L1-2	4oz		-001			X					X				
	9:27		L1-3			-002								X				
	11:00		L2-2			-003			X					X				
	11:05		L2-4			-004			X					X				
	11:08		L2-6			-005								X				
	11:12		L2-8			-006								X				
	10:05		L3-2			-007			X					X				
	10:09		L3-4			-008								X				
	10:10		L3-6			-009								X				
	10:50		L4-2			-010	X		X					X				
	11:50		BG3-5			-011								X				
1/22/18	11:30		BG7-1			-012								X				

Date	Time	Relinquished by:	Received by:	Date	Time
2/12/18	0945			2/12/18	0945
2/12/18	1910		courier	02/13/18	0945

Remarks:
XTO

Chain-of-Custody Record

Client: SMA-Cobuild

Turn-Around Time: 5 day turn

☐ Standard ☐ Rush

Project Name: Nash #5

Mailing Address:

Project #:

Phone #:

email or Fax#:

Project Manager: Austin Wegant

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Sampler: Heather Patterson

Accreditation

☐ NELAP ☐ Other

On Ice: ☒ Yes ☐ No

☐ EDD (Type)

Sample Temperature: 5.3

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. 1802746	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)
2/8/18	9:40	Soil	L5-2	4oz		-013	X		X													
	9:42		L5-3			-014			X													
	9:45		L5-5			-015			X													
	9:50		L5-6			-016			X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/12/18	0945			2/12/18	0945
2/12/18	1900		courier	02/13/18	0945

Remarks:

XTO PG. 2 of 2

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 08, 2018

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

RE: Nash 5 OrderNo.: 1802E53

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/28/2018 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.

Analytical Report
Lab Order: **1802E53**
Date Reported: **3/8/2018**

CLIENT: Souder, Miller & Associates
Project: Nash 5
Lab Order: 1802E53

Lab ID: 1802E53-001 **Collection Date:** 2/8/2018 10:19:00 AM
Client Sample ID: L3-8' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	1100	75		mg/Kg	50	3/7/2018 2:15:33 PM	36821

Lab ID: 1802E53-002 **Collection Date:** 2/8/2018 10:29:00 AM
Client Sample ID: L3-10' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	600	30		mg/Kg	20	3/4/2018 3:01:57 PM	36821

Lab ID: 1802E53-003 **Collection Date:** 2/8/2018 10:45:00 AM
Client Sample ID: L3-12' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1200	30		mg/Kg	20	3/4/2018 3:14:22 PM	36821

Lab ID: 1802E53-004 **Collection Date:** 2/8/2018 11:20:00 AM
Client Sample ID: L2-10' **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	480	30		mg/Kg	20	3/4/2018 3:26:47 PM	36821

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#: **1802E53**

08-Mar-18

Client: Souder, Miller & Associates

Project: Nash 5

Sample ID	**MB-36821**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**36821**	RunNo:	**49544**					
Prep Date:	**3/4/2018**	Analysis Date:	**3/4/2018**	SeqNo:	**1601148**	Units:	**mg/Kg**			

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

Sample ID	**LCS-36821**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**36821**	RunNo:	**49544**					
Prep Date:	**3/4/2018**	Analysis Date:	**3/4/2018**	SeqNo:	**1601149**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	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

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: 1802E53 RcptNo: 1

Received By: **Mandy Woods** 2/28/2018 9:45:00 AM

Completed By: **Ashley Gallegos** 2/28/2018 11:14:36 AM

Reviewed By: DDS 2/28/18

labeled by: MW 2/28/18

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	4.1	Good	Yes			

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address: 201 S. Halagueno

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 5 day

Project Name: Nash #5

Project #:

Project Manager: Austin Weyant

Sampler: HMP.

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.1

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. 1802E53	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)
2/8/18	10:19	soil	L3-8'	4oz.		-001								X				
	10:29		L3-10'			-002								X				
	10:45		L3-12'			-003								X				
	11:20		L2-10'			-004								X				

Date: 2-2718 Time: 8:30 Relinquished by:

Received by: Date 2/27/18 Time 0800

Date: 2/27/18 Time: 1900 Relinquished by:

Received by: Courier 2/28/18 Date Time 2/28/18 0945

Remarks: XTO.

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.