# UICI - 5

# WASTE ANALYSES INFO

2020

Reconstitute by OCD: 11/9/2023 8:38:17 AM 1025 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-138 Revised August 1, 2011 \*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
1. Generator Name and Address:
Heavy Oil Solutions, Inc., 5101 College Blvd, Farmington NM 87402
2. Originating Site:
Heavy Oil Solutions Engineering Development Laboratory
3. Location of Material (Street Address, City, State or ULSTR):
5101 College Blvd, Farmington NM 87402
4. Source and Description of Waste:
Oily water from oil upgrading pilot plant
Estimated Volume 20 bbl yd3 / bbls Known Volume (to be entered by the operator at the end of the haul) 20 bbl yd3 / bbls  5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
The state of the s
I. Stephen Yarbro , representative or authorized agent for Heavy Oil Solutions, Inc.
☐ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.  Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I. Stephen Yarbro , representative for Heavy Oil Solutions, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter:
M&R Trucking
OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: Sunco Disposal #1 UICI-5-0
Address of Facility: SW/4 NW/4 Section 2, T29N, R12W San Juan County, Crouch Mesa Facility
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other
Vaste Acceptance Status:  APPROVED  DENIED (Must Be Maintained As Permanent Record)
RINT NAME: Philana Thompson TITLE: Regulatory Compliance Specialist DATE: 9/6/18
SIGNATURE: Military Gulley TELEPHONE NO.: 505-486-1171



#### **Report Summary**

Client: Heavy Oil Solutions

Samples Received: 10/11/2019 Job Number: 17014-0001 Work Order: P910060

Project Name/Location: No Recycle

-	ALCOHOL TO THE PARTY OF THE PAR		
Report	Review	red By:	

Walter Hinken

Date:

10/17/19

Walter Hinchman, Laboratory Director



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

5796 Highway 64, Farmington, NM 87401



Project Name:

No Recycle

Project Number: Project Manager: 17014-0001 Alyssa House

Reported: 10/17/19 13:19

**Analytical Report for Samples** 

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container	
PW-100919	P910060-01A	Aqueous	10/10/19	10/11/19	Poly 500mL; HNO3	

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5796 Highway 64, Farmington, NM 87401



Project Name:

No Recycle

Project Number: Project Manager: 17014-0001 Alyssa House

Reported: 10/17/19 13:19

PW-100919 P910060-01 (Water)

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Metals by 6010									
Arsenic	ND	0.0600	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Barium	ND	0.750	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Cadmium	ND	0.0300	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Chromium	ND	0.0600	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Lead	ND	0.0300	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Selenium	ND	0.150	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Silver	ND	0.0300	mg/L	3	1942022	10/16/19	10/16/19	EPA 6010C	
Total Mercury by EPA 7470A								ndragi Hata vijeke vi	
Mercury	ND	0.200	ug/L	1	1942005	10/14/19	10/15/19	EPA 7470A	

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5796 Highway 64, Farmington, NM 87401



Project Name:

No Recycle

Project Number: Project Manager: 17014-0001 Alyssa House

Reported: 10/17/19 13:19

Total Metals by 6010 - Quality Control

**Envirotech Analytical Laboratory** 

		Reporting		Spike	Source	15.00	%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Blank (1942022-BLK1)				Prepared: 10	0/16/19 0 A	analyzed: 1	0/16/19 1			
Arsenic	ND	0.0200	mg/L							
Barium	ND	0.250	**							
Cadmium	ND	0.0100	. "							
Chromium	ND	0.0200	"							
Lead	ND	0.0100								
Selenium	ND	0.0500	91							
Silver	ND	0.0100								
LCS (1942022-BS1)				Prepared: 10	0/16/19 0 A	Analyzed: 1	0/16/19 1			
Arsenic	0.465	0.0200	mg/L	0.500		92.9	80-120			
Barium	12.9	0.250	n	12.5		103	80-120			
Cadmium	0.236	0.0100	19	0.250		94.5	80-120			
Chromium	0.984	0.0200	"	1.00		98.4	80-120			
Lead	0.255	0.0100		0.250		102	80-120			
Selenium	1.22	0.0500	**	1.25		97.7	80-120			
Silver	0.0910	0.0100		0.100		91.0	80-120			
Matrix Spike (1942022-MS1)	Sour	ee: P910060-	01	Prepared: 1	0/16/19 0 A	Analyzed: 1	0/16/19 1			
Arsenic	1.38	0,0600	mg/L	1.50	ND	92.1	75-125			
Barium	36.8	0.750	**	37.5	ND	98.2	75-125			
Cadmium	0.695	0.0300	*	0.750	ND	92.6	75-125			
Chromium	2.91	0.0600	**	3.00	ND	96.9	75-125			
Lead	0.740	0.0300	**	0.750	ND	98.6	75-125			
Selenium	3.66	0.150	**	3.75	ND	97.7	75-125			
Silver	0.272	0.0300		0.300	ND	90.5	75-125			
Matrix Spike Dup (1942022-MSD1)	Sour	ce: P910060-	01	Prepared: 1	0/16/19 0	Analyzed:	10/16/19 1			
Arsenie	1.46	0.0600	mg/L	1.50	ND	97.4	75-125	5.62	20	
Barium	39.9	0.750	"	37,5	ND	106	75-125	8.13	20	
Cadmium	0.735	0.0300	н	0.750	ND	98.0	75-125	5.71	20	
Chromium	3.07	0.0600	**	3.00	ND	102	75-125	5.41	20	
Lead	0.784	0.0300	**	0.750	ND	105	75-125	5.87	20	
Selenium	3.87	0.150	**	3.75	ND	103	75-125	5.57	20	
Silver	0.287	0.0300	**	0.300	ND	95.5	75-125	5.38	20	

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5796 Highway 64, Farmington, NM 87401



Project Name:

No Recycle

Project Number:

Reporting

17014-0001

Reported: 10/17/19 13:19

RPD

%REC

Project Manager:

Alyssa House

Spike

Source

#### Total Mercury by EPA 7470A - Quality Control

#### **Envirotech Analytical Laboratory**

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1942005 - Mercury Water Digestic	on KMNO4									
Blank (1942005-BLK1)				Prepared: 1	10/14/19 1	Analyzed: 1	0/15/19 0			
Mercury	ND	0.200	ug/L							
LCS (1942005-BS1)				Prepared: 1	10/14/19 1	Analyzed: 1	0/15/19 0			
Mercury	2.02	0.200	ug/L	2.00		101	80-120			
Matrix Spike (1942005-MS1)	Source	e: P910033-	01	Prepared:	10/14/19 1	Analyzed: 1	10/15/19 0			
Mercury	1.48	0.200	ug/L	2.00	ND	74.0	75-125			M2
Matrix Spike Dup (1942005-MSD1)	Source	e: P910033-	01	Prepared:	10/14/19 1	Analyzed: 1	10/15/19 0			
Mercury	1.50	0.200	ag/L	2.00	ND	74.8	75-125	1.06	20	M2

QC Summary Report

Comment:

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

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5796 Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fx (505) 632-1865

envirotech-inc.com

24 Hour Emergency Response Phone (800) 362-1879

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#### Received by OCD: 11/9/2023 8:38:17 AM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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-138
Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

# REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

	enerator Name and Address: rprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
	Originating Site: MAPL Dolores Pumping Station
	ocation of Material (Street Address, City, State or ULSTR):  4 Section 31 Township 37 North Range 15 West; 38.7416799, -108.433635
Sour Desc	Source and Description of Waste:  ce: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.  ription: Non Exempt/Non Hazardous Water from the compressor skids.  nated Volume 80 yd3 bbls Known Volume (to be entered by the operator at the end of the haul) yd3/bbls
5.	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
certif	omas Long, representative or authorized agent for Enterprise Products Operating do hereby  Generator Signature  by that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 atory determination, the above described waste is: (Check the appropriate classification)
	RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.  **Operator Use Only: Waste Acceptance Frequency   Monthly   Weekly   Per Load**
9	RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
	ISDS Information ⊠ RCRA Hazardous Waste Analysis ⊠ Process Knowledge □ Other (Provide description in Box 4)
	GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
	omas Long , representative for Enterprise Products Operating authorize to complete  Generator Signature equired testing/sign the Generator Waste Testing Certification.
1	, representative for Agua Moss, LLC do hereby certify that
have of th	sentative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results e representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 5.36 NMAC.
	Fransporter: To Be Determined
Na Add Me	The Permitted Surface Waste Management Facility  me and Facility Permit #: *Agua Moss, LLC - Permit #: NM-01-009  dress of Facility: SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM  thod of Treatment and/or Disposal:  Evaporation  Injection  Treating Plant  Landfarm  Landfill  Other  iste Acceptance Status:  APPROVED  DENIED (Must Be Maintained As Permanent Record)
PR	INT NAME: TITLE: DATE:
	SNATURE: TELEPHONE NO.: TELEPHONE NO.:



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

November 19, 2019

Ashley Maxwell Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401

TEL: (505) 325-5667 FAX: (505) 327-1496

RE: Dolores Non Exempt OrderNo.: 1911060

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/2/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109



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

Case Narrative

WO#: 1911060 Date: 11/19/2019

CLIENT: Souder, Miller and Associates

Project: Dolores Non Exempt

Analytical Notes For EPA Method 8270 PAHs:

The initial extraction for PAHs did not properly spike the LCS/LCSD. The sample was analyzed and was nondetect for PAHs. The sample was reextracted with a valid LCS/LCSD and the sample was reanalyzed. The sample result were nondetect for the second extraction as well.

Lab Order 1911060

Date Reported: 11/19/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Dolores

Project: Dolores Non Exempt Collection Date: 10/31/2019 9:28:00 AM Lab ID: 1911060-001 Matrix: AQUEOUS Received Date: 11/2/2019 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	ND	0.020		mg/L	1	11/8/2019 3:09:24 PM	48664
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	pmf
Arsenic	ND	5.0		mg/L	1	11/13/2019 8:08:26 PM	48560
Barium	ND	100		mg/L	1	11/13/2019 8:08:26 PM	48560
Cadmium	ND	1.0		mg/L	1	11/13/2019 8:08:26 PM	48560
Chromium	ND	5.0		mg/L	1	11/13/2019 8:08:26 PM	48560
Lead	ND	5.0		mg/L	1	11/13/2019 8:08:26 PM	48560
Selenium	ND	1.0		mg/L	1	11/13/2019 8:08:26 PM	48560
Silver	ND	5.0		mg/L	1	11/13/2019 8:08:26 PM	
EPA METHOD 8270C: PAHS						Analyst:	JDC
Naphthalene	ND	500	D	μg/L	20	11/15/2019 1:40:38 AM	48643
1-Methylnaphthalene	ND	1000	D	µg/L	20	11/15/2019 1:40:38 AM	48643
2-Methylnaphthalene	ND	1000	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Acenaphthylene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Acenaphthene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Fluorene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Phenanthrene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Anthracene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Fluoranthene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Pyrene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Benz(a)anthracene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Chrysene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Benzo(b)fluoranthene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Benzo(k)fluoranthene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Benzo(a)pyrene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Dibenz(a,h)anthracene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Benzo(g,h,i)perylene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Indeno(1,2,3-cd)pyrene	ND	500	D	µg/L	20	11/15/2019 1:40:38 AM	48643
Surr: N-hexadecane	0	20.4-126	SD	%Rec	20	11/15/2019 1:40:38 AM	48643
Surr: Benzo(e)pyrene	0	21.4-126	SD	%Rec	20	11/15/2019 1:40:38 AM	48643
EPA METHOD 8260B: VOLATILES						Analyst	JMR
Benzene	ND	0.50		mg/L	200	11/6/2019 9:51:50 PM	R6429
Toluene	ND	0.20		mg/L	200	11/6/2019 9:51:50 PM	R6429
Ethylbenzene	ND	0.20		mg/L	200	11/6/2019 9:51:50 PM	R6429
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	11/6/2019 9:51:50 PM	R6429
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	11/6/2019 9:51:50 PM	R6429
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200		R6429
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	11/6/2019 9:51:50 PM	R6429

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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Lab Order 1911060

Date Reported: 11/19/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Dolores Non Exempt

Lab ID: 1911060-001

Client Sample ID: Dolores

Collection Date: 10/31/2019 9:28:00 AM

Matrix: AQUEOUS Received Date: 11/2/2019 9:50:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed B	Batch
EPA METHOD 8260B: VOLATILES				Analyst: J	JMR
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R64290
Naphthalene	ND	0.40	mg/L	200 11/6/2019 9:51:50 PM R	R64290
1-Methylnaphthalene	ND	0.80	mg/L	200 11/6/2019 9:51:50 PM R	R64290
2-Methylnaphthalene	ND	0.80	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Acetone	ND	2.0	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Bromobenzene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Bromodichloromethane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Bromoform	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Bromomethane	ND	0.60	mg/L	200 11/6/2019 9:51:50 PM R	R6429
2-Butanone	ND	2.0	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Carbon disulfide	ND	2.0	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Carbon Tetrachloride	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Chlorobenzene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Chloroethane	ND	0.40	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Chloroform	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Chloromethane	ND	0.60	mg/L	200 11/6/2019 9:51:50 PM R	R6429
2-Chlorotoluene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
4-Chlorotoluene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
cis-1,2-DCE	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Dibromochloromethane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Dibromomethane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,2-Dichlorobenzene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,3-Dichlorobenzene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,4-Dichlorobenzene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Dichlorodifluoromethane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1.1-Dichloroethane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,1-Dichloroethene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,2-Dichloropropane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,3-Dichloropropane	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
2,2-Dichloropropane	ND	0.40	mg/L	200 11/6/2019 9:51:50 PM R	R6429
1,1-Dichloropropene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Hexachlorobutadiene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
2-Hexanone	ND	2.0	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Isopropylbenzene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R642
4-Isopropyltoluene	ND	0.20	mg/L	200 11/6/2019 9:51:50 PM R	R6429
4-Methyl-2-pentanone	ND	2.0	mg/L	200 11/6/2019 9:51:50 PM R	R6429
Methylene Chloride	ND	0.60	mg/L	200 11/6/2019 9:51:50 PM R	R6429

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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 3 of 12

Lab Order 1911060

Date Reported: 11/19/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Dolores Non Exempt

Lab ID: 1911060-001

Client Sample ID: Dolores

Collection Date: 10/31/2019 9:28:00 AM

Matrix: AQUEOUS Received Date: 11/2/2019 9:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	JMR
n-Butylbenzene	ND	0.60	mg/L	200	11/6/2019 9:51:50 PM	R64290
n-Propylbenzene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
sec-Butylbenzene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
Styrene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
tert-Butylbenzene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	11/6/2019 9:51:50 PM	R64290
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
trans-1,2-DCE	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,1,1-Trichloroethane	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,1,2-Trichloroethane	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
Trichloroethene (TCE)	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
Trichlorofluoromethane	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
1,2,3-Trichloropropane	ND	0.40	mg/L	200	11/6/2019 9:51:50 PM	R64290
Vinyl chloride	ND	0.20	mg/L	200	11/6/2019 9:51:50 PM	R64290
Xylenes, Total	ND	0.30	mg/L	200	11/6/2019 9:51:50 PM	R64290
Surr: 1,2-Dichloroethane-d4	92.3	70-130	%Rec	200	11/6/2019 9:51:50 PM	R64290
Surr: 4-Bromofluorobenzene	87.7	70-130	%Rec	200	11/6/2019 9:51:50 PM	R64290
Surr: Dibromofluoromethane	102	70-130	%Rec	200	11/6/2019 9:51:50 PM	R64290
Surr: Toluene-d8	97.3	70-130	%Rec	200	11/6/2019 9:51:50 PM	R64290

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 Matrox
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 4 of 12

Ss

Cn

Sr

Qc

GI

Al

Sc



# ANALYTICAL REPORT

# Hall Environmental Analysis Laboratory

Sample Delivery Group:

L1157021

Samples Received:

11/05/2019

Project Number:

Description:

Report To:

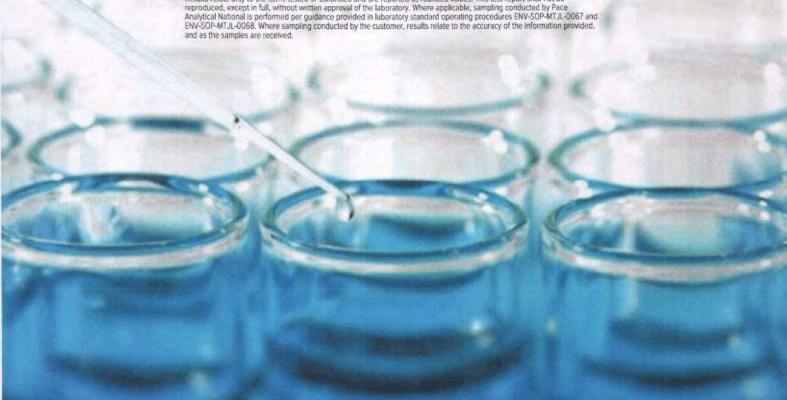
4901 Hawkins NE

Albuquerque, NM 87109

Dapline R Richards Entire Report Reviewed By:

> Daphne Richards Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided.



ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE: 1 of 13

Released to Imagings 11/9/2023 8:44:32 AM

L1157021

11/13/19 09:27

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### SAMPLE SUMMARY

Collected by

ONE LAB. NATIONWIDE.

Collected date/time Received date/time 10/31/19 09:28 11/05/19 08:30

1911060-001D	DOLORES.	1.1157021-01	GW
1011000 0010	DOLONLO	LIIJ/UZI-UI	OVV

Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Wet Chemistry by Method 4500 CN E-2011	WG1378771	1	11/12/19 08:29	11/12/19 18:39	JER	Mt. Juliet, TN
Wet Chemistry by Method 9034-9030B	WG1375435	1	11/05/19 15:59	11/05/19 15:59	MJA	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG1375220	1	11/05/19 17:00	11/05/19 17:00	MSP	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG1378561	1	11/11/19 16:54	11/11/19 16:54	SL	Mt. Juliet, TN







































All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards Project Manager

apline R Richards

#### Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012B. All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

#### Sample Delivery Group (SDG) Narrative

Analysis was performed from an improper container for the following samples.

Lab Sample ID

Project Sample ID

Method

L1157021-01

1911060-001D DOLORES

D93/1010A

# 1911060-001D DOLORES SAMI

SAMPLE RESULTS - 01

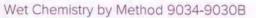
ONE LAB. NATIONWIDE.

Collected date/time: 10/31/19 09:28

Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/I		mg/l		date / time		
Reactive Cyanide	ND		0.00500	1	11/12/2019 18:39	WG1378771	





	Result	Qualifier	RDL	Dilution	Analysis	Batch		
Analyte	mg/l		mg/I		date / time			
Reactive Sulfide	ND		0.0500	1	11/05/2019 15:59	WG1375435		



Ss

Cn

#### Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	Sü			date / time		
Corrosivity by pH	7.36	T8	1	11/05/2019 17:00	WG1375220	



#### Sample Narrative:

L1157021-01 WG1375220: 7.36 at 17.9C

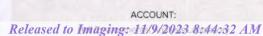
# 7 GI

Al

Sc

#### Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	deg F			date / time		
Flashpoint	DNF at 170		1	11/11/2019 16:54	WG1378561	



mg/l

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

(LCS) R3471197-2 11/12/19 18:11

Ing/

Reactive Cyanide

Analyte

0

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

l/gm

(MB) R3471197-1 11/12/19 18:10 Method Blank (MB)

WG1378771

Wet Chemistry by Method 8034-9030B	308		3	JALIIY	QUALITY CONTROL SUMMARY	OL SI	JMMAF	<b></b>			ONE LAB, NA HONWIDE.
(MB) R3468650-1 11/05/19 15:52											
MB Result	MB Qualifier	MB MDL	MB RDL								
Mg/l		mg/l	пдЛ								
a		0.00650	0,0500								
Laboratory Control Sample (LCS)	(52)										
(LCS) R3468650-2 11/05/19 15:52											
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier							
mg/l	l/gm	28	96								
0.500	Reactive Sulfide         0.500         0.552         110         85.0-115           41E 70034 On Onicinal Complex Control         Matrix Collection (MCC) (Matrix Collection)	180 Odjeđe	85,0-115	olico and olico	McDland						
59 - (MS) R34	[OS] L1157021-01 11/05/19 15:59 (MS) R3468650-3 11/05/19 16:01 (MSD) R3468650-4 11/05/	M) - 10:01 - (M;	SD) R3468650	11/05/19 16:02	02 02						
Spike Amount	Spike Amount Original Result MS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Dilution Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
mg/l	mg/l	mg/l	l/gm	96	88		26			38	<b>3</b> R
1.00	QN	1,18	1.14	115	E	-	80.0-120			3.70	20

Released to Imaging: 11/9/2023 8:44:32 AM



Te

SS

QC

Al

Sc

#### Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location, Results relate to the accuracy of this information provided, and as the samples are received.

#### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
J	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the resurreported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative If applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Q			

#### Description

Sample(s) received past/too close to holding time expiration.

### **ACCREDITATIONS & LOCATIONS**

ONE LAB. NATIONWIDE

Tε

Ss

Cn

Sr

QC

GI

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location, to be phone call, one point or contract, one laboratory, no other is accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conductive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

#### State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia <sup>1</sup>	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
lowa	364
Kansas	E-10277
Kentucky 1.6	90010
Kentucky 2	16
Louisiana	Al30792
Louisiana 1	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

ebraska	NE-OS-15-05
evada	TN-03-2002-34
ew Hampshire	2975
ew Jersey-NELAP	TN002
ew Mexico 1	n/a
ew York	11742
orth Carolina	Env375
orth Carolina 1	DW21704
orth Carolina 3	41
orth Dakota	R-140
hio-VAP	CL0069
klahoma	9915
regon	TN200002
ennsylvania	68-02979
hode Island	LA000356
outh Carolina	84004
outh Dakota	n/a
ennessee 1.4	2006
exas	T104704245-18-15
exas <sup>5</sup>	LAB0152
itah	TN00003
ermont	VT2006
Irginia	460132
/ashington	C847
Vest Virginia	233
Visconsin	9980939910
Vyoming	A2LA

#### Third Party Federal Accreditations

Control of the Contro		
A2LA - ISO 17025	1461.01	
A2LA - ISO 17025 5	1461.02	
Canada	1461.01	
EPA-Crypto	TN00003	

AIHA-LAP, LLC EMLAP	100789
DOD	1461,01
USDA	P330-15-00234

<sup>&</sup>lt;sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

#### Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



PAGE:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD PAGE 1 OFF 1

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NA 87109

Albuquerque, NA 87109 TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

SUB CONTRATOR ESC PACE	COMPANY:	ESC PACE		PHONE	(800) 767-5859	PAX	(615) 758-5859
ADDRESS: 12065 Lebanon Rd				ACCOUNT #.		EMARK	
CITY, STATE, 21P. Mt. Juliet, TN 37122			14.8				
ITEM SAMPLE CLIENT SAMPLE ID	PLEID	BOTILE	MATRIX	COLLECTION	# CONTAINERS	NALYTIC	L (1570) ( ANALYTICAL COMMENTS
1 1911060-001D Dolores		SOOHDPE	Aqueous	10/31/2019 9:28:00 AM	Aqueous 10/31/2019 9:28:00 AM 3 Reactivity, Corrosivity and Ignitability	and Ignitability	(PLT) -6

A068

Relinguished By: Received By: Received By: 6-12 AM					
	26	Date: Time:		ORT TRANSMITTAL DESIRED:	-
Relinquished By. V. Dute: Time: Received By.	у.	Date: Time:		HARDKOPT (extra cost) FAX EMAIL	ONLINE
Refinquished By: Received By:	Received By:	Dure Time.		COCST FOR LAB USE ONLY	
TAT: Sandard RUSH Next	D G8 Jug	3rd BID		if samples 2.1 As Attempt to Cool 7	1
			Comments	nts.	70

	do ito	
Pace Analytical National Center for Lesting & Innovation	ation	
Cooler Receipt Form		
Client	1520	7
Cooler Received/Opened On: 11 / p 4/19 Temperature:	5.9	
Received By: Issa Hussein		
Signature: 152		
Receipt Check List	Yes	No
COC Seal Present / Intact?	\	
COC Signed / Accurate?	1	
Bottles arrive intact?	1	
Correct bottles used?	1	
Sufficient volume sent?		-
If Applicable		-
VOA Zero headspace?		Section 1
Prosprvation Correct / Checked?	1	- Control of the last of the l
		20

# Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: rb1

Sample ID: 100ng Ics	Sampl	ype: LC	S	Tes	Code: E	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batc	h ID: R6	4290	F	RunNo: 6	4290				
Prep Date:	Analysis E	Date: 11	1/6/2019	8	eqNo: 2	200042	Units: mg/L	4		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	18	1.0	20.00	0	92.4	70	130			
Chlorobenzene	19	1.0	20.00	0	97.2	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	84.6	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	87.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.7	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		89.2	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	70	130			

TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW	Batc	n ID: R6	4290	F	RunNo: 6	4290				
Prep Date:	Analysis D	Date: 11	/6/2019	5	SeqNo: 2	200063	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0				77				
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								

#### Qualifiers:

Chloroethane

Chloromethane

2-Chlorotoluene

Chloroform

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND

ND

ND

ND

2.0

1.0

3.0

- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 5 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: rb1	Samp	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	h ID: Re	4290	F	RunNo: 6	4290				
Prep Date:	Analysis D	Date: 1	1/6/2019	8	SeqNo: 2	200063	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-Chlorotoluene	ND	1.0								
sis-1,2-DCE	ND	1.0								
sis-1,3-Dichloropropene	ND	1.0								
,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
,2-Dichlorobenzene	ND	1.0								
,3-Dichlorobenzene	ND	1.0								
,4-Dichlorobenzene	ND	1.0								
ichlorodifluoromethane	ND	1.0								
,1-Dichloroethane	ND	1.0								
,1-Dichloroethene	ND	1.0								
,2-Dichloropropane	ND	1.0								
3-Dichloropropane	ND	1.0								
2-Dichloropropane	ND	2.0								
1-Dichloropropene	ND	1.0								
exachlorobutadiene	ND	1.0								
-Hexanone	ND	10								
opropylbenzene	ND	1.0								
-Isopropyltoluene	ND	1.0								
-Methyl-2-pentanone	ND	10								
fethylene Chloride	ND	3.0								
-Butylbenzene	ND	3.0								
-Propylbenzene	ND	1.0								
ec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
ert-Butylbenzene	ND	1.0								
.1,1,2-Tetrachloroethane	ND	1.0								
,1,2,2-Tetrachloroethane	ND	2.0								
etrachloroethene (PCE)	ND	1.0								
rans-1,2-DCE	ND	1.0								
ans-1,3-Dichloropropene	ND	1.0								
,2,3-Trichlorobenzene	ND	1.0								
,2,4-Trichlorobenzene	ND	1.0								
1,1-Trichloroethane	ND	1.0								
,1,2-Trichloroethane										
richloroethene (TCE)	ND	1.0								
richloroethene (10E)	ND	1.0								
	ND	1.0								
,2,3-Trichloropropane	ND	2.0								

#### Qualifiers:

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

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

Page 6 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: rb1	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	D: R6	4290	F	RunNo: 6	4290				
Prep Date:	Analysis D	Date: 11	/6/2019	8	SeqNo: 2	200063	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
/inyl chloride	ND	1.0								
Kylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.0	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

#### Qualifiers

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

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

Page 7 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: mb-48643	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: PBW	Batc	h ID: 48	643	F	RunNo: 6	64521				
Prep Date: 11/7/2019	Analysis [	Date: 11	/14/2019	5	SeqNo: 2	2209221	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	1.0								
2-Methylnaphthalene	ND	1.0								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	67		87.60		76.4	20.4	126			
Surr: Benzo(e)pyrene	15		20.00		73.8		126			

Sample ID: mb-48733	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8270C: PAH			
Client ID: PBW	Batch	ID: 48	733	F	RunNo: 6	4521				
Prep Date: 11/12/2019	Analysis D	ate: 1	1/14/2019	S	SeqNo: 2	209222	Units: %Re			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: N-hexadecane	74		87.60		84.4	20.4	126			
Surr: Benzo(e)pyrene	17		20.00		84.2	21.4	126			

Sample ID: Ics-48733	SampT	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs	1		
Client ID: LCSW	Batch	1D: 48	733	F	RunNo: 6	4521				
Prep Date: 11/12/2019	Analysis E	)ate: 1	1/14/2019	8	SeqNo: 2	209226	Units: %Red			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: N-hexadecane	61		87.60		70.2	20.4	126			
Surr: Benzo(e)pyrene	13		20.00		66.3	21.4	126			

#### 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 Limit

Page 8 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

0

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: Icsd-48733

SampType: LCSD

TestCode: EPA Method 8270C: PAHs

Client ID: LCSS02

RunNo: 64521

Prep Date: 11/12/2019

SPK value SPK Ref Val %REC

Units: %Rec

126

Batch ID: 48733 Analysis Date: 11/14/2019

SeqNo: 2209227

HighLimit %RPD **RPDLimit** Qual LowLimit 0

Surr: N-hexadecane Surr: Benzo(e)pyrene 57 12 87.60 20.00

61.3 21.4

64.6

20.4

0 126

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded H

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

Page 9 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: MB-48664

Prep Date: 11/7/2019

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Batch ID: 48664 Analysis Date: 11/8/2019

RunNo: 64358 SeqNo: 2202576

Units: mg/L

HighLimit

**RPDLimit** 

%RPD

%RPD

Qual

Mercury

PQL ND 0.00020

Sample ID: LCS-48664

SampType: LCS

TestCode: EPA Method 7470: Mercury

Client ID: LCSW

Batch ID: 48664

RunNo: 64358

Prep Date: 11/7/2019

Analysis Date: 11/8/2019

SeqNo: 2202577

Units: mg/L

Analyte

%REC LowLimit

**RPDLimit** Qual

Mercury

SPK value SPK Ref Val

93.6

0.0047 0.00020 0.005000

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

Value exceeds Maximum Contaminant Level Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range Reporting Limit

Page 10 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: MB-48560	Samp	Type: ME	BLK	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
Client ID: PBW	Bato	h ID: 48	560	F	RunNo:	64273				
Prep Date: 11/4/2019	Analysis	Date: 1	1/6/2019	5	SeqNo:	2199639	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Silver	ND	0.0050								

Sample ID: LCS-48560	SampType: LCS			TestCode: EPA 6010B: Total Recoverable Metals						
Client ID: LCSW Batch ID: 48560		RunNo: 64273								
Prep Date: 11/4/2019	Analysis	Date: 11	/6/2019	5	SeqNo: 2	199644	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.49	0.020	0.5000	0	98.3	80	120			
Barium	0.48	0.020	0.5000	0	95.7	80	120			
Cadmium	0.51	0.0020	0.5000	0	102	80	120			
Chromium	0.49	0.0060	0.5000	0	98.4	80	120			
Silver	0.093	0.0050	0,1000	0	92.7	80	120			

Sample ID: MB-48560	Samp	Type: ME	BLK	Tes	tCode: E	PA 6010B:	Total Recove	rable Meta	als	
Client ID: PBW	Batch ID: 48560		RunNo: 64389							
Prep Date: 11/4/2019	Analysis	Date: 1	1/11/2019	5	SeqNo: 2	2203945	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ead	ND	0.0050								

Sample ID: LCS-48560	SampType: LCS	TestCode: EPA 6	6010B: Total Recoverable Metals
Client ID: LCSW	Batch ID: 48560	RunNo: 64389	9
Prep Date: 11/4/2019	Analysis Date: 11/11/201	SeqNo: 22039	947 Units: mg/L
Analyte	Result PQL SPK v	ue SPK Ref Val %REC Lo	owLimit HighLimit %RPD RPDLimit Qual
Lead	0.50 0.0050 0.5	00 0 99.4	80 120

		NID	0.0000								
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Prep Date:	11/4/2019	Analysis (	Date: 11	//13/2019	5	SeqNo: 2	208278	Units: mg/L			
Client ID:	PBW	Batc	h ID: 48	560	F	RunNo: 6	4501				
Sample ID:	MB-48560	Samp	ype: ME	BLK	Tes	tCode: El	PA 6010B:	Total Recove	rable Meta	als	

Lead ND 0.0050

#### Qualifiers

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 11 of 12

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911060

19-Nov-19

Client: Souder, Miller and Associates

Project: Dolores Non Exempt

Sample ID: LCS-48560 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: LCSW Batch ID: 48560 RunNo: 64501

Prep Date: 11/4/2019 Analysis Date: 11/13/2019 SeqNo: 2208283 Units: mg/L

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

Lead 0.51 0.0050 0.5000 0 102 80 120

#### Qualifiers:

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

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

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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:	ent Name: SMA-FARM Work Order Nur		ber: 1911060		RcptNo: 1		
Received By:	Erin Melendrez	11/2/2019 9:50:00	AM	MULL Appairal life desir	<del>-</del>		
Completed By:	Yazmine Garduno	11/4/2019 8:58:29	AM	ndagaira lidhidaita			
Reviewed By:	26	11/4/19					
Chain of Custo	ody						
1. Is Chain of Cus	stody complete?		Yes 🔽	No 🗆	Not Present		
2. How was the sa	ample delivered?		Courier	-			
Log In							
5. Was an attemp	t made to cool the sample	es?	Yes 🔽	No 🗆	NA 🗆		
4. Were all sample	as received at a temperat	ure of >0° C to 6.0°C	Yes 🔽	No 🗆 .	NA 🗆		
5. Sample(s) in pr	oper container(s)?		Yes 🗹	No 🗆			
S. Sufficient sample	le volume for indicated te	st(s)?	Yes 🗸	No 🗆			
	ccept VOA and ONG) pro		Yes 🗸	No 🗌			
	ve added to bottles?		Yes 🗌	No 🗹	NA 🗆		
O. VOA vials have	zero headspace?		Yes 🗌	No 🗆	No VOA Vials 🗹		
0. Were any samp	ele containers received br	oken?	Yes	No 🗸	# of preserved		
	match bottle labels? cies on chain of custody)		Yes 🔽	No 🗆	for pH: (<2/or >12 unless noted		
2. Are matrices con	rrectly identified on Chain	of Custody?	Yes 🗸	No 🗆	Adjusted? NO		
	malyses were requested?		Yes 🔽	No 🗆	40 11.		
	times able to be met? tomer for authorization.)		Yes 🗸	No 🗆	Checked by: JP 11416		
pecial Handlin	g (if applicable)						
5. Was client notif	ied of all discrepancies w	ith this order?	Yes 🗌	No 🗆	NA 🗹		
Person No	otified:	Date:					
By Whom	:	Via:	eMail	Phone Fax	In Person		
Regarding							
Client Inst	tructions:	THE RESERVE AND THE PARTY OF TH	-h 1		The state of the s		
6. Additional rema	arks:						
7. Cooler Inform	the same way is still be a second or the same of						
Service and desired and other papers.	Temp °C Condition	Seal Intact   Seal No	Seal Date	Signed By			
The same of the same of the same of	2.0 Good						
2	2.2 Good						

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410

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

12/3/21

Form C-138 Revised 08/01/11

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\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

### REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Nan Enterprise Field Se	ie and Addre	SS:	e, Farmington NM		EFI SOLID WAS	SIE
2. Originating Sit MAPL Lyborr	e:			0/401		
3. Location of Ma	aterial (Stree	Address, Cit	y, State or ULSTR) 7 West; 36.232901	: -107.545978		
	from the Non xempt/Non-H	Exempt Waste	from the compresso	rekide	r skid drains. the end of the haul)	yd³ / bbls
5.	GI	ENERATOR (	CERTIFICATION	STATEMENT (	OF WASTE STATUS	
I, Thomas Long  Generator Sign certify that according regulatory determina	to the Reson	rce Conservati	on and Recovery Ac	(DCDA) and the	TIC F I P	etion Agency's July 1988
	npt: Oil field	wastes general	ted from oil and gas	exploration and r	production operations and a	nre not mixed with non-
ATTICL MATERIAL CO.	Exempt: Oil stablished in I	field waste wh	ich is non-hazardous	that does not ex	ceed the minimum standar hazardous waste as defined the above-described waste	ds for waste hazardous by
☐ MSDS Information	on 🗵 RCR	A Hazardous V	Vaste Analysis	Process Knowled	dge	excription in Day 4)
					ATEMENT FOR LAND	
	, repre	sentative for E	nterprise Products O			ARMS
representative sample have been found to co of the representative s 19.15.36 NMAC.	es of the oil fi conform to the samples are a	tached to demo	been subjected to the	Innathaman miner	do hereby and tested for chloride com ant to Section 15 of 19.15. nform to the requirements	tent and that the samples
5. Transporter: To						
Method of Treatment and	Permit #: *Ag SW/4 NW/4 d/or Disposal vaporation	ua Moss, LLC Section 2, Tov	Facility - Permit #: NM-01 vnship 29N, Range  Treating Plant PPROVED	Crouch Mesa, N	☐ Landfill ☐ Other	
PRINTALANCE	No. of Lot	L AI	COLUMN TO A STREET		ENIED (Must Be Maintain	ed As Permanent Record)
PRINT NAME: SIGNATURE:			TITI	E: TELEPHONE N	10.	DATE:
	rface Waste Man	agement Facility A	uthorized Agent	I ELEFHONE N	0.,	

Received by OCD: 11/9/2023 8:38:17 AM 1625 N. French Dr., Hobbs, NM 88240

District II 1301 W. Grand Avenue, 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

ECPoint C-138 Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST	FOR APPROVAL TO ACCEPT SOLID WASTE
<ol> <li>Generator Name and Address:</li> <li>Enterprise Field Services, LLC, 614 Reil</li> </ol>	y Ave, Farmington NM 87401
2. Originating Site: MAPL Lyborrk Pumping Station	
J. Location of Material (Street Address UL C Section 14 Township 23 North R	
Description: Non Exempt/Non Hazardous	WasteWater Tanks and from the compressor skid drains.  Water from the compressor skids.  In Volume (to be entered by the operator at the end of the haul)
5. GENERAT	OR CERTIFICATION STATEMENT OF WASTE STATUS
Generator Signature certify that according to the Resource Cons	er authorized agent for Enterprise Products Operating do hereby ervation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 ed waste is: (Check the appropriate classification)
	enerated from oil and gas exploration and production operations and are not mixed with non- Waste Acceptance Frequency Monthly Weekly Per Load
characteristics established in RCRA re	ste which is non-hazardous that does not exceed the minimum standards for waste hazardous by gulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
☐ MSDS Information ☐ RCRA Hazar	dous Waste Analysis  ☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 W	ASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Thomas Long , representative Generator Signature he required testing/sign the Generator Was	for Enterprise Products Operating authorize to complete te Testing Certification.
l, representat	ive for Agua Moss, LLC do hereby certify that
have been found to conform to the specific	have been subjected to the paint filter test and tested for chloride content and that the samples requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of demonstrate the above-described waste conform to the requirements of Section 15 of
5. Transporter: To Be Determined	
OCD Permitted Surface Waste Manage  Name and Facility Permit #: *Agua Mos Address of Facility: SW/4 NW/4 Section  Method of Treatment and/or Disposal:  Evaporation Injection  Waste Acceptance Status:	s, LLC - Permit #: NM-01-009 2, Township 29N, Range Crouch Mesa, NM
PRINT NAME: SIGNATURE: Surface Waste Management I	TITLE: FORMAN DATE: 1/4/30 TELEPHONE NO.: 505-716-2988



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

December 12, 2019

Ashley Maxwell Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401 TEL: (505) 325-5667 FAX (505) 327-1496

RE: Lybrook OrderNo.: 1911677

### Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/15/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 03, 2019.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1911677

Date Reported: 12/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Lybrook

 Project:
 Lybrook
 Collection Date: 11/14/2019 9:13:00 AM

 Lab ID:
 1911677-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	ND	0.020		mg/L	1	11/22/2019 10:29:54 AM	48955
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	rde
Arsenic	ND	5.0		ma/l	1	11/25/2019 3:55:53 PM	
Barium	ND	100		mg/L mg/L	1	11/25/2019 3:35:35 PM	
Cadmium	ND	1.0		mg/L	1	11/25/2019 12:47:25 PM	
Chromium	ND	5.0		mg/L	1	11/25/2019 12:47:25 PM	
Lead	ND	5.0		mg/L	1	11/25/2019 12:47:25 PM	
Selenium	ND	1.0		mg/L	1	11/25/2019 12:47:25 PM	
Silver	ND	5.0		mg/L	1	11/25/2019 12:47:25 PM	
EPA METHOD 8270C: PAHS		0.0				Analyst:	
Naphthalene	ND	0.50		μg/L	1		48934
1-Methylnaphthalene	ND	1.0		µg/L	1	11/25/2019 4:12:01 PM	48934
2-Methylnaphthalene	ND	1.0		µg/L	1	11/25/2019 4:12:01 PM	48934
Acenaphthylene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	48934
Acenaphthene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	48934
Fluorene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Phenanthrene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	100-00-00
Anthracene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Fluoranthene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Pyrene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	W-10-1
Benz(a)anthracene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Chrysene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Benzo(b)fluoranthene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Benzo(k)fluoranthene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	
Benzo(a)pyrene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	48934
Dibenz(a,h)anthracene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	48934
Benzo(g,h,i)perylene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	48934
Indeno(1,2,3-cd)pyrene	ND	0.50		µg/L	1	11/25/2019 4:12:01 PM	48934
Surr: N-hexadecane	65.8	20.4-126		%Rec	1	11/25/2019 4:12:01 PM	48934
Surr: Benzo(e)pyrene	62.0	21.4-126		%Rec	1	11/25/2019 4:12:01 PM	48934
EPA METHOD 8260B: VOLATILES						Analyst:	JMR
Benzene	ND	0.50		mg/L	200	11/15/2019 3:32:37 PM	R6456
Toluene	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R6456
Ethylbenzene	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R6456
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R6456
1,2,4-Trimethylbenzene	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R6456
1,3,5-Trimethylbenzene	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R6456
1,2-Dichloroethane (EDC)	ND	0.20		mg/L		11/15/2019 3:32:37 PM	

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 Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 1 of 11

### Analytical Report Lab Order 1911677

Date Reported: 12/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Lybrook

 Project:
 Lybrook
 Collection Date: 11/14/2019 9:13:00 AM

 Lab ID:
 1911677-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual Unit	s DF Date Analyzed I	Batch
EPA METHOD 8260B: VOLATILES				Analyst:	JMR
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM I	R64562
Naphthalene	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM	R64562
1-Methylnaphthalene	ND	0.80	mg/L		R64562
2-Methylnaphthalene	ND	0.80	mg/L		R64562
Acetone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Bromobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Bromodichloromethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Bromoform	ND	0.20	mg/L		R6456
Bromomethane	ND	0.60	mg/L		R6456
2-Butanone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Carbon disulfide	ND	2.0	mg/L		R6456
Carbon Tetrachloride	ND	0.20	mg/L		R6456
Chlorobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
Chloroethane	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Chloroform	ND	0.20	mg/L		R6456
Chloromethane	ND	0.60	mg/L	200 11/15/2019 3:32:37 PM	R6456
2-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
4-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
cis-1,2-DCE	ND	0.20	mg/L		R6456
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM I	R6456
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Dibromochloromethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM I	R6456
Dibromomethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM I	R6456
1,2-Dichlorobenzene	ND	0.20	mg/L		R6456
1,3-Dichlorobenzene	ND	0.20	mg/L		R6456
1,4-Dichlorobenzene	ND	0.20	mg/L		R6456
Dichlorodifluoromethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
1,1-Dichloroethane	ND	0.20	ma/L	200 11/15/2019 3:32:37 PM	R6456
1,1-Dichloroethene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
1,2-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
1,3-Dichloropropane	ND	0.20	mg/L		R6456
2,2-Dichloropropane	ND	0.40	mg/L		R6456
1,1-Dichloropropene	ND	0.20	mg/L		R6456
Hexachlorobutadiene	ND	0.20	mg/L		R6456
2-Hexanone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM	R6456
Isopropylbenzene	ND	0.20	mg/L		R6456
4-Isopropyltoluene	ND	0.20	mg/L		R6456
4-Methyl-2-pentanone	ND	2.0	mg/L		R64562
Methylene Chloride	ND	0.60	mg/L		111111111111111111111111111111111111111

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 Limit

Page 2 of 11

Lab Order 1911677

Date Reported: 12/12/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Lybrook

 Project:
 Lybrook
 Collection Date: 11/14/2019 9:13:00 AM

 Lab ID:
 1911677-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst	JMR
n-Butylbenzene	ND	0.60	mg/L	200	11/15/2019 3:32:37 PM	R64562
n-Propylbenzene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
sec-Butylbenzene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
Styrene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
tert-Butylbenzene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	11/15/2019 3:32:37 PM	R64562
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
trans-1,2-DCE	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,1-Trichloroethane	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,2-Trichloroethane	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
Trichlaroethene (TCE)	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
Trichlorofluoromethane	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
1,2,3-Trichloropropane	ND	0.40	mg/L	200	11/15/2019 3:32:37 PM	R64562
Vinyl chloride	ND	0.20	mg/L	200	11/15/2019 3:32:37 PM	R64562
Xylenes, Total	ND	0.30	mg/L	200	11/15/2019 3:32:37 PM	R64562
Surr: 1,2-Dichloroethane-d4	98.1	70-130	%Rec	200	11/15/2019 3:32:37 PM	R64562
Surr: 4-Bromofluorobenzene	92.7	70-130	%Rec	200	11/15/2019 3:32:37 PM	R64562
Surr: Dibromofluoromethane	105	70-130	%Rec	200	11/15/2019 3:32:37 PM	R64562
Surr: Toluene-d8	107	70-130	%Rec	200	11/15/2019 3:32:37 PM	R64562

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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 3 of 11

Ss

Sr



### ANALYTICAL REPORT

December 12, 2019

### Hall Environmental Analysis Laboratory

Sample Delivery Group:

L1162243

Samples Received:

11/19/2019

Project Number:

Description:

Report To:

4901 Hawkins NE

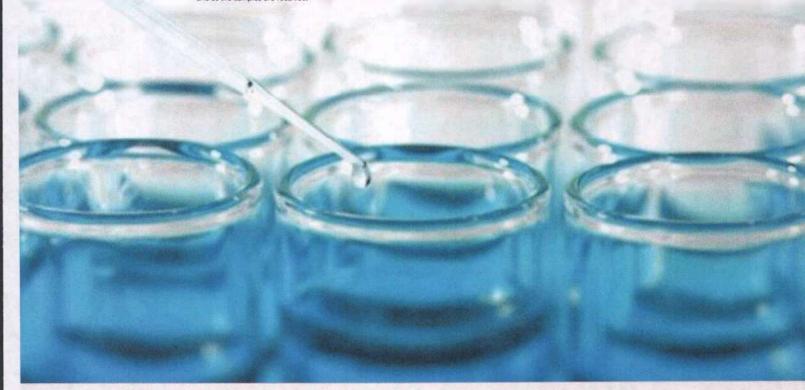
Albuquerque, NM 87109

Entire Report Reviewed By:

Dapline R Richards

Daphne Richards Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guldance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Cp: Cover Page	
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1911677-001D LYBROOK L1162243-01	5
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Wet Chemistry by Method 4500H+ B-2011	7
Wet Chemistry by Method 9034-9030B	8
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Wet Chemistry by Method D93/1010A

### SAMPLE SUMMARY

WG1393561

ONE LAB. Page 46 of 172

Mt. Juliet, TN

Collected date/time Received date/time

MCG

12/10/19 17:31

1911677-001D LYBR	OOK L116	2243-01	WW

1911677-001D LYBROOK L1162243-01 WW				11/14/19 09:13	11/19/19 08:4	5
Method	Batch D		Preparation	Analysis	Analyst	Location
			date/time	date/time		
Wet Chemistry by Method 4500 CN E-2011	WG1386291	1	11/24/19 11:16	11/24/19 21:47	JER	Mt. Juliet, TN
Wet Chemistry by Method 4500H+ B-2011	WG1383247	1	11/19/19 19:45	11/19/19 19:45	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9034-90308	WG1384494	1	11/21/19 18:10	11/21/19 18:10	ALM	Mt. Juliet, TN

Collected by

12/10/19 17:31



TC













Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Dapline R Richards

Daphne Richards Project Manager

### Report Revision History

Version 1: 11/29/19 09:07 AM

### Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

Collected date/time: 11/14/19 09:13

### SAMPLE RESULTS - 01

Cn

GI

Sc

1.116224

### Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Reactive Cyanide	ND	<u>J4</u>	0.00500	1	11/24/2019 21:47	WG1386291

### Wet Chemistry by Method 4500H+ B-2011

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	su			date / time		
Corrosivity by pH	6.75	<u>T8</u>	1	11/19/2019 19:45	WG1383247	

### Sample Narrative:

L1162243-01 WG1383247; 6.75 at 18.5C

### Wet Chemistry by Method 9034-9030B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Reactive Sulfide	ND		0.0500	1	11/21/2019 18:10	WG1384494	

### Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	deg F			date / time		
Flashpoint	DNF at 170	<u>Q</u>	1	12/10/2019 17:31	WG1393561	

	-2011	
	CNR	
	1 4500 CN E-201	
-	thoc	MB)
7	by	×
000	istry	Blan
213	Chem	owethod Blank (MB
>	Wet	Met

Re

The state of the s	17:07 5:07	
	MB Result	MB Qualifier
% Analyte mg/l	l/gm	
sactive Cyanide	0	

MB RDL

MB MDL mg/l

mg/l 0.00500

0.00180

Received by OCD: 11/9/2023 8:38:77 AM

ONE LAB. NATIONWIDE.

QUALITY CONTROL SUMMARY

11162243-01

1162058-02 Original Sample (OS) • Duplicate (DUP)	
1162058-02 Original Sample (OS) • Duplicate (Di	(A)
1162058-02 Original Sample (OS) • Duplicate	ē
1162058-02 Original Sample (OS) •	Duplicate
1162058-02 Original Sample (OS)	
1162058-02 Original Sample	(08)
200 1162058-02 Original	Sample
20-85029118	Original
€ 2023 8:	52058-02
023 8:	1
	023 8:

Original Result DUP Result DIP RPD	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
l/gm	l/gm		96		36
ON	0.00394	+	0.000		20

### Laboratory Control Sample (LCS)

CS) R3475672-2 11/24/19 20:23	/24/19 20:23					
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	
4nalyte	mg/l	l/bm	96			
Reactive Cyanide	00100	0.116	116	85.0-115	74	

# L1162228-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

mg/l	Spike Amount Original Result MS Result MSD Result MS Rec.  Analyte mg/l mg/l mg/l %	MS Result	MSD Result	MS Rec.	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD %	RPD Limits	
0.100	QN	0.0897	0.0937	7.68	93.7	-	75.0-125			4.36	20	

# L1162243-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

OS) L1162243-01 1	(/24/19 21:47 • (MS) R3	475672-6 11/24	4/19 21:48 · (A	MSD) R3475672	-7 11/24/19 21	20							
	Spike Amount Original Result MS Result MSD Result MS Rec. MS	Original Result	MS Result	MSD Result	MS Rec.	D Rec.	Dilution	Dilution Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	//6ш	mg/l	mg/l	mg/l	%			96			96	%	
Reactive Cyanide	0,100	QN	0.0893	0.101	89.3	101	-	75.0-125			12.3	20	

Weday Sand Sand Sand Sand Sand Sand Sand Sand	Belower Chemistry by Method 4500H+ B-2011		QUALITY CONTRO	CONTROL SUMMARY	ONE LAB.: NATIONWIDE.	Received
a 1162185-01 Orig	1162185-01 Original Sample (OS) • Duplicate (DUP)	licate (DUP)				by C
000 L1162185-01 11/19,	COS) L1162185-01 11/19/19 19:45 • (DUP) R3473880-10 11/19/19 19:45	1/19/19 19:45				CD
ing:	Original Result DUP Result	Dilution DUP RPD	DUP Qualifier Limits			: 11/
Hd yd ything by pH	8.75	1 0.000	b 1			202
2023 Sample Narrative: Sample Narrative: S. 8.75 at 18.85 S. 444:32						3 8:38:17 AM
L1162234-01 Orig	L1162234-01 Original Sample (OS) • Duplicate (DUP)	olicate (DUP)				
(05) L1162234-01 11/19	(OS) L1162234-01 11/19/19 19:45 • (DUP) R3473880-16 11/19/19 19:45	11/19/19 19:45				Öc
	Original Result DUP Result	Dilution DUP RPD	DUP Qualifier Limits			
Analyte	ns ns	%	88			0
Corrosivity by pH	5.41 5.41	1 0.000	-			
Sample Narrative: OS: 5.41 at 18.3C DUP: 5.41 at 18.4C						Sc
L1162243-01 Orig	L1162243-01 Original Sample (OS) • Duplicate (DUP)	olicate (DUP)				
(05) L1162243-01 11/19	(OS) L162243-01 11/19/19 19:45 • (DUP) R3473880-17 11/19/19 19:45	1/19/19 19:45				
	Original Result DUP Result	Dilution DUP RPD	DUP Qualifier Limits			
Analyte	ns ns	36	%			
Corresivity by pH	6.75 6.79	1 0.591	-			
Sample Narrative: 05: 6.75 at 18.5C DUP: 6.79 at 18.8C						
Laboratory Cont	Laboratory Control Sample (LCS)					
(LCS) R3473880-1 11/19/19 19:45	9/19 19:45					
Analyte	Spike Amount LCS Result	LCS Rec. Rec. Limits %	mits LCS Qualifier			I
Corrosivity by pH	10.0	99.2 99.0-101	31			Page
Sample Narrative: LCS: 9:92 at 19.1C						50 of 17
	ACCOUNT:		PROJECT:	SDG: DATE/TIME:	PAGE:	2

### Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Description

J4	The associated batch QC was outside the established quality control range for accuracy.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.

T8 Sample(s) received past/too close to holding time expiration



Z<sub>To</sub>

3 Ss

<sup>4</sup>Cn

Sr

Qc

8 Al

9 50

So



G

Pace National is the only environmental laboratory accredited/certifled to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conductive to accelerated productivity, decreasing turn-ground time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

### State Accreditations

otore , recreations		
Alabama	40660	Nebraska
Alaska	17-026	Nevada
Arizona	AZ0612	New Hamps
Arkansas	88-0469	New Jersey-
California	2932	New Mexico
Colorado	TN00003	New York
Connecticut	PH-0197	North Carolin
Florida	E87487	North Carolii
Georgia	NELAP	North Carolin
Georgia 1	923	North Dakota
Idaho	TN00003	Ohio-VAP
Illinois	200008	Oklahoma
Indiana	C-TN-01	Oregon
lowa	364	Pennsylvania
Kansas	E-10277	Rhode Island
Kentucky 16	90010	South Caroli
Kentucky 2	16	South Dakot
Louisiana	Al30792	Tennessee 1
Louisiana 1	LA180010	Texas
Maine	TN0002	Texas <sup>5</sup>
Maryland	324	Utah
Massachusetts	M-TN003	Vermont
Michigan	9958	Virginia
Minnesota	047-999-395	Washington
Mississippi	TN00003	West Virginia
Missouri	340	Wisconsin
Montana	CERTO086	Wyoming

ebraska	NE-OS-15-05
levada	TN-03-2002-34
lew Hampshire	2975
lew Jersey-NELAP	TN002
ew Mexico 1	n/a
ew York	11742
orth Carolina	Env375
orth Carolina 1	DW21704
orth Carolina 3	41
orth Dakota	R-140
hio-VAP	CL0069
klahoma	9915
regon	TN200002
ennsylvania	68-02979
hode Island	LA000356
outh Carolina	84004
outh Dakota	n/a
ennessee 1 4	2006
exas	T104704245-18-15
exas <sup>s</sup>	LAB0152
tah	TN00003
ermont	VT2006
irginia	460132
ashington	C847
est Virginia	233
/isconsin	9980939910
lyoming	AZLA

### Third Party Federal Accreditations

A2LA - ISO 17025	1461.01	
A2LA - ISO 17025 5	1461.02	
Canada	1461.01	
EPA-Crypto	TN00003	

AJHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

<sup>&</sup>lt;sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

### Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



ENVIRONMENTAL LABORATORY ANALYSIS

CHAIN OF CUSTODY RECORD PAGE

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975

FAX: 505-345-4107

Website: www.hallenvironmental.com

SUB CONTRATOR ESC PACE	COMPANY:	ESC PACE		PHONE	(800) 767-5859 (615) 758-5859	859
ADDRESS: 12065 Lebanon Rd				ACCOUNT	EMAIL	
GIY, STATE, ZIP Mt. Juliet, TN 37122	12					
			ox		#CON.	1201
ITEM SAMPLE CLIENT SAMPLE ID	AMPLEID	BOTTLE	MATRIX	COLLECTION	ANALYTICAL COMMENTS	ENTS
1 1911677-001D Lybrook		SOOHDPE	Aqueous	11/14/2019 9:13:00 AM	Aqueous 11/14/2019 9:13:00 AM 3 Reactivity, Corrosivity and Ignitability ** 7 Day TAT **	1162277 3

SPECIAL INSTRUCTIONS COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

	11/15/2019	11/15/2019 8:32 AM			
Relinquished By:	Dute	Time	Reserved By:	Date Tine	HARDOPY (sum cast) TAX TAXAL CONTRE
chinquished By.	Date:	Time	Received By: W Was law	tueter maps - 345	BAD SCREEN: <0.5 mR/hr
TAT	Standard []	RUSH	RUSH Nevi BD [] ANI BD []	10 d8 per	Comments.

Pace Analytical National Center for Testing & Innovation	ation	
Cooler Receipt Form		
Client:	112243	
Cooler Received/Opened On: // / / / 19 Temperature: 22		
Received By: Willie Taylor		
Signature:		
THE RESIDENCE OF THE PROPERTY	を できる は は は は は は は は は は は は は は は は は は は	
Receipt Check List NP	Yes	No
COC Seal Present / Intact?	/	
COC Signed / Accurate?	1	P.S. Links
Bottles arrive intact?	1	
Correct bottles used?	1	
Sufficient volume sent?	/	
If Applicable		
VOA Zero headspace?		
Preservation Correct / Checked?	1	STATE OF

### Ace Analytical ® Innovation National Center for Testing & Innovation

	<b>从</b> 但图4	e (check applicable items)	on-Conformanc
Evaluated by: Matt S	61/61/11:afed	Client:HALLENVANM	11162243

8			Tracking#
		The second second	Саттіел
	Sufficient sample remains		Temp./Cont. Rec./pH:
To	Broken container:	Chain of Custody is missing	Date/Time:
	Broken container	Client did not "X" analysis.	Received by:
13	Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
	Sample is biphasic.	Sample ids on containers do not match ids on	Container lid not intact
-	Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
ı	pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Court
)	type Improper container	Please specify Metals requested.	Insufficient packing material inside cooler
	Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
	Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
10	Sample Integrity	Chain of Custody Clarification	

### Login Comments: Received FLASH in HDPE

	The state of the s				व्यवस्थित विद्या स्थित
	A THE THE PARTY OF		1ct:	Client Conta	TSR Initials: DR
Time:1201	Date: 11/19	Voice Mail	lisma	Call	Client informed by:

Qualify and proceed with analysis

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

12-Dec-19

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID:	100ng lcs
Client ID:	LOCIN

SampType: LCS

TestCode: EPA Method 8260B: VOLATILES

Batch ID: R64562 Client ID: LCSW

RunNo: 64562

Prep Date:	Analysis I	Date: 11	1/15/2019	\$	SeqNo: 2	210714	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	82.7	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	81.7	70	130			
Surr. 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.0	70	130			
Surr. Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: 1911677-001a ms

SampType: MS

TestCode: EPA Method 8260B: VOLATILES

Client ID: Lybrook

Batch ID: R64562

RunNo: 64562

Prep Date:	Analysis [	Date: 11	1/15/2019	5	SeqNo: 2	210720	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	3.9	0.20	4.000	0	97.0	70	130				
Toluene	3.9	0.20	4.000	0	96.7	70	130				
Chlorobenzene	4.0	0.20	4.000	0	101	70	130				
1,1-Dichloroethene	3.4	0.20	4.000	0	85.6	70	130				
Trichloroethene (TCE)	3.3	0.20	4.000	0	82.6	70	130				
Surr. 1,2-Dichloroethane-d4	1.9		2.000		96.8	70	130				
Surr: 4-Bromofluorobenzene	1.9		2.000		93.8	70	130				
Surr: Dibromofluoromethane	2.1		2.000		106	70	130				
Surr: Toluene-d8	2.0		2.000		102	70	130				

Sample ID: 1911677-001a msd Client ID: Lybrook

SampType: MSD

TestCode: EPA Method 8260B: VOLATILES

Batch ID: R64562

RunNo: 64562

Prep Date:	Analysis D	1/15/2019	5	SeqNo: 2	210721	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.7	0.20	4.000	0	93.3	70	130	3.91	20	
Toluene	3.7	0.20	4.000	0	93.6	70	130	3.17	20	
Chlorobenzene	3.9	0.20	4.000	0	97.8	70	130	3.24	20	
1,1-Dichloroethene	3.2	0.20	4.000	0	79.3	70	130	7.65	20	
Trichloroethene (TCE)	3.2	0.20	4.000	0	79.1	70	130	4.33	20	
Surr: 1,2-Dichloroethane-d4	2.0		2.000		98.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.8		2.000		91.3	70	130	0	0	
Surr: Dibromofluoromethane	2.1		2.000		106	70	130	0	0	
Surr: Toluene-d8	2.1		2.000		104	70	130	0	0	

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Practical Quanitative Limit % Recovery outside of range due to dilution or matrix Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

Page 4 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677 12-Dec-19

Client: Souder, Miller and Associates

Project: Lybrook

Sample ID: rb1	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES								
Client ID: PBW	Batc	ID: RE	4562	RunNo: 64562												
Prep Date:	Analysis D	ate: 1	1/15/2019		SeqNo: 2210733 Un			10733 Units: μg/L						ε μg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual						
Benzene	ND	1.0														
Toluene	ND	1.0														
Ethylbenzene	ND	1.0														
Methyl tert-butyl ether (MTBE)	ND	1.0														
1,2,4-Trimethylbenzene	ND	1.0														
1,3,5-Trimethylbenzene	ND	1.0														
1,2-Dichloroethane (EDC)	ND	1.0														
1,2-Dibromoethane (EDB)	ND	1.0														
Naphthalene	ND	2.0														
1-Methylnaphthalene	ND	4.0														
2-Methylnaphthalene	ND	4.0														
Acetone	ND	10														
Bromobenzene	ND	1.0														
Bromodichloromethane	ND	1.0														
Bromoform	ND	1.0														
Bromomethane	ND	3.0														
2-Butanone	ND	10														
Carbon disulfide	ND	10														
Carbon Tetrachloride	ND	1.0														
Chlorobenzene	ND	1.0														
Chloroethane	ND	2.0														
Chloroform	ND	1.0														
Chloromethane	ND	3.0														
2-Chlorotoluene	ND	1.0														
4-Chlorotoluene	ND	1.0														
cis-1,2-DCE	ND	1.0														
cis-1,3-Dichloropropene	ND	1.0														
1,2-Dibromo-3-chloropropane	ND	2.0														
Dibromochloromethane	ND	1.0														
Dibromomethane	ND	1.0														
1,2-Dichlorobenzene	ND	1.0														
1,3-Dichlorobenzene	ND	1.0														
1,4-Dichlorobenzene	ND	1.0														
Dichlorodifluoromethane	ND	1.0														
Distributioning	IND	1.0														

### Qualifiers:

1,1-Dichloroethane

1,1-Dichloroethene

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

- Value exceeds Maximum Contaminant Level
- Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit H

ND

ND

ND

ND

ND

1.0

1.0

1.0

1.0

2.0

- ND
- Practical Quanitative Limit PQL.
- % Recovery outside of range due to dilution or matrix

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

Page 5 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

12-Dec-19

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID: rb1	Samp	ype: ME	BLK	Tes	tCode: EF	A Method	8260B: VOL	ATILES				
Client ID: PBW	Batc	h ID: R6	4562	F	RunNo: 64	4562						
Prep Date:	Analysis [	Date: 1	1/15/2019	S	SeqNo: 2210733		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
1,1-Dichloropropene	ND	1.0										
Hexachlorobutadiene	ND	1.0										
2-Hexanone	ND	10										
Isopropylbenzene	ND	1.0										
4-Isopropyltoluene	ND	1.0										
4-Methyl-2-pentanone	ND	10										
Methylene Chloride	ND	3.0										
n-Butylbenzene	ND	3.0										
n-Propylbenzene	ND	1.0										
sec-Butylbenzene	ND	1.0										
Styrene	ND	1.0										
ert-Butylbenzene	ND	1.0										
1,1,1,2-Tetrachloroethane	ND	1.0										
1,1,2,2-Tetrachloroethane	ND	2.0										
Tetrachloroethene (PCE)	ND	1.0										
trans-1,2-DCE	ND	1.0										
trans-1,3-Dichloropropene	ND	1.0										
1,2,3-Trichlorobenzene	ND	1.0										
1,2,4-Trichlorobenzene	ND	1.0										
1,1,1-Trichloroethane	ND	1.0										
1,1,2-Trichloroethane	ND	1.0										
Trichloroethene (TCE)	ND	1.0										
Trichlorofluoromethane	ND	1.0										
1,2,3-Trichloropropane	ND	2.0										
Vinyl chloride	ND	1.0										
Xylenes, Total	ND	1.5										
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.8	70	130					
Surr: 4-Bromofluorobenzene	9.3		10.00		92.9	70	130					
Surr: Dibromofluoromethane	11		10.00		107	70	130					
Surr: Toluene-d8	11		10.00		109	70	130					

### Qualifiers:

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

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

Page 6 of 11

### Hall Environmental Analysis Laboratory, Inc.

ND

ND

ND

ND

ND

ND

ND

ND

61

13

15

0.50

20.00

0.50

0.50

0.50

0.50

0.50

0.50

0.50

0.50

87.60

20.00

WO#:

1911677

12-Dec-19

Client: Souder, Miller and Associates

Project: Lybrook

Benz(a)anthracene

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Dibenz(a,h)anthracene

Indeno(1,2,3-cd)pyrene

Surr: N-hexadecane

Surr: Benzo(e)pyrene

Benzo(g,h,i)perylene

Benzo(a)pyrene

Chrysene

Sample ID: mb-48934 SampType: MBLK TestCode: EPA Method 8270C: PAHs Client ID: PBW Batch ID: 48934 RunNo: 64751 Prep Date: 11/21/2019 Analysis Date: 11/25/2019 SeqNo: 2219189 Units: µg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD HighLimit **RPDLimit** Qual Naphthalene ND 0.50 1-Methylnaphthalene ND 1.0 2-Methylnaphthalene ND 1.0 Acenaphthylene ND 0.50 Acenaphthene ND 0.50 Fluorene ND 0.50 Phenanthrene ND 0.50 Anthracene ND 0.50 Fluoranthene ND 0.50 Pyrene ND 0.50

Sample ID: Ics-48934 SampType: LCS TestCode: EPA Method 8270C: PAHs Client ID: LCSW Batch ID: 48934 RunNo: 64751 Prep Date: 11/21/2019 Analysis Date: 11/25/2019 SeqNo: 2219191 Units: µg/L Analyte Result %RPD PQL SPK value SPK Ref Val %REC HighLimit **RPDLimit** LowLimit Qual Naphthalene 15 0.50 20.00 0 73.8 41.8 97.8 1-Methylnaphthalene 14 1.0 20.00 0 68.3 104 44.7 2-Methylnaphthalene 14 1.0 20.00 0 72.4 45 101 Acenaphthylene 15 0.50 20.00 0 72.8 51.2 102 Acenaphthene 14 0.50 20.00 0 71.8 53.2 101 Fluorene 15 0.50 20.00 0 75.1 57.6 106 Phenanthrene 15 0.50 20.00 0 75.6 57.6 109 Anthracene 15 0.50 20.00 0 73.2 56.1 98.9 Fluoranthene 16 0.50 20.00 0 81.9 61.4 114 Pyrene 16 0.50 20.00 0 78.7 58 110 15 Benz(a)anthracene 0.50 20.00 0 76.6 60 102 Chrysene 14 0.50 20.00 0 70.9 50.8 93.4

### Qualifiers:

Benzo(b)fluoranthene

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

B Analyte detected in the associated Method Blank

74.0

56.2

118

69.2

64.5

20.4

21.4

126

126

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

0

Page 7 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

**RPDLimit** 

1911677

12-Dec-19

Qual

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID: Ics-48934 Client ID: LCSW

SampType: LCS

TestCode: EPA Method 8270C: PAHs

Batch ID: 48934

RunNo: 64751

Prep Date: 11/21/2019

Analysis Date: 11/25/2019

SeqNo: 2219191 Units: µg/L

Analyte PQL Result SPK value SPK Ref Val %REC %RPD LowLimit **HighLimit** Benzo(k)fluoranthene 15 0.50 20.00 0 75.7 119 Benzo(a)pyrene 15 0.50 20.00 0 75.0 55.5 114 Dibenz(a,h)anthracene 15 0.50 20.00 0 75.5 53 110 Benzo(g,h,i)perylene 15 0.50 20.00 0 74.8 55 113

Indeno(1,2,3-cd)pyrene 15 0.50 20.00 0 75.5 51.2 115 Surr: N-hexadecane 67 87.60 76.4 20.4 126 Surr: Benzo(e)pyrene 14 20.00 68.3 126 21.4

Sample ID: Icsd-48934

LCSS02

Client ID:

SampType: LCSD

TestCode: EPA Method 8270C: PAHs

Batch ID: 48934

RunNo: 64751

Prep Date: 11/21/2019 Analysis Date: 11/25/2019 SeqNo: 2219192 Units: µg/L Analyte SPK value SPK Ref Val Result PQL %REC LowLimit HighLimit %RPD **RPDLimit** Qual Naphthalene 15 0.50 20.00 0 74.2 41.8 97.8 0.541 25.4 1-Methylnaphthalene 15 1.0 20.00 0 44.7 7.74 73.8 104 21.5 2-Methylnaphthalene 15 1.0 20.00 0 45 25.2 76.0 101 4.85 Acenaphthylene 17 0.50 20.00 0 83.4 51.2 102 13.6 30.3 Acenaphthene 16 0.50 20.00 0 81.6 53.2 101 12.8 28.1 Fluorene 17 0.50 20.00 0 57.6 83.5 106 10.6 33 Phenanthrene 15 0.50 20,00 0 74.8 57.6 109 1.06 24.5 Anthracene 15 0.50 20.00 0 98.9 76.6 56.1 4.54 26.9 Fluoranthene 17 0.50 20.00 0 83.2 61.4 114 1.57 21.8 Pyrene 15 0.50 20.00 0 77.1 58 110 2.05 27 Benz(a)anthracene 14 0.50 20.00 0 60 102 5.50 725 27 4 Chrysene 14 0.50 20.00 0 68.6 50.8 93.4 3.30 20.4 Benzo(b)fluoranthene 15 0.50 20.00 0 77.4 56.2 118 4.49 22.5 Benzo(k)fluoranthene 17 0.50 20.00 0 83.3 57.7 119 9.56 24.1 Benzo(a)pyrene 0.50 20.00 0 16 78.3 55.5 114 4.31 27.3 Dibenz(a,h)anthracene 0.50 16 20.00 0 78.5 53 110 3.90 18.5 Benzo(g,h,i)perylene 0.50 28.4 16 20.00 0 79.4 55 113 5.97 Indeno(1,2,3-cd)pyrene 16 0.50 20.00 0 81.5 51.2 115 7.64 21.8 Surr: N-hexadecane 70 87.60 79.8 20.4 126 0 0 Surr: Benzo(e)pyrene 14 20.00 0 0 71.8 21.4 126

### Qualifiers:

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

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

Page 8 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

12-Dec-19

Qual

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID: MB-48955

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Batch ID: 48955

RunNo: 64701

Prep Date: 11/21/2019

Analysis Date: 11/22/2019 PQL

SeqNo: 2217075

Units: mg/L HighLimit

Analyte Mercury

ND 0.00020

Sample ID: LCS-48955

SampType: LCS

Result

Result

ND

TestCode: EPA Method 7470: Mercury

Client ID: LCSW

Client ID: Lybrook

Client ID: Lybrook

Prep Date: 11/21/2019

Prep Date: 11/21/2019

Batch ID: 48955

PQL

0.005000

SPK value SPK Ref Val

0.020 0.005000 .00004404

RunNo: 64701

Prep Date: 11/21/2019 Analysis Date: 11/22/2019

SPK value SPK Ref Val %REC LowLimit

SPK value SPK Ref Val %REC LowLimit

0

SeqNo: 2217080

Units: mg/L

HighLimit

120

%RPD

**RPDLimit** 

**RPDLimit** Qual

Analyte Mercury

Sample ID: 1911677-001CMS

SampType: MS

0.0048 0.00020

TestCode: EPA Method 7470: Mercury

%REC

95.5

96.7

Batch ID: 48955 Analysis Date: 11/22/2019 RunNo: 64701 SeqNo: 2217083

Units: mg/L

HighLimit

125

%RPD

%RPD

**RPDLimit** Qual

Qual

Analyte Mercury

Sample ID: 1911677-001CMSD

ND 0.020 0.005000 .00004404

TestCode: EPA Method 7470: Mercury

SampType: MSD Batch ID: 48955

RunNo: 64701

75

LowLimit

Analysis Date: 11/22/2019

SeqNo: 2217084

98.3

Units: mg/L

**RPDLimit** 

Analyte Mercury

Result PQL SPK value SPK Ref Val

%REC

LowLimit 75

HighLimit 125

0

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND. Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 9 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677 12-Dec-19

Client:

Souder, Miller and Associates

ND

5.0

Project:

Lybrook

Sample ID: MB-48826 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals Client ID: PBW Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219763 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Barium ND 0.020 Cadmium ND 0.0020 Chromium ND 0.0060

 Cadmium
 ND
 0.0020

 Chromium
 ND
 0.0060

 Lead
 ND
 0.050

 Selenium
 ND
 0.050

 Silver
 ND
 0.0050

Sample ID: LCS-48826 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals Client ID: LCSW Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219768 Units: mg/L Analyte Result POL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit Barium 0.47 0.020 0.5000 94.6 80 120 0 Cadmium 0.49 0.0020 0.5000 0 97.1 80 120 Chromium 0.47 0.0060 0.5000 0 95.0 80 120 Lead 0 80 120 0.50 0.0050 0.5000 100 Selenium 0.050 0 0.54 0.5000 107 80 120 Silver 0.095 0 0.0050 0.1000 95.0 80 120

Sample ID: 1911677-001CMS TestCode: EPA 6010B: Total Recoverable Metals SampType: MS Client ID: Lybrook Batch ID: 48826 RunNo: 64774 Units: mg/L Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219789 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** %RPD **RPDLimit** ND 100 98.2 75 125 Barium 0.04852 0.5000 ND Cadmium 1.0 0.5000 0 102 75 125 5.0 0 Chromium ND 0.5000 99.3 75 125 Lead ND 5.0 75 125 0.5000 0.004371 104 Selenium ND 1.0 0.5000 114 75 125

0.1000 0.0007323

Sample ID: 1911677-001CMSD SampType: MSD TestCode: EPA 6010B: Total Recoverable Metals Client ID: Lybrook Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219793 Units: mg/L %RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Qual Barium ND 100 0.5000 0.04852 98.3 75 125 0 20 Cadmium ND 1.0 0.5000 101 75 125 0 20 ND 0 20 Chromium 5.0 0.5000 0 99.5 75 125 Lead ND 125 20 5.0 0.5000 0.004371 102 75

### Qualifiers:

Silver

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

B Analyte detected in the associated Method Blank

96.1

125

75

- F. Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

12-Dec-19

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID: 1911677-001CMSD

SampType: MSD

TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Lybrook

Batch ID: 48826

1.0

5.0

RunNo: 64774

Prep Date: 11/15/2019

Analysis Date: 11/25/2019

SeqNo: 2219793

LowLimit

75

75

Units: mg/L

Analyte Selenium

Silver

Result PQL ND ND

SPK value SPK Ref Val 0.5000 0.1000 0.0007323

%REC 106 94 7

HighLimit %RPD 125 125

**RPDLimit** Qual 0

20 20

Sample ID: MB-48826

Prep Date: 11/15/2019

SampType: MBLK

TestCode: EPA 6010B: Total Recoverable Metals

Client ID: PBW

Batch ID: 48826 Analysis Date: 11/25/2019 RunNo: 64774 SegNo: 2219851

Units: mg/L

Analyte Arsenic

ND

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

0

**RPDLimit** Qual

0.020

Result

0.50

Result

TestCode: EPA 6010B: Total Recoverable Metals

Sample ID: LCS-48826

Prep Date: 11/15/2019

SampType: LCS

RunNo: 64774

Client ID: LCSW

Batch ID: 48826 Analysis Date: 11/25/2019

SeqNo: 2219853

Units: mg/L

Analyte

PQL

0.5000

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** 

Qual

Arsenic

Sample ID: 1911677-001CMS

SampType: MS

TestCode: EPA 6010B: Total Recoverable Metals

%RPD

Client ID: Lybrook

Batch ID: 48826

0.020

RunNo: 64774

120

Prep Date: 11/15/2019

Analysis Date: 11/25/2019

SeqNo: 2219873

Units: mg/L

Analyte

SPK value SPK Ref Val %REC POL

0.5000

LowLimit HighLimit 125 **RPDLimit** Qual

Arsenic

Sample ID: 1911677-001CMSD

SampType: MSD

TestCode: EPA 6010B: Total Recoverable Metals

96.7

Client ID: Lybrook

Batch ID: 48826

Result

ND

ND

RunNo: 64774

Analyte Arsenic

Prep Date: 11/15/2019

Analysis Date: 11/25/2019 PQL

5.0

5.0

0.5000

SegNo: 2219874

95.6

SPK value SPK Ref Val %REC LowLimit

Units: mg/L HighLimit

%RPD

**RPDLimit** Qual

### Qualifiers:

POL

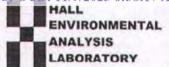
- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix

Practical Quanitative Limit

- Holding times for preparation or analysis exceeded H
- Not Detected at the Reporting Limit ND
- % Recovery outside of range due to dilution or matrix

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

Page 11 of 11



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

### Sample Log-In Check List

LABORATORY

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

2. Are matrices correctly identified on Chain of Custody?  3. Is it clear what analyses were requested?  4. Were all holding times able to be met? (If no, notify customer for authorization.)  5. Pecial Handling (if applicable)  15. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:	Completed By: Desiree Dominguez  11/15/2019 8:22:05 AM    Reviewed By:	
Completed By: Desiree Dominguez  11/15/2019 8:22:05 AM Reviewed By:	Completed By: Desiree Dominguez  11/15/2019 8:22:05 AM    Reviewed By:   EN M	
Chain of Custody  1. Is Chain of Custody complete?  2. How was the sample delivered?  Log In  3. Was an attempt made to cool the samples?  4. Were all samples received at a temperature of >0° C to 6.0°C  5. Sample(s) in proper container(s)?  7. Are samples (except VOA and ONG) properly preserved?  8. Was preservative added to bottles?  9. VOA vials have zero headspace?  10. Were any sample containers received broken?  11. Does paperwork match bottle labels?  (Note discrepancies on chain of custody)  2. Are matrices correctly identified on Chain of Custody?  3. Is it clear what analyses were requested?  4. Were all holding times able to be met?  (If no, notify customer for authorization.)  5. Person Notified:  By Whom:  Regarding:  Client Instructions:	Chain of Custody  1. Is Chain of Custody complete?  2. How was the sample delivered?  Courier  Log In  3. Was an attempt made to cool the samples?  4. Were all samples received at a temperature of >0° C to 6.0°C  Yes V No No NA  NA  Sample(s) in proper container(s)?  Are samples (except VOA and ONG) properly preserved?  Was preservative added to bottles?  Yes V No	
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3, Is it clear what analyses were requested?  4. Were all holding times able to be met? (If no, notify customer for authorization.)  **Pecial Handling (if applicable)*  15. Was client notified of all discrepancies with this order?  Person Notified:  By Whom:  Regarding:  Client Instructions:	3, Is it clear what analyses were requested? Yes ✓ No □	(12 0)11033
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Person Notified:  By Whom:  Regarding:  Client Instructions:		on,
Person Notified:  By Whom:  Regarding:  Client Instructions:	(If no, notify customer for authorization.)	11/1
Person Notified:  By Whom:  Via: eMail Phone Fax In Person  Regarding:  Client Instructions:	Special Handling (if applicable)	
By Whom: Via:eMailPhoneFaxIn Person  Regarding:	15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA 🗹	
Regarding: Client Instructions:	Person Notified: Date:	
Client Instructions:	By Whom: Via: eMail Phone Fax In Person	
	Regarding:	
And the service of th	Client Instructions:	
16. Additional remarks:	16. Additional remarks:	
/ Cooler Information	7. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	

Received by OCD: 11/9/2023 8:.	38:17 AM		Page 67 of 172
HALL ENVIRONMENTAL ANALYSIS LABORATOR www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request	270 (Semi-VOA) Otal Coliform (Present/Absent)		CC TOP Cotated on the analytics
LYSIS LYSIS allenvironme - Albuquer Fax 50 Analysis Re	21, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> 260 (VOA)	37	UN L A At OriSe
HALL ANAL ANAL Www.halle Hawkins NE - 505-345-3975	20 PAHS by 8310 or 82705/MS	4 ×	82 Leo File Connected tale will by your contracted data will by
Haw 505-3	.081 Pesticides/8082 PCB's EDB (Method 504.1)		arks: 82 up proportion of the
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	10 No HEAL NO.		Date Time Remarks: 82 up Full UST    14   5   1630   TCLP Compound at TCLP Lum    1   15   1630   Invividual Enterprise CL Tom 1  This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
Time:	ger:  CU)  DIV  EYes  (including CF): 0.8	Various	Via: Via: (Array) ccredited laboratories.
Turn-Around Time:  Standard  Project Name:  LND700	Project Manager:    PSh   Langler   PSh   Langler   PSh   Langler   PSh   Langler   Preserve   Pres	Various	Received by: Received by: Received by:
Chain-of-Custody Record  E. SMR  g Address: 401 W Broadwow  nung that NM 87401  e.#: 355 325 7535	mpliance   Pull Validation)	Lybrack	Time: Relinquished by: Via: Received by: Via: Time: Relinquished by: Via: Relinquished by: Via: Relinquished by: Via: Received by: Via: Relinquished by: Via: Relinquished by: Via: Received by: Via: Relinquished by: Via: Relinquished by: Via: Relinquished by: Via: Relinquished by: Via: Received by: Via: Received by: Via: Received by: Via: Relinquished by: Via: Via: Via: Via: Via: Via: Via: Via
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Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 03, 2019

Ashley Maxwell Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401

TEL: (505) 325-5667 FAX: (505) 327-1496

RE: Lybrook OrderNo.: 1911677

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/15/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order 1911677

Date Reported: 12/3/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

1911677-001

Client Sample ID: Lybrook

Project: Lybrook

Lab ID:

Collection Date: 11/14/2019 9:13:00 AM Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual U	nits I	F	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	ND	0.020	m	ng/L	1	11/22/2019 10:29:54 AM	48955
EPA 6010B: TOTAL RECOVERABLE METALS				-		Analyst:	rde
	NID	= 0				11/25/2019 3:55:53 PM	
Arsenic Barium	ND	5.0 100			1	11/25/2019 3:35:53 PM	
Cadmium	ND ND	1.0			1	11/25/2019 12:47:25 PM	
Chromium	ND	5.0		-	1	11/25/2019 12:47:25 PM	
Lead	ND	5.0			1	11/25/2019 12:47:25 PM	
Selenium	ND	1.0			1	11/25/2019 12:47:25 PM	
Silver	ND	5.0			1	11/25/2019 12:47:25 PM	
EPA METHOD 8270C: PAHS	140	0.0		·g·-		Analyst:	
						Andrew State of the Control of the C	
Naphthalene	ND	0.50			1	11/25/2019 4:12:01 PM	
1-Methylnaphthalene	ND	1.0		-	1	11/25/2019 4:12:01 PM	
2-Methylnaphthalene	ND	1.0			1	11/25/2019 4:12:01 PM	
Acenaphthylene	ND	0.50		4	1		4893
Acenaphthene	ND	0.50		7	1		4893
Fluorene	ND	0.50			1		4893
Phenanthrene Anthracene	ND	0.50		-	1		4893
	ND	0.50		-	1	11/25/2019 4:12:01 PM	4893
Fluoranthene	ND	0.50			1	11/25/2019 4:12:01 PM	
Pyrene	ND	0.50		-	1	11/25/2019 4:12:01 PM	4893
Benz(a)anthracene	ND	0.50		9	1	11/25/2019 4:12:01 PM 11/25/2019 4:12:01 PM	4893 4893
Chrysene	ND	0.50		4	1	11/25/2019 4:12:01 PM	4893
Benzo(b)fluoranthene	ND	0.50			1	11/25/2019 4:12:01 PM	4893
Benzo(k)fluoranthene	ND	0.50			1	11/25/2019 4:12:01 PM	4893
Benzo(a)pyrene	ND ND	0.50		4	1		4893
Dibenz(a,h)anthracene		0.50			1	11/25/2019 4:12:01 PM	4893
Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene	ND ND	0.50	-		1		4893
Surr: N-hexadecane	65.8	20.4-126			1	11/25/2019 4:12:01 PM	
Surr: Benzo(e)pyrene	62.0	21.4-126		TO THE REAL PROPERTY.	1	11/25/2019 4:12:01 PM	
EPA METHOD 8260B: VOLATILES	02.0	2117 120		01100	1	Analyst:	
The state of the s					000	The state of the s	
Benzene	ND	0.50				11/15/2019 3:32:37 PM	
Toluene	ND	0.20				11/15/2019 3:32:37 PM	R645
Ethylbenzene	ND	0.20				11/15/2019 3:32:37 PM	R645
Methyl tert-butyl ether (MTBE)	ND	0.20				11/15/2019 3:32:37 PM	R645
1,2,4-Trimethylbenzene	ND	0.20		-		11/15/2019 3:32:37 PM	R645
1,3,5-Trimethylbenzene 1,2-Dichloroethane (EDC)	ND ND	0.20				11/15/2019 3:32:37 PM 11/15/2019 3:32:37 PM	R645

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

Matrix: AQUEOUS

Qualifiers:

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

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

Page 1 of 11

Lab Order 1911677

Date Reported: 12/3/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Lybrook

 Project:
 Lybrook
 Collection Date: 11/14/2019 9:13:00 AM

 Lab ID:
 1911677-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst:	JMR
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
Naphthalene	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM	R64562
1-Methylnaphthalene	ND	0.80	mg/L	200 11/15/2019 3:32:37 PM	R64562
2-Methylnaphthalene	ND	0.80	mg/L	200 11/15/2019 3:32:37 PM	R64562
Acetone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM	R64562
Bromobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
Bromodichloromethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
Bromoform	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
Bromomethane	ND	0.60	mg/L	200 11/15/2019 3:32:37 PM	R64562
2-Butanone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM	R64562
Carbon disulfide	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM	R64562
Carbon Tetrachloride	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
Chlorobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
Chloroethane	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM	R6456
Chloroform	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
Chloromethane	ND	0.60	mg/L	200 11/15/2019 3:32:37 PM	R6456
2-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
4-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
cis-1,2-DCE	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM	R64562
Dibromochloromethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64563
Dibromomethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
1,2-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
1,3-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
1,4-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
Dichlorodifluoromethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
1,1-Dichloroethane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
1,1-Dichloroethene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
1,2-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
1,3-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
2,2-Dichloropropane	ND	0.40	mg/L	200 11/15/2019 3:32:37 PM	R6456
1,1-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
Hexachlorobutadiene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R6456
2-Hexanone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM	R6456
Isopropylbenzene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
4-Isopropyltoluene	ND	0.20	mg/L	200 11/15/2019 3:32:37 PM	R64562
4-Methyl-2-pentanone	ND	2.0	mg/L	200 11/15/2019 3:32:37 PM	R64562
Methylene Chloride	ND	0.60	mg/L	200 11/15/2019 3:32:37 PM	R64562

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
- PQI Practical Quantitative I imit
- 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
- RI Reporting Limit

Page 2 of 11

Client Sample ID: Lybrook

Lab Order 1911677

### Date Reported: 12/3/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Lybrook Lab ID: 1911677-001

Matrix: AQUEOUS

Collection Date: 11/14/2019 9:13:00 AM Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF I	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	JMR
n-Butylbenzene	ND	0.60		mg/L	200	11/15/2019 3:32:37 PM	R64562
n-Propylbenzene	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
sec-Butylbenzene	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
Styrene	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R64562
tert-Butylbenzene	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,1,2-Tetrachloroethane	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,2,2-Tetrachloroethane	ND	0.40		mg/L	200	11/15/2019 3:32:37 PM	R64562
Tetrachloroethene (PCE)	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R64562
trans-1,2-DCE	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
trans-1,3-Dichloropropene	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R64562
1,2,3-Trichlorobenzene	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
1,2,4-Trichlorobenzene	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
1,1,1-Trichloroethane	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R64562
1,1,2-Trichloroethane	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R64562
Trichloroethene (TCE)	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
Trichlorofluoromethane	ND	0.20		mg/L	200	11/15/2019 3:32:37 PM	R64562
1,2,3-Trichloropropane	ND	0.40		mg/L		11/15/2019 3:32:37 PM	R64562
Vinyl chloride	ND	0.20		mg/L		11/15/2019 3:32:37 PM	R64562
Xylenes, Total	ND	0.30		mg/L		11/15/2019 3:32:37 PM	R64562
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	200	11/15/2019 3:32:37 PM	R64562
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	200	11/15/2019 3:32:37 PM	R64562
Surr: Dibromofluoromethane	105	70-130		%Rec	200	11/15/2019 3:32:37 PM	R64562
Surr: Toluene-d8	107	70-130		%Rec	200	11/15/2019 3:32:37 PM	R64562

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

### Qualifiers:

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

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

Page 3 of 11



# ANALYTICAL REPORT

November 29, 2019

## Hall Environmental Analysis Laboratory

Sample Delivery Group:

L1162243

Samples Received:

11/19/2019

Project Number:

Description:

Report To:

4901 Hawkins NE

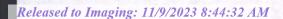
Albuquerque, NM 87109

Entire Report Reviewed By:

Dapline R Richards

Daphne Richards Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
1911677-001D LYBROOK L1162243-01	5
Qc: Quality Control Summary	6
Wet Chemistry by Method 4500 CN E-2011	6
Wet Chemistry by Method 4500H+ B-2011	7
Wet Chemistry by Method 9034-9030B	8
Wet Chemistry by Method D93/1010A	9
GI: Glossary of Terms	11
Al: Accreditations & Locations	12
Sc: Sample Chain of Custody	13

1911677-001D L	YBROOK	11162243-01	WW
DION COID L	- I DIVOVIV	F11022-10-01	A A A A

Collected by Collected date/time Received date/time 11/14/19 09:13 11/19/19 08:45

Method	Batch	Dilution	Preparation	Analysis	Analyst	Location
			date/time	date/time		
Wet Chemistry by Method 4500 CN E-2011	WG1386291	1.	11/24/19 11:16	11/24/19 21:47	JER	Mt. Juliet, TN
Wet Chemistry by Method 4500H+ B-2011	WG1383247	1	11/19/19 19:45	11/19/19 19:45	MSP	Mt. Juliet, TN
Wet Chemistry by Method 9034-90308	WG1384494	1	11/21/19 18:10	11/21/19 18:10	MJA	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG1387079	1	11/26/19 17:15	11/26/19 17:15	ALM	Mt. Juliet, TN

















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All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Naphne R Richards

Daphne Richards Project Manager

#### Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

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## SAMPLE RESULTS - 01

ONE LAB. Page 77 of 172

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Collected date/time: 11/14/19 09:13

#### Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Reactive Cyanide	ND	<u>J4</u>	0.00500	1	11/24/2019 21:47	WG1386291	

### Wet Chemistry by Method 4500H+ B-2011

N. N. S.	Result	Qualifier	Dilution	Analysis	Batch
Analyte	SU			date / time	
Carrosivity by pH	6.75	<u>T8</u>	1	11/19/2019 19:45	WG1383247

#### Sample Narrative:

L1162243-01 WG1383247: 6.75 at 18.5C

#### Wet Chemistry by Method 9034-9030B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Reactive Sulfide	ND		0.0500	1	11/21/2019 18:10	WG1384494	

#### Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	deg F			date / time		
Flashpoint	131		1	11/26/2019 17:15	WG1387079	

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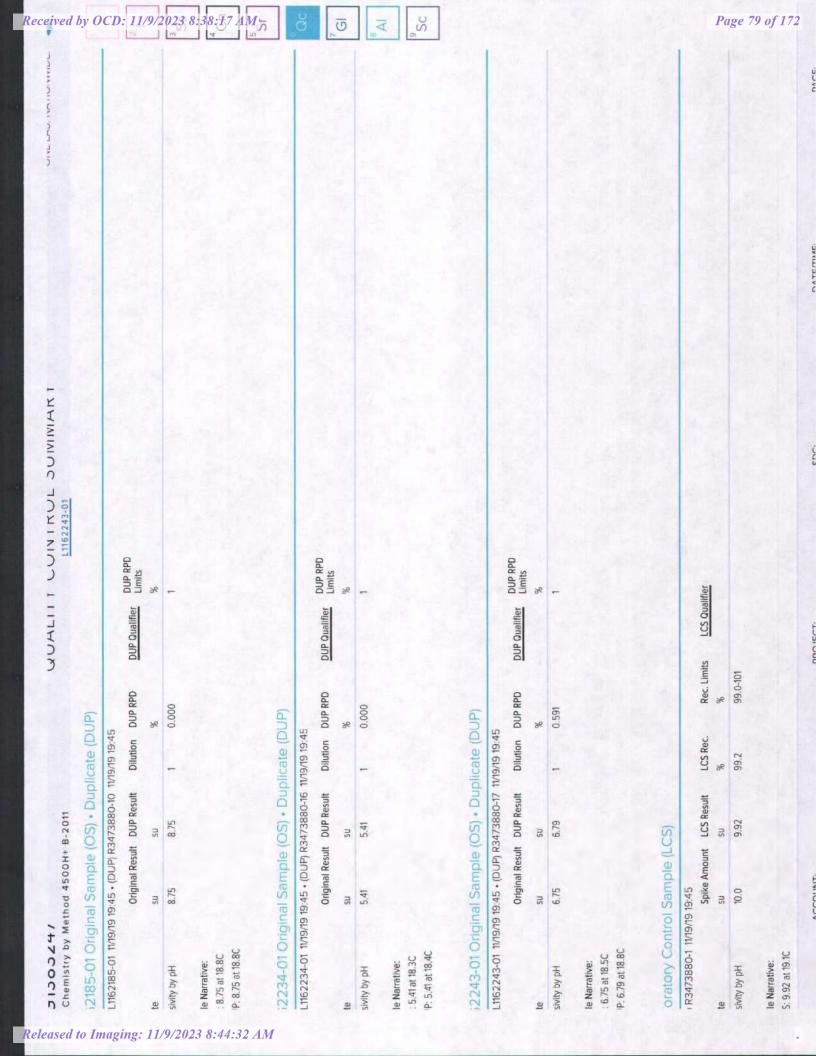
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R3475672-1 11/24/19 20:21

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JIJOIOIU Chemistry by Me	JOOIOIS Chemistry by Method D93/1010A	40			QUALL!	1 COIN   ROL L1162243-01	L SUNIVIAR I	לאני ישרבי באני	eceived
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L1162185-01 11/2(	L1162185-01 11/26/19 17:15 • (DUP) R3476638-2 11/26/19 17:15	:15 - (DUP) R3476638-2 11/2	1/26/19 17:1	6/19 17:15 Ollution Dilp ppn	DIID Orialifier	DUP RPD			
a	deg F	deg F		%	Dilippo Local	Limits %			
soint	131	125	-	4.69		01			m 7
32234-01 Ori	32234-01 Original Sample (OS) · Duplicate (DUP)	ing • (so)	olicate (	(And					4
L1162234-01 11/2	L1162234-01 11/26/19 17:15 • (DUP) R3476638-3 11/26/19 17:15	3476638-3 1	1/26/19 17:1	5					
	Original Result DUP Result	<b>DUP Result</b>		Dilution DUP RPD	DUP Qualifler	DUP RPD Limits			M <sub>5</sub>
le	deg F	deg F		36		*			
oint	131	136	-	3.75		10			ð
:2243_01 Orig	(D) Original Sample (OS) • Dunicate (D) P)	J. 180	) dicate (	Idilo					\sqrt{\overline{O}}
L1162243-01 11/20	LN62243-01 11/26/19 17:15 • (DUP) R3476638-4 11/26/19 17:15	3476638-4 11	1/26/19 17:1	5					
	Original Result	Original Result DUP Result Dilution DUP RPD	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits			, Z
te	deg F	deg F		*		38			6
yoint	131	135	-	3.01		10			SC
;2558-01 Ori	2558-01 Orlginal Sample (OS) • Duplicate (DUP)	OS) · Duc	olicate (	DUP					
L1162558-01 11/2	L1162558-01 11/26/19 17:15 - (DUP) R3476638-5 11/26/19 17:15	3476638-5 1	1/26/19 17:1	2					
	Original Result	Original Result DUP Result Dilution DUP RPD	Dilution	DUP RPD	<b>DUP Qualifier</b>	DUP RPD Limits			
te	deg F	deg F		38		%			
yoint	116	127	-	90.6		10			
i4862-01 Ori	4862-01 Original Sample (OS) • Duplicate (DUP)	ing • (50)	olicate (	DUP)					
L1164862-01 11/2	L1164862-01 11/26/19 17:15 • (DUP) R3476638-6 11/26/19 17:15	3476638-6 1	1/26/19 17:3	5					
	Original Result	Original Result DUP Result	Dilution	Dilution DUP RPD	DUP Qualifier	DUP RPD Limits			
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#### Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer – Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

#### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
j	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
imits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
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Guanner	Description
J4	The associated batch QC was outside the established quality control range for accuracy.
T8	Sample(s) received past/too close to holding time expiration.

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Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conductive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium guality and prompt service allows us to be YOUR LAB OF CHOICE.

Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

#### State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico 1	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina 1	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Seorgia 1	923	North Dakota	R-140
daho	TN00003	Ohio-VAP	CL0069
llinois	200008	Oklahoma	9915
ndiana	C-TN-01	Oregon	TN200002
owa	364	Pennsylvania	68-02979
Cansas	E-10277	Rhode Island	LA000356
Centucky 16	90010	South Carolina	84004
Centucky 2	16	South Dakota	n/a
ouisiana	Al30792	Tennessee 1 4	2006
ouisiana 1	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas 5	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

#### Third Party Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA - ISO 17025 5	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>&</sup>lt;sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

#### Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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SPECIAL INSTRUCTIONS COMMENTS.  Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.		
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Relinquished By:	Date	Tonic	Received By:	Date	Thic	[[AARIXOPY (sain cost)
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TAT:	Standard C	RESE	Neu BD	2nd HD 3nd HD	HD 12	Temp of surples of 271 % Cold of Alterdal ITT out 7
					100	Сонтирок

Client:  Client:  Cooler Receipt Form  Cooler Receipt Form  Cooler Received/Opened On: 1/1 / 1/4 / 1/9 Temperature: 3/2  Received By: Willie Taylor  Signature:  Receipt Check List  COC Seal Present / Intact?  COC Signed / Accurate?  Correct bottles used?  Sufficient volume sent?  If Applicable  VOA Zero headspace?  Preservation Correct / Checked?	Pace Analytical National Center for Testing & Innovation	ation	
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Preservation Correct / Checked?	VOA Zero headspace?		
The state of the s	Preservation Correct / Checked?		

# Astional Center for Testing & Innovation

Evaluated by:Matt S	Date:11/19/19	Client:HALLENVANM	11162243

## Non-Conformance (check applicable items)

			#paiderT
			Carrier:
	Sufficient sample remains		Temp./Cont. Rec./pH:
	Broken container:	Chain of Custody is missing	Date/Time:
	Broken container	Client did not "X" analysis.	Received by:
	Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
	Sample is biphasic.	Sample ids on containers do not match ids on	Container lid not intact
	Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
	pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Cou
×	Improper container	Please specify Metals requested.	Insufficient packing material inside
	Temperature not in gange	Chain of custody is incomplete	Insufficient packing material around container
	Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
	Sample Integrity	Chain of Custody Clarification	

# Login Comments: Received FLASH in HDPE

					tenedamment also.
			it:	Client Contac	TSR Initials: DR
Time:1201	Date: 11/19	Voice Mail	Email	Call	Client informed by:

Qualify and proceed with analysis

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

03-Dec-19

Client:

Souder, Miller and Associates

2.1

2.0

Project:

Lybrook

Sample ID: 100ng lcs	Samp	Type: LC	s	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batc	h ID: R6	4562	F	RunNo: 6	4562				
Prep Date:	Analysis [	Date: 11	/15/2019	5	SeqNo: 2	210714	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	82.7	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	81.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.0	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: 1911677-001a ms SampType: MS TestCode: EPA Method 8260B: VOLATILES Client ID: Lybrook Batch ID: R64562 RunNo: 64562 Prep Date: Analysis Date: 11/15/2019 SeqNo: 2210720 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 3.9 Benzene 0.20 4,000 97.0 70 130 Toluene 3.9 0.20 0 70 4.000 96.7 130 Chlorobenzene 4.0 0.20 4.000 0 101 70 130 1,1-Dichloroethene 3.4 0.20 4.000 0 85.6 70 130 Trichloroethene (TCE) 3.3 70 0.20 4.000 82.6 130 Surr: 1,2-Dichloroethane-d4 70 1.9 2.000 96.8 130 Surr: 4-Bromofluorobenzene 1.9 2.000 93.8 70 130

2.000

2.000

Sample ID: 1911677-001a m	sd Samp1	ype: MS	SD	Tes	TestCode: EPA Method 8260B: VOLATILES						
Client ID: Lybrook	Batcl	ID: R6	4562	F	RunNo: 6	4562					
Prep Date:	Analysis D	Date: 11	/15/2019	5	SeqNo: 2	210721	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	3.7	0.20	4.000	0	93.3	70	130	3.91	20		
Toluene	3.7	0.20	4.000	0	93.6	70	130	3.17	20		
Chlorobenzene	3.9	0.20	4.000	0	97.8	70	130	3.24	20		
1,1-Dichloroethene	3.2	0.20	4.000	0	79.3	70	130	7.65	20		
Trichloroethene (TCE)	3.2	0.20	4.000	0	79.1	70	130	4.33	20		
Surr. 1,2-Dichloroethane-d4	2.0		2.000		98.5	70	130	0	0		
Surr: 4-Bromofluorobenzene	1.8		2.000		91.3	70	130	0	0		
Surr: Dibromofluoromethane	2.1		2.000		106	70	130	0	0		
Surr: Toluene-d8	2.1		2.000		104	70	130	0	0		

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: Dibromofluoromethane

Surr: Toluene-d8

- II Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

106

102

70

70

130

130

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 11

## Hall Environmental Analysis Laboratory, Inc.

ND

1.0

3.0

1.0

1.0

1.0

1.0

2.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

1.0

2.0

SampType: MBLK

WO#:

1911677

03-Dec-19

Client: Souder, Miller and Associates

Project: Lybrook

Sample ID: rb1

		4.4.								
Client ID: PBW	Bato	h ID: Re	4562	F	RunNo: 6	4562				
Prep Date:	Analysis I	Date: 1	/15/2019	\$	SeqNo: 2	210733	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								

TestCode: EPA Method 8260B: VOLATILES

#### Qualifiers:

Chloroform

Chloromethane

2-Chlorotoluene

4-Chlorotoluene

cis-1,3-Dichloropropene

Dibromochloromethane

Dibromomethane

1,2-Dichlorobenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,1-Dichloroethane

1,1-Dichloroethene

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

Dichlorodifluoromethane

1,2-Dibromo-3-chloropropane

cis-1,2-DCE

- 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 Limit

Page 5 of 11

## Hall Environmental Analysis Laboratory, Inc.

9.9

9.3

11

11

10.00

10.00

10.00

10.00

WO#:

1911677

03-Dec-19

Client: Souder, Miller and Associates

Project: Lybrook

Sample ID: rb1 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES Client ID: PBW Batch ID: R64562 RunNo: 64562 Prep Date: Analysis Date: 11/15/2019 SeqNo: 2210733 Units: µg/L Result PQL Analyte SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual HighLimit 1,1-Dichloropropene ND Hexachlorobutadiene ND 1.0 2-Hexanone ND 10 Isopropylbenzene ND 1.0 4-Isopropyltoluene ND 1.0 4-Methyl-2-pentanone ND 10 Methylene Chloride ND 3.0 n-Butylbenzene ND 3.0 n-Propylbenzene ND 10 sec-Butylbenzene ND 1.0 Styrene ND 1.0 tert-Butylbenzene ND 1.0 1,1,1,2-Tetrachloroethane ND 1.0 1,1,2,2-Tetrachloroethane ND 2.0 Tetrachloroethene (PCE) ND 1.0 trans-1,2-DCE ND 1.0 trans-1,3-Dichloropropene ND 1.0 1,2,3-Trichlorobenzene ND 1.0 1,2,4-Trichlorobenzene ND 1.0 1,1,1-Trichloroethane ND 1.0 1,1,2-Trichloroethane ND 1.0 Trichloroethene (TCE) ND 1.0 Trichlorofluoromethane ND 1.0 1,2,3-Trichloropropane ND 2.0 Vinyl chloride ND 1.0 Xylenes, Total ND 1.5

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

98.8

92.9

107

109

70

70

70

70

130

130

130

130

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

03-Dec-19

Client:

Souder, Miller and Associates

SampType: LCS

Project:

Lybrook

Sample ID: mb-48934	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: PBW	Batc	h ID: 489	934	F	RunNo: 6	4751				
Prep Date: 11/21/2019	Analysis D	)ate: 11	/25/2019		SeqNo: 2	219189	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	1.0								
2-Methylnaphthalene	ND	1.0								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Anthracene	ND	0.50								
Fluoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
Indeno(1,2,3-cd)pyrene	ND	0.50		5						
Surr: N-hexadecane	61		87.60		69.2	20.4	126			
Surr: Benzo(e)pyrene	13		20.00		64.5	21.4	126			

Client ID: LCSW	Batci	h ID: 489	934	F	tunNo: 6	4751				
Prep Date: 11/21/2019	Analysis D	Date: 11	/25/2019	8	SeqNo: 2	219191	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	15	0.50	20.00	0	73.8	41.8	97.8			
1-Methylnaphthalene	14	1.0	20.00	0	68.3	44.7	104			
2-Methylnaphthalene	14	1.0	20.00	0	72.4	45	101			
Acenaphthylene	15	0.50	20.00	0	72.8	51.2	102			
Acenaphthene	14	0.50	20.00	0	71.8	53.2	101			
Fluorene	15	0.50	20.00	0	75.1	57.6	106			
Phenanthrene	15	0.50	20.00	0	75.6	57.6	109			
Anthracene	15	0.50	20.00	0	73.2	56.1	98.9			
Fluoranthene	16	0.50	20.00	0	81.9	61.4	114			
Pyrene	16	0.50	20.00	0	78.7	58	110			
Benz(a)anthracene	15	0.50	20.00	0	76.6	60	102			
Chrysene	14	0.50	20.00	0	70.9	50.8	93.4			
Benzo(b)fluoranthene	15	0.50	20.00	0	74.0	56.2	118			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit

Sample ID: Ics-48934

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

TestCode: EPA Method 8270C: PAHs

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

03-Dec-19

Client: Souder, Miller and Associates

Project: Lybrook

Sample ID: Ics-48934	SampT	ype: LC	s	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSW	Batch	h ID: 48	934	F	RunNo: 6	4751				
Prep Date: 11/21/2019	Analysis D	Date: 11	/25/2019	\$	eqNo: 2:	219191	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	15	0.50	20.00	0	75.7	57.7	119			
Benzo(a)pyrene	15	0.50	20.00	0	75.0	55.5	114			
Dibenz(a,h)anthracene	15	0.50	20.00	D	75.5	53	110			
Benzo(g,h,i)perylene	15	0.50	20.00	0	74.8	55	113			
indeno(1,2,3-cd)pyrene	15	0.50	20.00	0	75.5	51.2	115			
Surr: N-hexadecane	67		87.60		76.4	20.4	126			
Surr: Benzo(e)pyrene	14		20.00		68.3	21.4	126			

Sample ID: Icsd-48934	Sampl	ype: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batc	n ID: 48	934	F	RunNo: 6	4751				
Prep Date: 11/21/2019	Analysis [	Date: 11	1/25/2019	5	SeqNo: 2	219192	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	15	0.50	20.00	0	74.2	41.8	97.8	0.541	25.4	
1-Methylnaphthalene	15	1.0	20.00	0	73.8	44.7	104	7.74	21.5	
2-Methylnaphthalene	15	1.0	20.00	0	76.0	45	101	4.85	25.2	
Acenaphthylene	17	0.50	20.00	0	83.4	51.2	102	13.6	30.3	
Acenaphthene	16	0.50	20.00	0	81.6	53.2	101	12.8	28.1	
Fluorene	17	0.50	20.00	0	83.5	57.6	106	10.6	33	
Phenanthrene	15	0.50	20.00	0	74.8	57.6	109	1.06	24.5	
Anthracene	15	0.50	20.00	0	76.6	56.1	98.9	4.54	26.9	
Fluoranthene	17	0.50	20.00	0	83.2	61.4	114	1.57	21.8	
Pyrene	15	0.50	20.00	0	77.1	58	110	2.05	27	
Benz(a)anthracene	14	0.50	20.00	0	72.5	60	102	5.50	27.4	
Chrysene	14	0.50	20.00	0	68.6	50.8	93.4	3.30	20.4	
Benzo(b)fluoranthene	15	0.50	20.00	0	77.4	56.2	118	4.49	22.5	
Benzo(k)fluoranthene	17	0.50	20.00	0	83.3	57.7	119	9.56	24.1	
Benzo(a)pyrene	16	0.50	20.00	0	78.3	55.5	114	4.31	27.3	
Dibenz(a,h)anthracene	16	0.50	20.00	0	78.5	53	110	3.90	18.5	
Benzo(g,h,i)perylene	16	0.50	20.00	0	79.4	55	113	5.97	28.4	
Indeno(1,2,3-cd)pyrene	16	0.50	20.00	0	81.5	51.2	115	7.64	21.8	

#### Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

70

14

87.60

20.00

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

Surr. N-hexadecane

Surr: Benzo(e)pyrene

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

79.8

71.8

20.4

21.4

126

126

0

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 11

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677 03-Dec-19

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID: MB-48955

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Batch ID: 48955

RunNo: 64701

Prep Date: 11/21/2019

Analysis Date: 11/22/2019

PQL

SeqNo: 2217075

SPK value SPK Ref Val %REC LowLimit

Units: mg/L HighLimit

%RPD **RPDLimit** 

Qual

Analyte Mercury

ND 0.00020

Sample ID: LCS-48955

SampType: LCS

0.0048

Batch ID: 48955

TestCode: EPA Method 7470: Mercury

Prep Date: 11/21/2019

Client ID: LCSW

Analysis Date: 11/22/2019

RunNo: 64701 SeqNo: 2217080

Units: mg/L

**RPDLimit** 

Qual

Analyte Mercury

Result PQL

SPK value SPK Ref Val %REC LowLimit 0.00020 0.005000

96.7

HighLimit

%RPD

%RPD

Sample ID: 1911677-001CMS

Client ID: Lybrook

Client ID: Lybrook

SampType: MS

Batch ID: 48955

TestCode: EPA Method 7470: Mercury RunNo: 64701

Units: mg/L

125

**RPDLimit** 

Analyte

Prep Date: 11/21/2019

Analysis Date: 11/22/2019

SPK value SPK Ref Val

0.005000 .00004404

SeqNo: 2217083 %REC LowLimit

**HighLimit** 

Qual

Mercury

Sample ID: 1911677-001CMSD

SampType: MSD

ND

Result

TestCode: EPA Method 7470: Mercury RunNo: 64701

95.5

LowLimit

Prep Date: 11/21/2019

Batch ID: 48955

0.020

SegNo: 2217084

Units: mg/L

Analyte

Analysis Date: 11/22/2019

HighLimit

**RPDLimit** 

Qual

Mercury

PQL SPK value SPK Ref Val ND 0.020 0.005000 .00004404

%REC 98.3

75

125

0

%RPD

20

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

Value above quantitation range E

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 9 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911677

03-Dec-19

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID: MB-48826 Client ID: PBW

SampType: MBLK

TestCode: EPA 6010B: Total Recoverable Metals

Batch ID: 48826 RunNo: 64774

Analysis Date: 11/25/2019 SeqNo: 2219763 Units: mg/L

Prep Date: 11/15/2019 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Barium 0.020 Cadmium ND 0.0020 Chromium ND 0.0060 Lead ND 0.0050 Selenium ND 0.050 Silver ND 0.0050

Samp	Type: LC	S	Tes	tCode: El	PA 6010B:	Total Recover	rable Met	als		
Bato	ch ID: 48	826	F	RunNo: 6	4774					
Analysis	Date: 11	/25/2019	5	SeqNo: 2	219768	Units: mg/L				
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
0.47	0.020	0.5000	0	94.6	80	120				
0.49	0.0020	0.5000	0	97.1	80	120				
0.47	0.0060	0.5000	0	95.0	80	120				
0.50	0.0050	0.5000	0	100	80	120				
0.54	0.050	0.5000	0	107	80	120				
0.095	0.0050	0.1000	0	95.0	80	120				
	Analysis  Result  0.47  0.49  0.47  0.50  0.54	Batch ID: 488 Analysis Date: 11  Result PQL  0.47 0.020 0.49 0.0020 0.47 0.0060 0.50 0.0050 0.54 0.050	Result         PQL         SPK value           0.47         0.020         0.5000           0.49         0.0020         0.5000           0.47         0.0060         0.5000           0.50         0.0050         0.5000           0.54         0.050         0.5000	Batch ID: 48826 F Analysis Date: 11/25/2019 S  Result PQL SPK value SPK Ref Val  0.47 0.020 0.5000 0 0.49 0.0020 0.5000 0 0.47 0.0060 0.5000 0 0.50 0.0050 0.5000 0 0.54 0.050 0.5000 0	Batch ID: 48826         RunNo: 6           Analysis Date: 11/25/2019         SeqNo: 2           Result         PQL         SPK value         SPK Ref Val         %REC           0.47         0.020         0.5000         0         94.6           0.49         0.0020         0.5000         0         97.1           0.47         0.0060         0.5000         0         95.0           0.50         0.0050         0.5000         0         100           0.54         0.050         0.5000         0         107	Batch ID: 48826       RunNo: 64774         Analysis Date: 11/25/2019       SeqNo: 2219768         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit         0.47       0.020       0.5000       0       94.6       80         0.49       0.0020       0.5000       0       97.1       80         0.47       0.0060       0.5000       0       95.0       80         0.50       0.0050       0.5000       0       100       80         0.54       0.050       0.5000       0       107       80	Batch ID: 48826         RunNo: 64774           Analysis Date: 11/25/2019         SeqNo: 2219768         Units: mg/L           Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit           0.47         0.020         0.5000         0         94.6         80         120           0.49         0.0020         0.5000         0         97.1         80         120           0.47         0.0060         0.5000         0         95.0         80         120           0.50         0.0050         0.5000         0         100         80         120           0.54         0.050         0.5000         0         107         80         120	Batch ID: 48826       RunNo: 64774         Analysis Date: 11/25/2019       SeqNo: 2219768       Units: mg/L         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD         0.47       0.020       0.5000       0       94.6       80       120         0.49       0.0020       0.5000       0       97.1       80       120         0.47       0.0060       0.5000       0       95.0       80       120         0.50       0.0050       0.5000       0       100       80       120         0.54       0.050       0.5000       0       107       80       120	Batch ID: 48826       RunNo: 64774         Analysis Date: 11/25/2019       SeqNo: 2219768       Units: mg/L         Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit         0.47       0.020       0.5000       0       94.6       80       120         0.49       0.0020       0.5000       0       97.1       80       120         0.47       0.0060       0.5000       0       95.0       80       120         0.50       0.0050       0.5000       0       100       80       120         0.54       0.050       0.5000       0       107       80       120	Batch ID: 48826 RunNo: 64774  Analysis Date: 11/25/2019 SeqNo: 2219768 Units: mg/L  Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual  0.47 0.020 0.5000 0 94.6 80 120  0.49 0.0020 0.5000 0 97.1 80 120  0.47 0.0060 0.5000 0 95.0 80 120  0.50 0.0050 0.5000 0 100 80 120  0.54 0.050 0.5000 0 107 80 120

Sample ID: 1911677-001CMS	SampT	ype: MS	3	Tes	tCode: El	PA 6010B:	Total Recove	rable Meta	als	
Client ID: Lybrook	Batch	ID: 48	826	F	RunNo: 6	4774				
Prep Date: 11/15/2019	Analysis D	ate: 11	/25/2019	\$	SeqNo: 2	219789	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	0.04852	98.2	75	125			
Cadmium	ND	1.0	0.5000	0	102	75	125			
Chromium	ND	5.0	0.5000	0	99.3	75	125			
Lead	ND	5.0	0.5000	0.004371	104	75	125			
Selenium	ND	1.0	0.5000	0	114	75	125			
Silver	ND	5.0	0.1000	0.0007323	96.1	75	125			

Sample ID: 1911677-001CMSI	Samp1	ype: MS	SD	Tes	tCode: El	PA 6010B:	Total Recove	rable Meta	als	
Client ID: Lybrook	Batch	ID: 48	826	F	RunNo: 6	4774				
Prep Date: 11/15/2019	Analysis D	)ate: 11	1/25/2019	5	SeqNo: 2	219793	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	100	0.5000	0.04852	98.3	75	125	0	20	
Cadmium	ND	1.0	0.5000	0	101	75	125	0	20	
Chromium	ND	5.0	0.5000	0	99.5	75	125	0	20	
ead	ND	5.0	0.5000	0.004371	102	75	125	0	20	

#### Qualifiers:

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

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

Page 10 of 11

#### Hall Environmental Analysis Laboratory, Inc.

WO#:

**RPDLimit** 

20 20 1911677

03-Dec-19

Qual

Client:

Souder, Miller and Associates

Project:

Lybrook

Sample ID:	1911677-0010
Client ID:	Lybrook

SampType: MSD

TestCode: EPA 6010B: Total Recoverable Metals

Prep Date: 11/15/2019

Batch ID: 48826 Analysis Date: 11/25/2019 RunNo: 64774

SeqNo: 2219793

Units: mg/L

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	-
Selenium	ND	1.0	0.5000	0	106	75	125	0	
Silver	ND	5.0	0.1000	0.0007323	94.7	75	125	0	

Sample ID: MB-48826

SampType: MBLK

TestCode: EPA 6010B: Total Recoverable Metals

Client ID: PBW

Batch ID: 48826

PQL

RunNo: 64774

Units: mg/L

Prep Date: 11/15/2019

Analysis Date: 11/25/2019

SegNo: 2219851

HighLimit

**RPDLimit** Qual

Analyte Arsenic

ND 0.020

SampType: LCS

TestCode: EPA 6010B: Total Recoverable Metals

SPK value SPK Ref Val %REC LowLimit

%RPD

%RPD

%RPD

Client ID: LCSW

Batch ID: 48826

RunNo: 64774

120

Prep Date: 11/15/2019

Sample ID: LCS-48826

Analysis Date: 11/25/2019

0.020

SegNo: 2219853

Units: mg/L

Analyte

Result 0.50

Result

PQL

0.5000

SPK value SPK Ref Val %REC LowLimit 99.7

HighLimit

**RPDLimit** Qual

Arsenic

Sample ID: 1911677-001CMS

SampType: MS

TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Lybrook

Batch ID: 48826

Result

Result

ND

ND

RunNo: 64774

Prep Date: 11/15/2019

Analysis Date: 11/25/2019

5.0

SeqNo: 2219873

Units: mg/L

Arsenic

Analyte

PQL

0.5000

0.5000

SPK value SPK Ref Val %REC 0 96.7

HighLimit LowLimit

**RPDLimit** Qual

Sample ID: 1911677-001CMSD

SampType: MSD

TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Lybrook

Batch ID: 48826

RunNo: 64774

Units: mg/L

Analyte Arsenic

Prep Date: 11/15/2019

Analysis Date: 11/25/2019

PQL

5.0

SeqNo: 2219874

75

%RPD **RPDLimit** 

SPK value SPK Ref Val %REC

95.6

LowLimit

HighLimit 125

125

Qual

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit ND POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

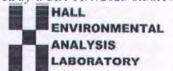
B Analyte detected in the associated Method Blank

E Value above quantitation range

Analyte detected below quantitation limits 1

Sample pH Not In Range

RI. Reporting Limit Page 11 of 11



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-FARM	Work Order Number	er: 1911	677			RcptNo: 1
Received By: Juan Rojas	1/15/2019 8:00:00	AM				
	1/15/2019 8:22:05	AM		TD:		
	1/15/19			11-	2	
Coli	.,,,,,,,,					
Chain of Custody						
1. Is Chain of Custody complete?		Yes	<b>V</b>	No		Not Present
2. How was the sample delivered?		Couri	er			
Log In						
Was an attempt made to cool the samples?		Yes	V	No		NA 🗆
		1,000				
4. Were all samples received at a temperature of	>0° C to 6.0°C	Yes	V	No		NA 🗆
5. Sample(s) in proper container(s)?		Yes		No		
o. Sample(s) in proper container(s)?		Yes	•	140		
<ol><li>Sufficient sample volume for indicated test(s)?</li></ol>		Yes	V	No		
7. Are samples (except VOA and ONG) properly p	reserved?	Yes	<b>V</b>	No		
8. Was preservative added to bottles?		Yes		No	<b>V</b>	NA 🗆
9. VOA vials have zero headspace?		Yes	<b>V</b>	No		No VOA Vials
10. Were any sample containers received broken?		Yes		No	~	
					_	# of preserved bottles checked
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	~	No		for pH: (<2 or 12 unless noted)
Are matrices correctly identified on Chain of Cu	stody?	Yes	V	No		Adjusted? (1)
3. Is it clear what analyses were requested?	olody !	Yes		No		
4. Were all holding times able to be met?		Yes		No		Checked by: D2~
(If no, notify customer for authorization.)						11/15/
Special Handling (if applicable)						
15. Was client notified of all discrepancies with this	order?	Yes		No		NA 🗹
Person Notified:	Date:				-	
By Whom:	Via:	☐ eMa	1 🗇	Phone	Fax	In Person
Regarding:						
Client Instructions:						
16. Additional remarks:						
17 Cooley Information						
<ol> <li>Cooler Information         Cooler No Temp °C Condition Seal     </li> </ol>	Intact Seal No	Seal Da	la.	Signed B		

HALL ENVIRONMENTAL ANALYSIS LABORATORY  www.hallenvironmental.com  kins NE - Albuquerque, NM 87109  845-3975 Fax 505-345-4107  Analysis Request	38:17 AM	Page 97 of 172 Stown today 150 Today
ENVIRONME  rSIS LABORA  environmental.com  Albuquerque, NM 87109  Fax 505-345-4107  alysis Request	X pcI	To to analytic
RA LA A Lee, The Lee,	Total Coliform (Present/Absent)	ts 22 8
S I S I S I S I S I S I S I S I S I S I	(AOV-ima2) 07S8	J + On Note
SI S	(AOV) 09S8	1 2 SI
1 1 = 1	CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO₄, SO₄	Leo Fiul Lepound at Enterprise
W.ha NE 8975	X RCRA 8 Metals X	A data
HALL ANAL www.hal kins NE - 345-3975	SM(20758 19 01 58 yd 2HA9 X	itage & Carlotte
Tawl 19w 1	EDB (Method 504.1)	1 Sempon Sub-contracted of Sub
######################################	8081 Pesticides/8082 PCB's	SS: 8
94 F	TPH:8015D(GRO / DRO / MRO)	Remarks: 82 uo Futto Compound Invidial Enterp
	BTEX / MTBE / TMB's (8021)	Ren Ren Houses
	Well 100.	Date Time Remarks: 82 Leo F.W. LLST LLP Lim Date Time Trup Compound at TCLP Lim Date Time Any sub-contracted data will be clearly notated on the analytical report
nd Time:	Sch Manager:  Pler: Ryes D No Coolers: 1  Per Temp(induding CF): 0.6-0.  ainer Preservative 19  Irrous Various	Via: Via: Via: ANT. PV
Turn-Aroun Project Nar Project #:	Sam On Ic Cools Cont Type	Received by: Received by:
Chain-of-Custody Record ent: Smf- siling Address: HO IN Broadwow ming And The State of So5 325 7585	Standard Coc Package: Standard Creditation:  Creditation:	Time: Relinquished by:    A   1630     A   1

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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-138 Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

<ol> <li>Generator Name and Address Enterprise Field Services, LLC, 6</li> </ol>		NM 87401		
2. Originating Site: MAPL Huerfano Pumping Si		2000		TENT
3. Location of Material (Street UL L Section 21 Township 26 I				1.11
4. Source and Description of W Source: Water/Oil from the Non I Description: Non Exempt/Non Ha Estimated Volume 80 yd3 bbls	Exempt Waste Water Tanks ar zardous Water from the comp	ressor skids.		yd³/bbls
5. GE	NERATOR CERTIFICAT	ION STATEMENT O	F WASTE STATUS	F 1-17
I, Thomas Long, represent the Resource certify that according to the Resourcegulatory determination, the above	rce Conservation and Recove	ry Act (RCRA) and the	US Environmental Protect	ction Agency's July 1988
RCRA Exempt: Oil field exempt waste. Operator U	wastes generated from oil and ise Only: Waste Acceptance			
RCRA Non-Exempt: Oil characteristics established in R subpart D, as amended. The fi the appropriate items)	RCRA regulations, 40 CFR 26	51.21-261.24, or listed I	nazardous waste as define	d in 40 CFR, part 261,
☐ MSDS Information ☐ RCR	A Hazardous Waste Analysis	☑ Process Knowled	ge  Other (Provide d	escription in Box 4)
GENERATOR 19.15.	36.15 WASTE TESTING C	ERTIFICATION ST.	ATEMENT FOR LAND	FARMS
I, Thomas Long , repre Generator Signature the required testing/sign the Generator	sentative for Enterprise Produ ator Waste Testing Certificati		e to complete	
representative samples of the oil finance been found to conform to the of the representative samples are at 19.15.36 NMAC.	specific requirements applica	able to landfarms pursu	and tested for chloride con ant to Section 15 of 19.15	.36 NMAC. The results
5. Transporter: To Be Determi				
OCD Permitted Surface Waste  Name and Facility Permit #: *Ag  Address of Facility: SW/4 NW/4  Method of Treatment and/or Disposal:  Evaporation  Waste Acceptance Status:	gua Moss, LLC - Permit #: ?	Range Crouch Mesa, N	☐ Landfill ☐ Oth	ner ined As Permanent Record)
PRINT NAME:		TITLE:		DATE:
SIGNATURE:		TELEPHONE 1		DATE

Received by OCD: 11/9/2023 8:38:17 AM 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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-138 Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

	614 Reilly Ave, Farmington NM 87401
. Originating Site: MAPL Huerfano Pumping S	tation
	Address, City, State or ULSTR): North Range 10 West; 36.471831, -107.908114
Description: Non Exempt/Non Ha	Exempt WasteWater Tanks and from the compressor skid drains.  zardous Water from the compressor skids.  Known Volume (to be entered by the operator at the end of the haul) yd³ / bbls
5. GE	NERATOR CERTIFICATION STATEMENT OF WASTE STATUS
Generator Signature ertify that according to the Resou	ntative or authorized agent for Enterprise Products Operating do hereby rce Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 e described waste is: (Check the appropriate classification)
	wastes generated from oil and gas exploration and production operations and are not mixed with non- ise Only: Waste Acceptance Frequency Monthly Weekly Per Load
RCRA Non-Exempt: Oil	field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by
characteristics established in I	RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
characteristics established in I subpart D, as amended. The t the appropriate items)	
characteristics established in I subpart D, as amended. The t the appropriate items)  ☐ MSDS Information ☐ RCR	following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check
characteristics established in I subpart D, as amended. The fithe appropriate items)  MSDS Information  RCR  GENERATOR 19.15  Thomas Long  Generator Signature	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete
characteristics established in I subpart D, as amended. The inthe appropriate items)  MSDS Information  RCR  GENERATOR 19.15  Thomas Long  Generator Signature  he required testing/sign the Generator	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete  ator Waste Testing Certification.
characteristics established in I subpart D, as amended. The fithe appropriate items)  ☐ MSDS Information ☐ RCR  ☐ GENERATOR 19.15  ☐, Thomas Long, representative samples of the oil fither representative samples are a	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete
characteristics established in I subpart D, as amended. The fithe appropriate items)  MSDS Information RCR  GENERATOR 19.15  Thomas Long , representative samples of the oil fit ave been found to conform to the	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete  ator Waste Testing Certification.  Presentative for Agua Moss, LLC do hereby certify that eld waste have been subjected to the paint filter test and tested for chloride content and that the samples specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results ttached to demonstrate the above-described waste conform to the requirements of Section 15 of
characteristics established in I subpart D, as amended. The fithe appropriate items)  MSDS Information RCR  GENERATOR 19.15  Thomas Long , representative samples of the oil fither representative samples are a 9.15.36 NMAC.	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete  ator Waste Testing Certification.  presentative for Agua Moss, LLC do hereby certify that eld waste have been subjected to the paint filter test and tested for chloride content and that the samples specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results ttached to demonstrate the above-described waste conform to the requirements of Section 15 of med
characteristics established in I subpart D, as amended. The in the appropriate items)  ☐ MSDS Information ☐ RCR  GENERATOR 19.15  , Thomas Long, representative samples of the oil finave been found to conform to the off the representative samples are a 9.15.36 NMAC.  ☐ Transporter: To Be Determit OCD Permitted Surface Waster  Name and Facility Permit #: *A	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete  ator Waste Testing Certification.  presentative for Agua Moss, LLC do hereby certify that eld waste have been subjected to the paint filter test and tested for chloride content and that the samples specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results ttached to demonstrate the above-described waste conform to the requirements of Section 15 of med
characteristics established in I subpart D, as amended. The in the appropriate items)  ☐ MSDS Information	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete ator Waste Testing Certification.  presentative for Agua Moss, LLC do hereby certify that eld waste have been subjected to the paint filter test and tested for chloride content and that the samples specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results trached to demonstrate the above-described waste conform to the requirements of Section 15 of ned  Management Facility  gua Moss, LLC - Permit #: NM-01-009
characteristics established in I subpart D, as amended. The fithe appropriate items)  ■ MSDS Information ■ RCR  GENERATOR 19.15  , Thomas Long , representative Signature he required testing/sign the Generator Signature	A Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)  36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS  sentative for Enterprise Products Operating authorize to complete ator Waste Testing Certification.  presentative for Agua Moss, LLC do hereby certify that eld waste have been subjected to the paint filter test and tested for chloride content and that the samples specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results ttached to demonstrate the above-described waste conform to the requirements of Section 15 of  med  Management Facility gua Moss, LLC - Permit #: NM-01-009 Section 2, Township 29N, Range Crouch Mesa, NM  Injection Treating Plant Landfarm Landfill Other



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

December 12, 2019

Ashley Maxwell Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401 TEL: (505) 325-5667 FAX (505) 327-1496

RE: Huerfano OrderNo.: 1911679

#### Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/15/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued December 03, 2019.

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. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

Lab Order 1911679

Date Reported: 12/12/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Huerfano

Project: Huerfano Collection Date: 11/14/2019 10:22:00 AM

Lab ID: 1911679-001 Matrix: AQUEOUS Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	ND	0.020		mg/L	1	11/22/2019 10:36:46 AM	48955
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	rde
Arsenic	ND	5.0		mg/L	1	11/25/2019 4:00:30 PM	48826
Barium	ND	100		mg/L	1	11/25/2019 12:59:21 PM	
Cadmium	ND	1.0		mg/L	1	11/25/2019 12:59:21 PM	
Chromium	ND	5.0		mg/L	1	11/25/2019 12:59:21 PM	
Lead	ND	5.0		mg/L	1	11/25/2019 12:59:21 PM	
Selenium	ND	1.0		mg/L	1	11/25/2019 12:59:21 PM	
Silver	ND	5.0		mg/L	1	11/25/2019 12:59:21 PM	
EPA METHOD 8270C: PAHS						Analyst:	JDC
Naphthalene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
1-Methylnaphthalene	ND	10	D	µg/L	1	11/25/2019 4:36:18 PM	48934
2-Methylnaphthalene	ND	10	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Acenaphthylene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Acenaphthene	ND	5.0		µg/L	1	11/25/2019 4:36:18 PM	48934
Fluorene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Phenanthrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Anthracene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Pyrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benz(a)anthracene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Chrysene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(b)fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(k)fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(a)pyrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Dibenz(a,h)anthracene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(g,h,i)perylene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Indeno(1,2,3-cd)pyrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Surr: N-hexadecane	84.6	20.4-126	D	%Rec	1	11/25/2019 4:36:18 PM	48934
Surr; Benzo(e)pyrene	72.4	21.4-126	D	%Rec	1	11/25/2019 4:36:18 PM	48934
EPA METHOD 8260B: VOLATILES						Analyst:	JMR
Benzene	ND	0.50		mg/L	200	11/15/2019 4:58:30 PM	R6456
Toluene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
Ethylbenzene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456

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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 1 of 10

## **Analytical Report**

Lab Order 1911679

Date Reported: 12/12/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Huertano

 Project:
 Huerfano
 Collection Date: 11/14/2019 10:22:00 AM

 Lab ID:
 1911679-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst	JMR
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Naphthalene	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
1-Methylnaphthalene	ND	0.80	mg/L	200 11/15/2019 4:58:30 PM	R64562
2-Methylnaphthalene	ND	0.80	mg/L	200 11/15/2019 4:58:30 PM	R64562
Acetone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R64562
Bromobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Bromodichloromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Bromoform	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Bromomethane	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R64562
2-Butanone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R64562
Carbon disulfide	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R64562
Carbon Tetrachloride	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Chlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Chloroethane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
Chloroform	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Chloromethane	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R64562
2-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
4-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
cis-1,2-DCE	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
Dibromochloromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Dibromomethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,2-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,3-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,4-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Dichlorodifluoromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1-Dichloroethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1-Dichloroethene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,2-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,3-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
2,2-Dichloropropane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Hexachlorobutadiene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
2-Hexanone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R64562
Isopropylbenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
4-Isopropyltoluene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
4-Methyl-2-pentanone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R64562
Methylene Chloride	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R64562

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
- PQI Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- I Analyte detected below quantitation mista
- P Sample pH Not In Range
- RT. Reporting Limit

Page 2 of 10

#### Analytical Report

## Hall Environmental Analysis Laboratory, inc.

Date Reported: 12/12/2019

CHERT Sample 1D: Huerrano

Project: Huerfano Collection Date: 11/14/2019 10:22:00 AM

Lab ID: 1911679-001 Matrix: AOUEOUS Received Date: 11/15/2019 8-00-00 AM

Analyses	Result	RL (	Quai Units	DF	Date Analyzeu	Daten
EPA METHOD 8260B: VOLATILES			13.7		Analyst	JMR
- D. A. Ilianzana	ND	0.60	ma/L	200	11/15/2019 4:58:30 PM	R64562
n-Propylbenzene	ND	0.20	mg/L	200	11/15/2019 4:58:30 PM	R64562
sec-Butvlbenzene	ND	0.20	ma/L	200	11/15/2019 4-58-30 PM	REASE?
Styrene	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
tert-Butylbenzene	ND	0.20	mg/L	200	11/15/2019 4:58:30 PM	R64562
1.1.1.2-Tetrachloroethane	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
1.1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	11/15/2019 4:58:30 PM	R64562
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	11/15/2019 4:58:30 PM	R64562
trans-1.2-DCE	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
trans-1.3-Dichloropropene	ND	0.20	mg/L	200	11/15/2019 4:58:30 PM	R64562
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	11/15/2019 4:58:30 PM	R64562
1.2.4-Trichlorobenzene	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
1.1.1-Trichloroethane	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
1,1,2-Trichloroethane	ND	0.20	mg/L	200	11/15/2019 4:58:30 PM	R64562
Trichloroethene (TCE)	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
Trichlorofluoromethane	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
1,2,3-Trichloropropane	ND	0.40	mg/L	200	11/15/2019 4:58:30 PM	R64562
Vinvl chloride	ND	0.20	ma/L	200	11/15/2019 4:58:30 PM	R64562
Xvlenes. Total	ND	0.30	mg/L	200	11/15/2019 4:58:30 PM	R64562
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	200	11/15/2019 4:58:30 PM	R64562
Surr: 4-Bromofluorobenzene	94.8	70-130	%Rec	200	11/15/2019 4:58:30 PM	R64563
Surr: Dibromofluoromethane	107	70-130	%Rec	200	11/15/2019 4:58:30 PM	R64562
Surr: Toluene-d8	107	70-130	%Rec	200	11/15/2019 4:58:30 PM	R64562

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 nH Nor In Range
- RL Reporting Limit

Page 3 01 16



# ANALYTICAL REPORT

#### Hall Environmental Analysis Laboratory

Sample Delivery Group:

L1162234

Camples Received

11/19/2019

Project Number:

LICEDIDECT .

SERVICE KAS

4901 Hawkins NE

COURSE OF THE PARTY OF THE PART

Project Manager

Reproved to Accept in the Memory within appropriated the absoratory standard operating procedures SNV-SOP-MT3-0067 and Aralytical National is performed per guidance provided in laboratory standard operating procedures SNV-SOP-MT3-0067 and

#### Cp. Cover Page

Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
1911679-001D HUERFANO L1162234-01	5
Oc: Quality Control Summary	6
Wet Chemistry by Method 4500 CN E-2011	6
Wet Chemistry by Method 4500H+ B-2011	7
Wet Chemistry by Method 9034-9030B	8
Wet Chemistry by Method D93/1010A	9
GI: Glossary of Terms	10
Al: Accreditations & Locations	11
Sc: Sample Chain of Custody	12

1911679-001D HUERFANO L1162234-01
-----------------------------------

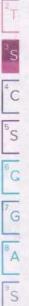
Collected by

Collected date/time Received date/time

11/14/19 10:22 11/19/19 08:45

metnoa	Batch	Dilution	Preparation date/time	Analysis date/time	Anaiyst	Location
Wet Chemistry by Method 4500H+ B-2011	WG1383247	1	כיי.פו פו ופו ווו	Tiviavia ia.45	WSF	Wit Juliet, TN
Wet Chemistry by Method 9034-9030B	WG1384494	1	11/21/19 18:09	11/21/19 18:09	ALM	Mt. Juliet. TN





All sample stability were received by the correct temperature, in the proper containers, with the

appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples

are within established criteria except where addressed in this case partative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Dapline R Richards

Project Manager

Report Revision History

Version 1: 11/29/19 09:06 AM

Project Narrative

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

<sup>7</sup>G <sup>8</sup>A <sup>9</sup>S

### Wet Chemistry by Method 4500 CN E-2011

Analyte	mg/I		mg/l		date / time	
Baselius Cumida	MD	<u>J4</u>	0.00500	1	בא-וכ פוחביואכיווו	WG1386291
Wet Chemistry by	Method 4500	H+ B-2011				

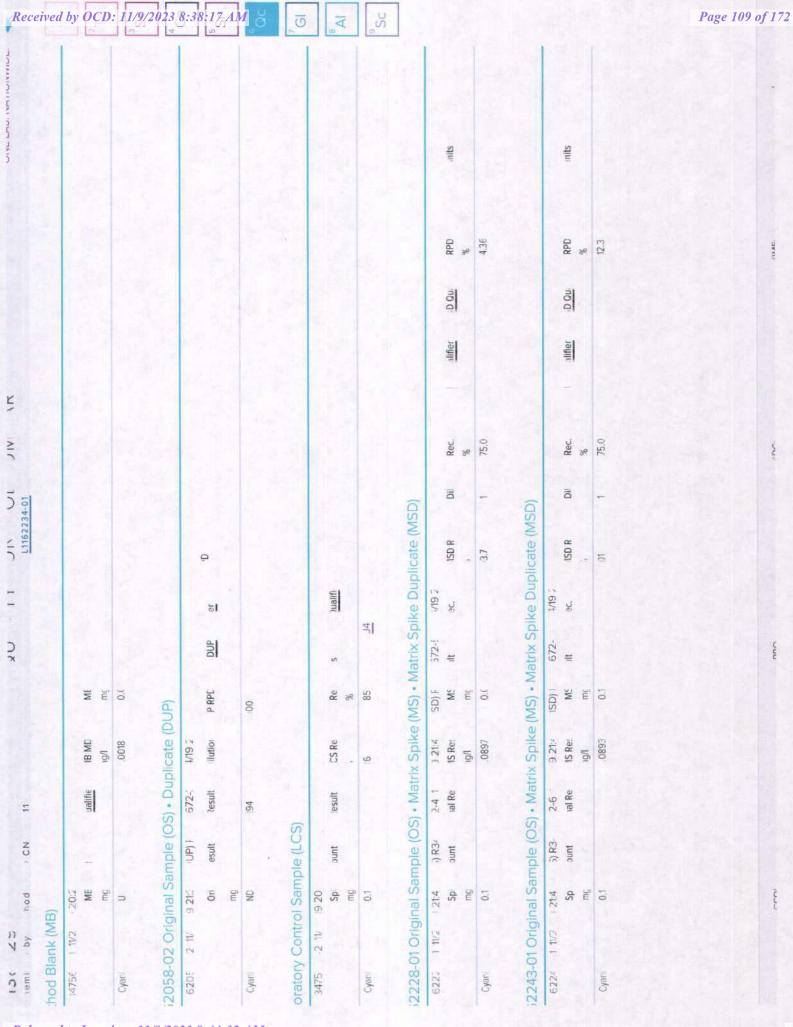
Corrosivity by pH	5.41	<u>T8</u>	1	11/19/2019 19:45	WG1383247

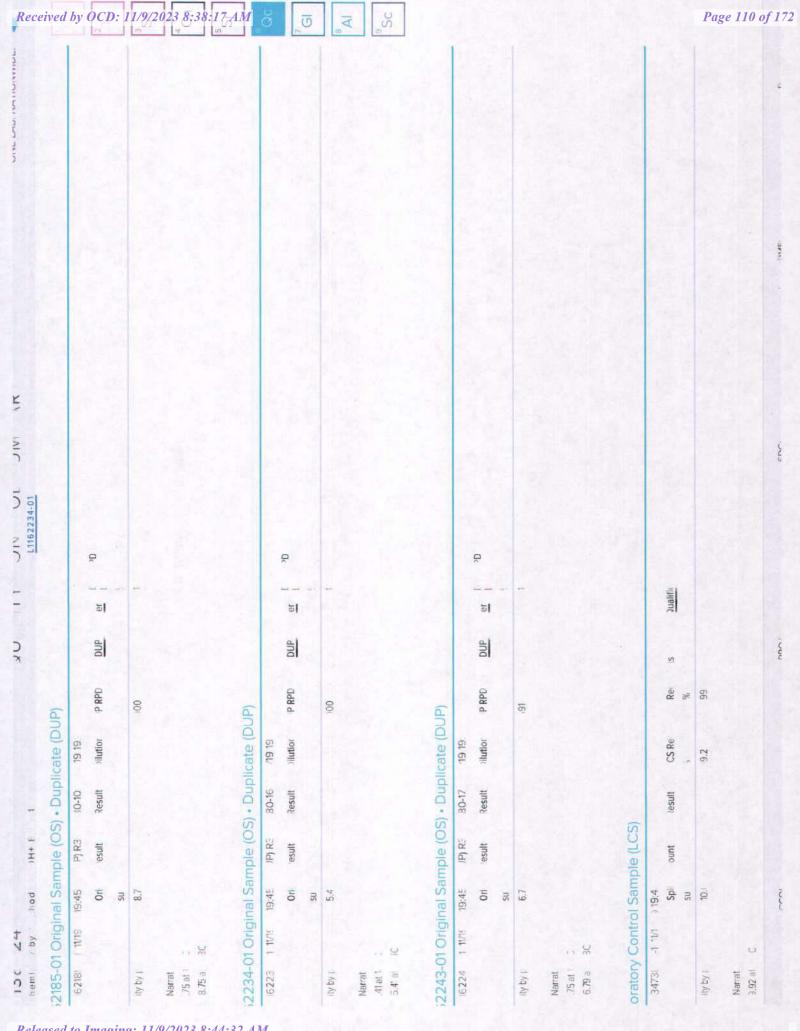
L1162234-01 WG1383247: 5.41 at 18.3C

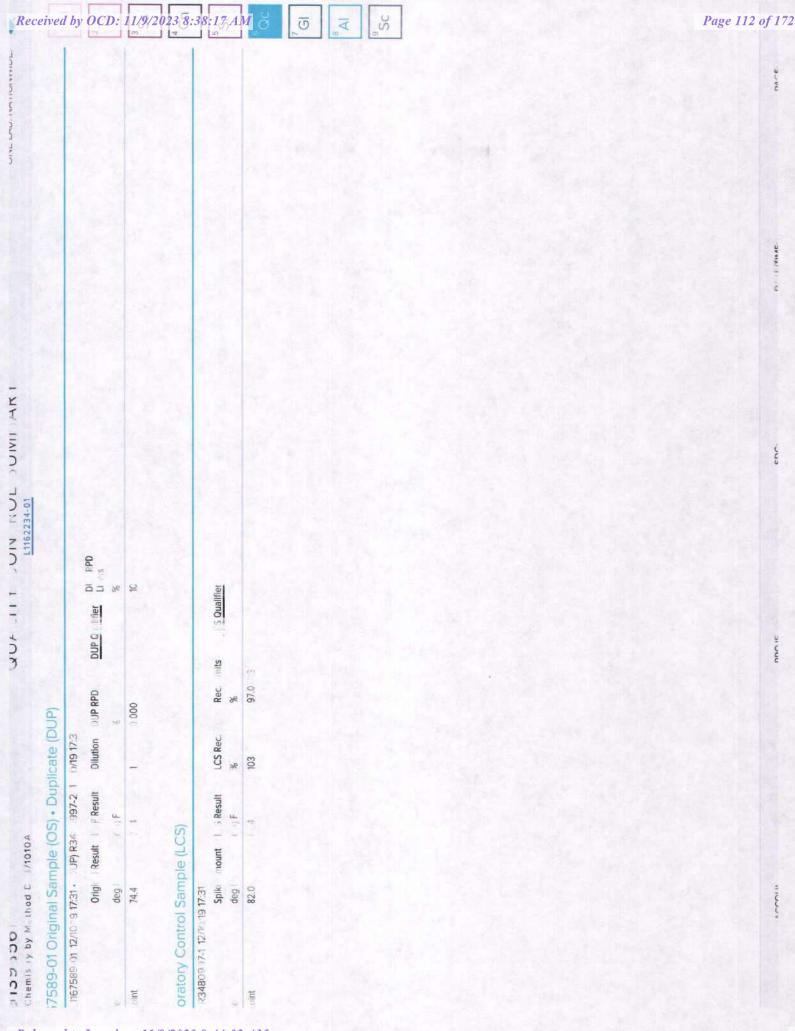
#### Wet Chemistry by Method 9034-9030B

	Result	Qualifier	RDL	Dilution Analysis	Batch	
					WG1384494	
Vet Chemistry by Met	hod D93/10	0104				

	Produce	wominer when	www.	Market Co.	
Analyte	deg F		date / time		
		0		WG1393561	







### Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of enalytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, sample in Jampie matter, neighbors, neighbors

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
нес.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
e e	Not detected at the Reporting Little for Wich where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than his used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or supplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a fetter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis

Qualifier	Description
-----------	-------------

J4	The associated batch QC was outside the established quality control range for accuracy.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
T8	Sample(s) received past/too close to holding time expiration.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network reportures in our indestry. The most significant penetr to our one location design is the design of our laboratory campus. The model is conductive to accelerated productivity, decreasing turn-around time, and preventing cross commination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUK LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

### State Accreditations

Alabama	40660
Alaska	17-026
tranna	A70612
Arkansas	88-0469
California	2932
Colorado	TNOODOS
Connecticut	Pri-ula/
Florida	E87487
Georgia	NELAP
No. and Gallery	
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
reste	Elnill
Kansas	E-10277
Kentucky 16	90010
Kentucky <sup>2</sup>	16
evaluate.	Alastres
Louisiana 1	LA180010
Maine	TN0002
Mandand	274
massachusens	M-119003
Michigan	9958
Minnesota	047-999-395
December 2	1194/4/Ware
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
Mayottamashira	2075
New Jersey-NELAP	TN002
New Mexico 1	n/a
Now York	11742
North Carolina	ENV3/5
North Carolina 1	DW21704
North Carolina 3	41
Hartis Daharu	B (15)
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
unnecuune:=	NW 11 No ext
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
14	4444
Texas	T104704245-18-15
Texas 5	LAB0152
) Node	TAIODOOS
vernonc	V12000
Virginia	460132
Washington	C847
Made Majorina	+++
Wisconsin	9980939910
Wyoming	A2LA

### Third Party Federal Accreditations

A2LA - ISO 17025	1461.01	
A2LA - ISO 17025 5	1461.02	
1 hasans	Open and	
EPA-Crypto	TN00003	

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
y 64, 6 (da	M = 224 Th + (6.00 ± 1.1

<sup>&</sup>lt;sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

#### Our Locations

Made highway has sixty-rour client support centers that provide sample dickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, blease contact our main office. Pace National performs all testing at our central laboratory.



EAX: 505-345-4107

TEL. 505-345-3975

4901 Hawkins NE Ubuquerque, NM 87109

Annuyars Econormor

|--|

CHAIN OF CUSTODY RECOKD

SUB-CONTRATOR ESC PACE COMPANY:	ESC PACE		PHONE	(800) 767-5859	FAX	(615) 758-5859
ADDRESS: 12065 Lebanon Rd			ACCOUNT 6:		EMAIL	
CITY. STATE, ZIP. Mt. Juliet, TN 37122						
EM SAMPLE CLIENT SAMPLE ID	BOTTLE	9< MATRIX	COLLECTION	# CUNTAINERS	NALYTICA	ANALYTICAL COMMENTS
1 1911679-001D Huerfano	3dQH00S	Aqueous	11/14/2019 10:22:00 AM	Aqueous 11/14/2019 10:22:00 AM 3 Reactivity, Corrosivity and Ignitability ** 7 Day TAT **	and Ignitability **	7 Day TAT ** 11 (22 34 . A

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you PECIAL INSTRUCTIONS / COMMENTS

Pace Analytical National Center for Testing & Innovation	ation	
Cooler Receipt Form		
Client: HALLIN AN	lens1	
Cooler Received/Opened On: /// 19/19 Temperature: 22		
Received By: Willie Taylor		
Signature:		
Receipt Check List NP	Yes	No
COC Seal Present / Intact?		
COC Signed / Accurate?	1	
Bottles arrive intact?	1	1
Correct bottles used?	10000	N
Sufficient volume sent?		
If Applicable		
VOA Zero headspace?		
Preservation Correct / Checked?	1	

National Center for Testing & Innovation

Evaluated by:Matt S	91/21/11:9Jed	Client:HALLENVANM	Login #: L1162234

Non-Conformance (check applicable items)

			Trackinu#
			Carrier
	Sufficient sample remains		Temp./Cont. Rec./pH:
	Broken container:	Chain of Custody is missing	Date/Time:
Ť	Broken container	Client did not "X" analysis.	Received by:
	Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
	Sample is biphasic.	Sample ids on containers do not match ids on	Container lid not intact
	Insufficient sample volume.	Received additional samples not listed on coc.	sew alganes nasori
vi.	pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Cou
X	improper container	Please specify Metals requested.	Insufficient packing material inside
	Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
	Parameter(s) past holding time	Login Clarification Meeded	If Broken Container:
	Sample Integrity	Chain of Custody Clarification	

## Login Comments: Received FLASH in HDPE

The same of the sa				temption ment affect
		:3:	Client Contac	TSR Initials: DR
Date: 11/19	Voice Mail	Email	Call	Client informed by:
	01/11:91sd	Voice Mail Date: 11/19		Client Contact:   Cinail   Voice Mail   Date: 11/19

Qualify and proceed with analysis

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

12-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: 100ng Ics	Samp	Type: LC	S	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batc	h ID. R6	4562	F	RunNo: 6	4562				
Prep Date:	Analysis I	Date: 11	/15/2019	8	SeqNo: 2	210714	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	82.7	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	81.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.0	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID. 101	Samp	ype. IN	BLA	185	Code. E	PA Method	8200B. VOL	ATILES		
Client ID: PBW	Batc	n ID: Re	4562	F	RunNo: 6	4562				
Prep Date:	Analysis D	Date: 11	1/15/2019		SeqNo: 2	210733	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								

Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
Methyl tert-butyl ether (MTBE)	ND	1.0	
1,2,4-Trimethylbenzene	ND	1.0	
1,3,5-Trimethylbenzene	ND	1.0	
1,2-Dichloroethane (EDC)	ND	1.0	
1,2-Dibromoethane (EDB)	ND	1.0	
Naphthalene	ND	2.0	
1-Methylnaphthalene	ND	4.0	
2-Methylnaphthalene	ND	4.0	
Acetone	ND	10	
Bromobenzene	ND	1.0	
Bromodichloromethane	ND	1.0	
Bromoform	ND	1.0	
Bromomethane	ND	3.0	
2-Butanone	ND	10	
Carbon disulfide	ND	10	
Carbon Tetrachloride	ND	1.0	
Chlorobenzene	ND	1.0	
Chloroethane	ND	2.0	
Chloroform	ND	1.0	
Chloromethane	ND	3.0	
2-Chlorotoluene	ND	1.0	

### Qualifiers:

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

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

Page 4 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

12-Dec-19

Client:

Souder, Miller and Associates

Project:

Huerfano

Sample ID: rb1	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: Re	4562	F	RunNo: 6	4562				
Prep Date:	Analysis E	)ate: 1	1/15/2019	S	SeqNo: 2	210733	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-Chlorotoluene	ND	1.0								
is-1,2-DCE	ND	1.0								
is-1,3-Dichloropropene	ND	1.0								
,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
,2-Dichlorobenzene	ND	1.0								
.3-Dichlorobenzene	ND	1.0								
,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
.1-Dichloroethane	ND	1.0								
,1-Dichloroethene	ND	1.0								
,2-Dichloropropane	ND	1.0								
,3-Dichloropropane	ND	1.0								
,2-Dichloropropane	ND	2.0								
,1-Dichloropropene	ND	1.0								
exachlorobutadiene	ND	1.0								
-Hexanone	ND	10								
sopropylbenzene	ND	1.0								
-Isopropyltoluene	ND	1.0								
-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
-Butylbenzene	ND	3.0								
-Propylbenzene	ND	1.0								
ec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
ert-Butylbenzene	ND	1.0								
,1,1,2-Tetrachloroethane	ND	1.0								
1,2,2-Tetrachloroethane	ND	2.0								
etrachloroethene (PCE)	ND	1.0								
rans-1,2-DCE	ND	1.0								
rans-1,3-Dichloropropene	ND	1.0								
2.3-Trichlorobenzene	ND	1.0								
,2,4-Trichlorobenzene	ND	1.0								
.1.1-Trichloroethane	ND	1.0								
,1,2-Trichloroethane	ND	1.0								
richloroethene (TCE)	ND	1.0								
richlorofluoromethane	ND	1.0								
,2,3-Trichloropropane	ND	2.0								

#### Qualifiers:

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

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range

RL Reporting Limit

Page 5 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1911679

12-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: rb1 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES
Client ID: PBW Batch ID: R64562 RunNo: 64562

Client ID: PBW Batch ID: R64562 RunNo: 64562

Prep Date:	Analysis I	Date: 11	/15/2019	5	SeqNo: 2	210733	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.8	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.9	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr. Toluene-d8	11		10.00		109	70	130			

#### Qualifiers:

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

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

RL Reporting Limit

Page 6 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

12-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: mb-48934 SampType: MBLK TestCode: EPA Method 8270C: PAHs Client ID: PBW RunNo: 64751

Batch ID: 48934

Client ID: PBW	Batc	n ID: 48	934	F	Runino: 6	4/51				
Prep Date: 11/21/2019	Analysis [	Date: 1	1/25/2019	5	SeqNo: 2	219189	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								
1-Methylnaphthalene	ND	1.0								
2-Methylnaphthalene	ND	1.0								
Acenaphthylene	ND	0.50								
Acenaphthene	ND	0.50								
Fluorene	ND	0.50								
Phenanthrene	ND	0.50								
Inthracene	ND	0.50								
luoranthene	ND	0.50								
Pyrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
ndeno(1,2,3-cd)pyrene	ND	0.50								
Surr. N-hexadecane	61		87.60		69.2	20.4	126			
Surr: Benzo(e)pyrene	13		20.00		64.5	21.4	126			

Sample ID: Ics-48934	Samp	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs				
Client ID: LCSW	Batc	h ID: 48	934	F	RunNo: 6	4751					
Prep Date: 11/21/2019	Analysis D	Date: 1	1/25/2019	\$	SeqNo: 2	219191	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Naphthalene	15	0.50	20.00	0	73.8	41.8	97.8				
1-Methylnaphthalene	14	1.0	20.00	0	68.3	44.7	104				
2-Methylnaphthalene	14	1.0	20.00	0	72.4	45	101				
Acenaphthylene	15	0.50	20.00	0	72.8	51.2	102				
Acenaphthene	14	0.50	20.00	0	71.8	53.2	101				
Fluorene	15	0.50	20.00	0	75.1	57.6	106				
Phenanthrene	15	0.50	20.00	0	75.6	57.6	109				
Anthracene	15	0.50	20.00	0	73.2	56.1	98.9				
Fluoranthene	16	0.50	20.00	0	81.9	61.4	114				
Pyrene	16	0.50	20.00	0	78.7	58	110				
Benz(a)anthracene	15	0.50	20.00	0	76.6	60	102				
Chrysene	14	0.50	20.00	0	70.9	50.8	93.4				
Benzo(b)fluoranthene	15	0.50	20.00	0	74.0	56.2	118				

#### Qualifiers:

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

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

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 1911679

12-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: Ics-48934 SampType: LCS TestCode: EPA Method 8270C: PAHs Client ID: LCSW Batch ID: 48934 RunNo: 64751 Prep Date: 11/21/2019 Analysis Date: 11/25/2019 SeqNo: 2219191 Units: µg/L Analyte SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual Result PQL LowLimit HighLimit Benzo(k)fluoranthene 15 0.50 20.00 0 75.7 Benzo(a)pyrene 15 0.50 20.00 0 75.0 55.5 114 Dibenz(a,h)anthracene 15 0.50 20.00 0 75.5 110 53 Benzo(g,h,i)perylene 15 0.50 20.00 0 74.8 55 113 0 115 Indeno(1,2,3-cd)pyrene 15 0.50 20.00 75.5 51.2 Surr: N-hexadecane 67 87.60 76.4 20.4 126 Surr: Benzo(e)pyrene 14 20.00 68.3 126 21.4

Sample ID: Icsd-48934	Samp	Type: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs	3			
Client ID: LCSS02	Batc	h ID: 48	934	F	RunNo: 6	4751					
Prep Date: 11/21/2019	Analysis E	Date: 11	1/25/2019	5	SeqNo: 2	219192	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Naphthalene	15	0.50	20.00	0	74.2	41.8	97.8	0.541	25.4		
1-Methylnaphthalene	15	1.0	20.00	0	73.8	44.7	104	7.74	21.5		
2-Methylnaphthalene	15	1.0	20.00	0	76.0	45	101	4.85	25.2		
Acenaphthylene	17	0.50	20.00	0	83.4	51,2	102	13.6	30.3		
Acenaphthene	16	0.50	20.00	0	81.6	53.2	101	12.8	28.1		
Fluorene	17	0.50	20.00	0	83.5	57.6	106	10.6	33		
Phenanthrene	15	0.50	20.00	0	74.8	57.6	109	1.06	24.5		
Anthracene	15	0.50	20.00	0	76.6	56.1	98.9	4.54	26.9		
Fluoranthene	17	0.50	20.00	0	83.2	61.4	114	1.57	21.8		
Pyrene	15	0.50	20.00	0.	77.1	58	110	2.05	27		
Benz(a)anthracene	14	0.50	20.00	0	72.5	60	102	5.50	27.4		
Chrysene	14	0.50	20.00	0	68.6	50.8	93.4	3.30	20.4		
Benzo(b)fluoranthene	15	0.50	20.00	0	77.4	56.2	118	4.49	22.5		
Benzo(k)fluoranthene	17	0.50	20.00	0	83.3	57.7	119	9.56	24.1		
Benzo(a)pyrene	16	0.50	20.00	0	78.3	55.5	114	4.31	27.3		
Dibenz(a,h)anthracene	16	0.50	20.00	0	78.5	53	110	3.90	18.5		
Benzo(g,h,i)perylene	16	0.50	20.00	0	79.4	55	113	5.97	28.4		
A STATE OF THE PARTY OF THE PAR											

0

#### Qualifiers:

Indeno(1,2,3-cd)pyrene

Surr: N-hexadecane

Surr: Benzo(e)pyrene

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

B Analyte detected in the associated Method Blank

81.5

79.8

71.8

51.2

20.4

21.4

115

126

126

7.64

0

0

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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21.8

0

0

16

70

14

0.50

20.00

87.60

20.00

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679 12-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: MB-48955 SampType: MBLK TestCode: EPA Method 7470: Mercury

Client ID: PBW Batch ID: 48955 RunNo: 64701

Prep Date: 11/21/2019 Analysis Date: 11/22/2019 SeqNo: 2217075 Units: mg/L

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

Mercury ND 0.00020

Sample ID: LCS-48955 SampType: LCS TestCode: EPA Method 7470: Mercury

Client ID: LCSW Batch ID: 48955 RunNo: 64701

Prep Date: 11/21/2019 Analysis Date: 11/22/2019 SeqNo: 2217080 Units: mg/L

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

Mercury 0.0048 0.00020 0.005000 0 96,7 80 120

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

WO#: 1911670

12-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: LCS-48826

Silver

Sample ID: MB-48826 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals

Client ID: PBW Batch ID: 48826 RunNo: 64774

SampType: LCS

Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219763 Units: mg/L

PQL Analyte Result SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual HighLimit Barium ND 0.020 Cadmium ND 0.0020 Chromium ND 0.0060 Lead ND 0.0050 Selenium ND 0.050 Silver 0.0050 ND

TestCode: EPA 6010B: Total Recoverable Metals

80

120

Client ID: LCSW Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219768 Units: mg/L Analyte POL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit 0.47 Barium 0.020 0.5000 0 94.6 80 120 Cadmium 0.49 0.0020 0.5000 0 97.1 80 120 Chromium 0.47 0.0060 0.5000 0 95.0 80 120 0.50 0.0050 0 80 120 Lead 0.5000 100 0 Selenium 0.54 0.050 0.5000 107 80 120

0

95.0

Sample ID: MB-48826 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals

0.1000

Client ID: PBW Batch ID: 48826 RunNo: 64774

0.0050

0.095

Prep Date: 11/15/2019 Analysis Date: 11/25/2019 Units: mg/L SegNo: 2219851

Result HighLimit %RPD **RPDLimit** Analyte PQL SPK value SPK Ref Val %REC LowLimit ND

0.020 Arsenic

Sample ID: LCS-48826 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: LCSW Batch ID: 48826 RunNo: 64774

Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219853 Units: mg/L

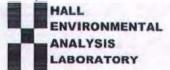
Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit 0.50 0.020 0.5000 99.7 80 120 Arsenic

#### Qualifiers:

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

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: SMA-FARM Work Order Number: 1911679 RcptNo: 1 Received By: Juan Rouas 11/15/2019 8:00:00 AM Completed By: **Desiree Dominguez** 11/15/2019 8:37:26 AM Reviewed By: 11/15/19 Chain of Custody Not Present 1. Is Chain of Custody complete? Yes V No 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? NA Yes V No No \_ NA Were all samples received at a temperature of >0° C to 6.0°C Yes V No 🗌 Sample(s) in proper container(s)? Yes V No Sufficient sample volume for indicated test(s)? No . 7. Are samples (except VOA and ONG) properly preserved? NA . No V 8. Was preservative added to bottles? Yes 9. VOA vials have zero headspace? No I No VOA Vials Yes V 10. Were any sample containers received broken? No V Yes # of preserved bottles checked for pH: No 11. Does paperwork match bottle labels? Yes V (<2/or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No \_ 12. Are matrices correctly identified on Chain of Custody? Yes V No 13. Is it clear what analyses were requested? Checked by: Dm 11/5/19 14. Were all holding times able to be met? No \_ (If no, notify customer for authorization.) Special Handling (if applicable) Yes No \_ NA V 15. Was client notified of all discrepancies with this order? 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 Signed By

0.6

Good

Yes

Chain-of-Custody Record	Turn-Around Time:	
ent: Smp	V Standard C Rush	ANAL ENVIRONMENTAL
	25	pin .
illing Address: 401 W Broadway	Hacitano	4901 Hawkins NF - Albitonerral NM 87100
JOHZS MIN uch bunum	Project #:	Fax 505-345-4107
one #: 508 325 7535		Analysis Request
ail or Fax#: CISTICU. MOXIWEN	Project Manager:	()u
/QC Package: Standard  □ Level 4 (Full Validation)	AShiry Maximul	PO4, S
1:   Az Con	Sampler: QM	DR(2) 1) 002,1
NELAC □ Other	1	\ O3 08\z
EDD (Type)		(GRS) idea stalsalsalsalsalsalsalsalsalsalsalsalsalsa
	Cooler Temp(including of): 0.8-0.2-0.6	ethoethoethoethoethoethoethoethoethoetho
e Time Matrix Sample Name	Container Preservative HEAL No.	3TEX / TPH:80-8081 Per 80-81 Per 80-
19 10:27 Agree	> Nonocal	3 X
	NAT I CALL	
Time: Relinquished by: Time: Relinquished by:	Received by: Via: Date Time Received by: Via: Date Time	Remarks: 8260 Full UST TOLD Compaind at TOLD Lunion
110 1753 (Indistructulanters	100	
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.

Received by OCD: 11/9/2023 8:38:17 AM 1625 N. French Dt., Hobbs, NM 88240

District II 1301 W. Grand Avenue, 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.

Good till 12/3/2020 Page 127 of 172

Form C-138 Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

Santa Fe, NM 87505

	LC, 614 Reilly Ave, Farmingt	on NM 87401	
. Originating Site: MAPL Huerfano Pump	ing Station		
	treet Address, City, State or U p 26 North Range 10 West; 36		
Description: Non Exempt/No	Non Exempt WasteWater Tanks on Hazardous Water from the co	s and from the compressor skid drains. mpressor skids. entered by the operator at the end of the har	ıl) yd³/bbls
5.	GENERATOR CERTIFICA	TION STATEMENT OF WASTE STA	TUS
Generator Signature ertify that according to the F	Resource Conservation and Reco	for Enterprise Products Operating do here every Act (RCRA) and the US Environment ek the appropriate classification)	
		and gas exploration and production operatice Frequency Monthly Weekly	
characteristics establishe	ed in RCRA regulations, 40 CFR	azardous that does not exceed the minimum 261.21-261.24, or listed hazardous waste a attached to demonstrate the above-describ	as defined in 40 CFR, part 261,
☐ MSDS Information	RCRA Hazardous Waste Analy	sis 🛮 Process Knowledge 🗖 Other (F	Provide description in Box 4)
GENERATOR	19.15.36.15 WASTE TESTING	CERTIFICATION STATEMENT FO	R LANDFARMS
Generator Signature	representative for Enterprise Pro Generator Waste Testing Certific	oducts Operating authorize to complete cation.	
ave been found to conform	to the specific requirements appl	Agua Moss, LLC eted to the paint filter test and tested for chl ficable to landfarms pursuant to Section 15 above-described waste conform to the requ	of 19.15.36 NMAC. The results
. Transporter: To Be De	termined		
OCD Permitted Surface V	Vaste Management Facility		
	t: *Agua Moss, LLC - Permit # NW/4 Section 2, Township 29N		
Method of Treatment and/or Disp  Evaporat  Waste Acceptance Status:	ion 🛛 Injection 🗌 Treati	ing Plant	Other  Maintained As Permanent Record
PRINT NAME:		TITLE:	DATE:

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



December 03, 2019

Ashley Maxwell Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401

TEL: (505) 325-5667 FAX: (505) 327-1496

RE: Huerfano OrderNo.: 1911679

### Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/15/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

## **Analytical Report**

Lab Order 1911679

Date Reported: 12/3/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Huerfano

 Project:
 Huerfano
 Collection Date: 11/14/2019 10:22:00 AM

 Lab ID:
 1911679-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	ND	0.020		mg/L	1	11/22/2019 10:36:46 AM	48955
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	rde
Arsenic	ND	5.0		mg/L	1	11/25/2019 4:00:30 PM	
Barium	ND	100		mg/L	1	11/25/2019 12:59:21 PM	
Cadmium	ND	1.0		mg/L	1	11/25/2019 12:59:21 PM	
Chromium	ND	5.0		mg/L	1	11/25/2019 12:59:21 PM	
Lead	ND	5.0		mg/L	1	11/25/2019 12:59:21 PM	
Selenium	ND	1.0		mg/L	1	11/25/2019 12:59:21 PM	
Silver	ND	5.0		mg/L	1	11/25/2019 12:59:21 PM	48826
EPA METHOD 8270C: PAHS						Analyst:	JDC
Naphthalene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
1-Methylnaphthalene	ND	10	D	µg/L	1	11/25/2019 4:36:18 PM	48934
2-Methylnaphthalene	ND	10	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Acenaphthylene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Acenaphthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Fluorene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Phenanthrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Anthracene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Pyrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benz(a)anthracene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Chrysene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(b)fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(k)fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(a)pyrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Dibenz(a,h)anthracene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Benzo(g,h,i)perylene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Indeno(1,2,3-cd)pyrene	ND	5.0	D	µg/L	1	11/25/2019 4:36:18 PM	48934
Surr: N-hexadecane	84.6	20.4-126	D	%Rec	1	11/25/2019 4:36:18 PM	48934
Surr: Benzo(e)pyrene	72.4	21.4-126	D	%Rec	1	11/25/2019 4:36:18 PM	48934
EPA METHOD 8260B: VOLATILES						Analyst:	JMR
Benzene	ND	0.50		mg/L	200	11/15/2019 4:58:30 PM	R6456
Toluene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
Ethylbenzene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	11/15/2019 4:58:30 PM	R6456
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	0 11/15/2019 4:58:30 PM	R6456
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	0 11/15/2019 4:58:30 PM	R6456

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 Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

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

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### **Analytical Report**

Lab Order 1911679

Date Reported: 12/3/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Huerfano

 Project:
 Huerfano
 Collection Date: 11/14/2019 10:22:00 AM

 Lab ID:
 1911679-001
 Matrix: AQUEOUS
 Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst:	JMR
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Naphthalene	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
1-Methylnaphthalene	ND	0.80	mg/L	200 11/15/2019 4:58:30 PM	R64562
2-Methylnaphthalene	ND	0.80	mg/L	200 11/15/2019 4:58:30 PM	R64562
Acetone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R6456
Bromobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Bromodichloromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Bromoform	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Bromomethane	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R6456
2-Butanone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R6456
Carbon disulfide	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R6456
Carbon Tetrachloride	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Chlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Chloroethane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R6456
Chloroform	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Chloromethane	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R6456
2-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
4-Chlorotoluene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
cis-1,2-DCE	ND	0,20	mg/L	200 11/15/2019 4:58:30 PM	R6456
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R6456
Dibromochloromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Dibromomethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,2-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,3-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,4-Dichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Dichlorodifluoromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,1-Dichloroethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,1-Dichloroethene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,2-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,3-Dichloropropane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
2,2-Dichloropropane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R6456
1,1-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
Hexachlorobutadiene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
2-Hexanone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R6456
Isopropylbenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
4-Isopropyltoluene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R6456
4-Methyl-2-pentanone	ND	2.0	mg/L	200 11/15/2019 4:58:30 PM	R6456
Methylene Chloride	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R6456

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
- PQI. Practical Quantitative I imit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- 3 Analyte detected below quantitation limits
- P Sample pH Not In Range
- RI. Reporting I imit

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### **Analytical Report**

Lab Order 1911679

Date Reported: 12/3/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: Huerfano

Project: Huerfano

Collection Date: 11/14/2019 10:22:00 AM

Lab ID: 1911679-001

Matrix: AQUEOUS

Received Date: 11/15/2019 8:00:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst:	JMR
n-Butylbenzene	ND	0.60	mg/L	200 11/15/2019 4:58:30 PM	R64562
n-Propylbenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
sec-Butylbenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Styrene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
tert-Butylbenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
Tetrachloroethene (PCE)	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
trans-1,2-DCE	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
trans-1,3-Dichloropropene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1,1-Trichloroethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,1,2-Trichloroethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Trichloroethene (TCE)	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Trichlorofluoromethane	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
1,2,3-Trichloropropane	ND	0.40	mg/L	200 11/15/2019 4:58:30 PM	R64562
Vinyl chloride	ND	0.20	mg/L	200 11/15/2019 4:58:30 PM	R64562
Xylenes, Total	ND	0.30	mg/L	200 11/15/2019 4:58:30 PM	R64562
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	200 11/15/2019 4:58:30 PM	R64562
Surr: 4-Bromofluorobenzene	94.8	70-130	%Rec	200 11/15/2019 4:58:30 PM	R64562
Surr: Dibromofluoromethane	107	70-130	%Rec	200 11/15/2019 4:58:30 PM	R64562
Surr: Toluene-d8	107	70-130	%Rec	200 11/15/2019 4:58:30 PM	R64562

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
- II 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
- I Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 10

# ANALYTICAL REPORT

November 29, 2019

## Hall Environmental Analysis Laboratory

Sample Delivery Group:

L1162234

Samples Received:

11/19/2019

Project Number:

Description:

Report To:

4901 Hawkins NE

Albuquerque, NM 87109

Entire Report Reviewed By:

Dapline R Richards

Daphne Richards Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where ampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	4
Sr: Sample Results	5
1911679-001D HUERFANO L1162234-01	5
Qc: Quality Control Summary	6
Wet Chemistry by Method 4500 CN E-2011	6
Wet Chemistry by Method 4500H+ B-2011	7
Wet Chemistry by Method 9034-9030B	8
Wet Chemistry by Method D93/1010A	9
GI: Glossary of Terms	11
Al: Accreditations & Locations	12
Sc: Sample Chain of Custody	13

1911679-001D HUERFANO L1162234-01 WW

Collected by

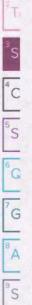
Collected date/time Received date/time

11/14/19 10:22

Batch	Dilution	Preparation	Analysis	Analyst	Location
		date/time	date/time		
WG1386291	1	11/24/19 11:16	11/24/19 21:46	JER	Mt. Juliet, TN
WG1383247	1	11/19/19 19:45	11/19/19 19:45	MSP	Mt. Juliet, TN
WG1384494	1	11/21/19 18:09	11/21/19 18:09	ALM	Mt. Juliet, TN
WG1387079	1	11/26/19 17:15	11/26/19 17:15	ALM	Mt. Juliet, TN
	WG1386291 WG1383247 WG1384494	WG1386291 1 WG1383247 1 WG1384494 1	WG1386291 1 11/24/19 11:16 WG1383247 1 11/19/19 19:45 WG1384494 1 11/21/19 18:09	WG1386291         1         11/24/19 11:16         11/24/19 21:46           WG1383247         1         11/19/19 19:45         11/19/19 19:45           WG1384494         1         11/21/19 18:09         11/21/19 18:09	date/time         date/time           WG1386291         1         11/24/19 11:16         11/24/19 21:46         JER           WG1383247         1         11/19/19 19:45         11/19/19 19:45         MSP           WG1384494         1         11/21/19 18:09         11/21/19 18:09         MJA











All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards
Project Manager

Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

## Redeivelby (OCD) 14/9/2023 8:38:17 AM

## SAMPLE RESULTS - 01

ONE LAB. NA Page 136 of 172

Collected date/time: 11/14/19 10:22

## Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Reactive Cyanide	ND	<u>J4</u>	0.00500	1	11/24/2019 21:46	WG1386291

## Wet Chemistry by Method 4500H+ B-2011

	Result	Qualifier	Dilution	Analysis	Batch	H
Analyte	su			date / time		
Corrosivity by pH	5.41	T8	1	11/19/2019 19:45	WG1383247	

### Sample Narrative:

L1162234-01 WG1383247: 5.41 at 18.3C

### Wet Chemistry by Method 9034-9030B

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/l		date / time	
Reactive Sulfide	0.125		0.0500	1	11/21/2019 18:09	WG1384494

## Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	deg F			date / time		
Flashpoint	131		1	11/26/2019 17:15	WG1387079	

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Released to Imaging: 11/9/2023 8:44:32 AM

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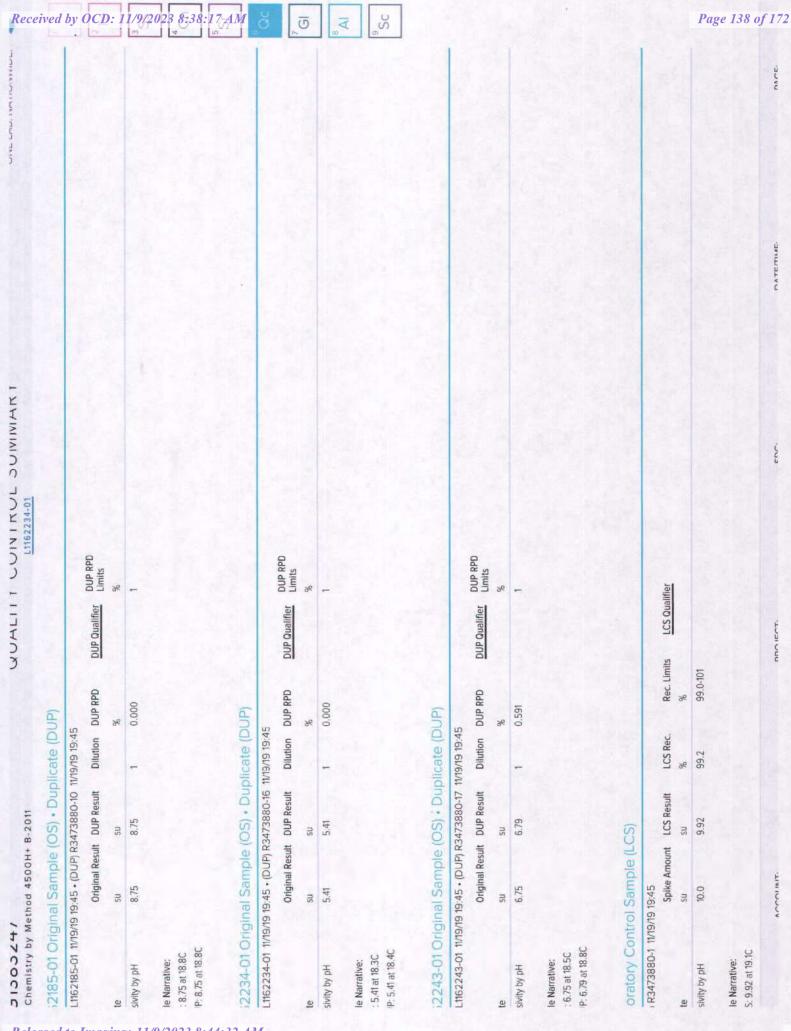
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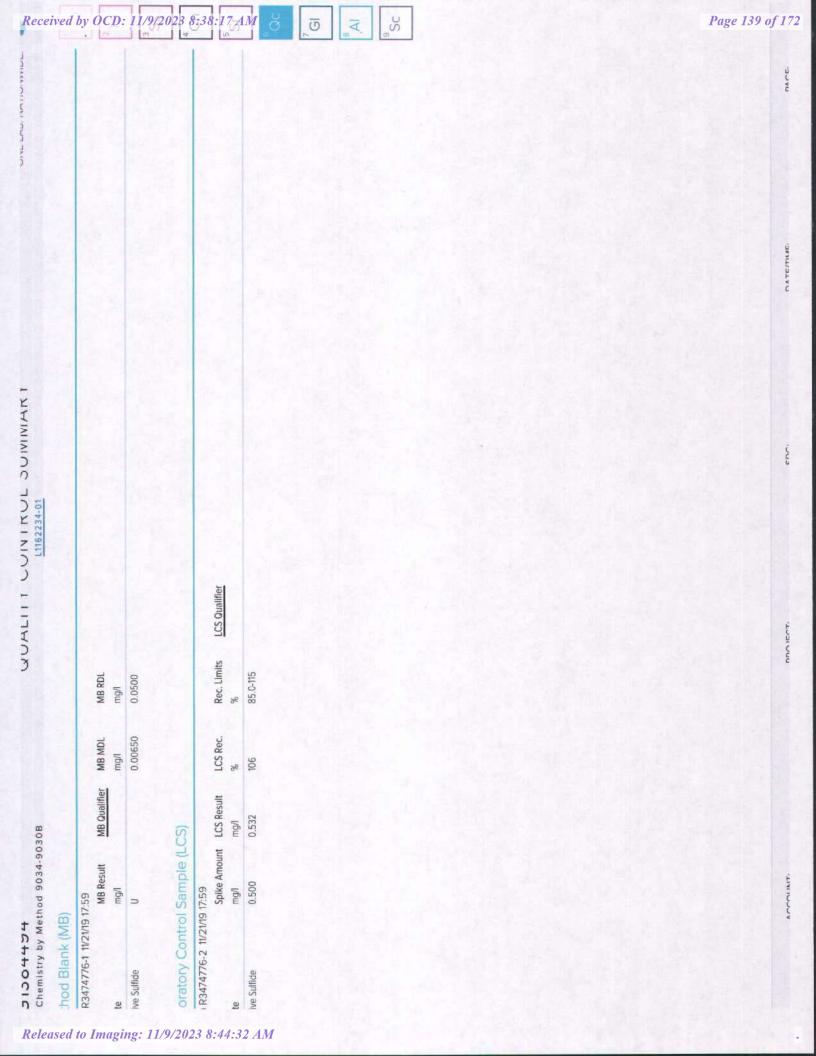
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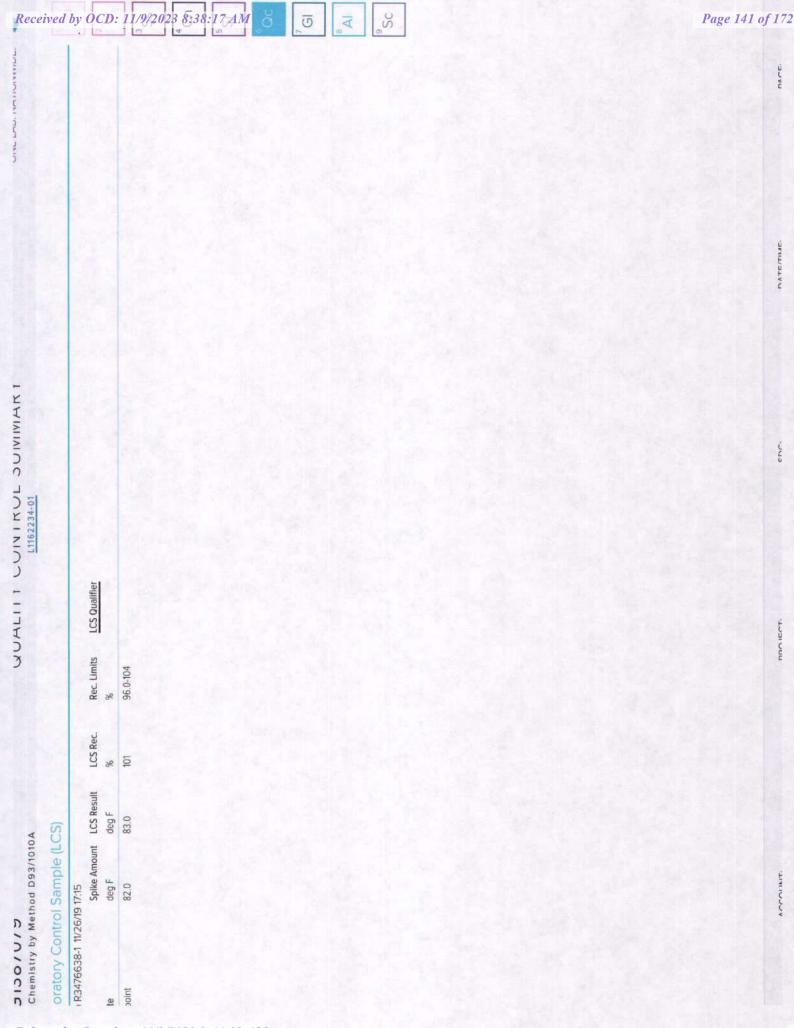
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L1162234-01





JISOIOIS Chemistry by Me	JIJOIUIJ Chemistry by Method D93/1010A	A		WOAL!	1 COINTROL 11162234-01	JUNIVIAR I	ישויים איים.	Rece
;2185-01 Orig	12185-01 Original Sample (OS) · Duplicate (DUP)	os) · Dup	licate (DUP)					ivea
L1162185-01 11/26	L1162185-01 11/26/19 17:15 • (DUP) R3476638-2 11/26/19 17:15	3476638-2 11/	26/19 17.15					by
	Original Result DUP Result	<b>DUP Result</b>	Dilution DUP RPD	DUP Qualifler	DUP RPD Limits			
te	deg F	deg F	%		39			D: 1
point	131	125	1 4.69		10			1/9/ [m
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L1162234-01 11/26	L1162234-01 11/26/19 17:15 • (DUP) R3476638-3 11/26/19 17:15	3476638-3 11	/26/19 17:15					
	Original Result	<b>DUP Result</b>	Original Result DUP Result Dilution DUP RPD	DUP Qualifier	DUP RPD Limits			I J-A
異	4 geb	deg F	%		38			M
point	131	136	1 3.75		10			C
32243-01 Oric	52243-01 Original Sample (OS) • Duplicate (DUP)	OS) • Dup	licate (DUP)					<sup>7</sup> Gl
L1162243-01 11/26	L1162243-01 11/26/19 17/15 • (DUP) R3476638-4 11/26/19 17/15	3476638-4 11/	/26/19 17:15					00
	Original Result	Original Result DUP Result	Dilution DUP RPD	DUP Qualifier	DUP RPD			A
te	deg F	deg F	%		36			5.
point	131	135	1 3.01		10			SC
32558-01 Orig	32558-01 Original Sample (OS) · Duplicate (DUP)	dng · (so)	viicate (DUP)					
L1162558-01 11/26	L1162558-01 11/26/19 17:15 • (DUP) R3476638-5 11/26/19 17:15	3476638-5 11	726/19 17:15					
	Original Result	Original Result DUP Result	Dilution DUP RPD	DUP Qualifier	DUP RPD Limits			
te	deg F	deg F	%		à <sup>2</sup>			
oint	116	127	1 9.06		9			
,4862-01 Orig	:4862-01 Original Sample (OS) • Duplicate (DUP)	dng • (50)	ilicate (DUP)					
L1164862-01 11/26	L1164862-01 11/26/19 17:15 • (DUP) R3476638-6 11/26/19 17:15	3476638-6 11	726/19 17:15		The state of the s			
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### Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	
RDL	Not detected at the Reporting Limit (or MDL where applicable).  Reported Detection Limit
Rec.	Reported Detection Limit.
RPD	Recovery.  Relative Percent Difference.
SDG	
	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

scription

Guanner	Description
J4	The associated batch QC was outside the established quality control range for accuracy.
T8	Sample(s) received past/too close to holding time expiration.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conductive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

### State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia <sup>1</sup>	923
ldaho	TN00003
Illinois	200008
Indiana	C-TN-01
lowa	364
Kansas	E-10277
Kentucky <sup>1 6</sup>	90010
Kentucky 2	16
Louisiana	Al30792
Louisiana <sup>1</sup>	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico 1	n/a
lew York	11742
forth Carolina -	Env375
orth Carolina 1	DW21704
orth Carolina 3	41
lorth Dakota	R-140
hio-VAP	CL0069
klahoma	9915
)regon	TN200002
ennsylvania	68-02979
hode Island	LA000356
outh Carolina	84004
outh Dakota	n/a
ennessee 1 4	2006
exas	T104704245-18-15
exas <sup>5</sup>	LAB0152
Itah	TN00003
ermont	VT2006
irginia	460132
/ashington	C847
/est Virginia	233
Visconsin	9980939910
Vyoming	AZLA

### Third Party Federal Accreditations

A2LA - ISO 17025	1461.01	
A2LA - ISO 17025 5	1461.02	
Canada	1461.01	
EPA-Crypto	TN00003	

AIHA-LAP, LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

<sup>&</sup>lt;sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

### Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



4901 Hawkins NE Abuquerque, NM 87109

man amaysis caporator

DAMES HIDE

CHAIN OF CUSTODY RECURD

TEL. 505-345-3975 FAX. 505-345-4107 Website: www hallenvironmental com

 ENVIRONMENTAL	ANALYSIS	LABORATORY
	-	

(615) 758-5859 EMAIL EAX (800) 767-5859 ACCOUNT 8. ESC PACE COMPANY CITY, STATE, ZIP, Mt. Juliet, TN 37122 12065 Lebanon Rd SUB-CONTRATOR ESC PACE NDDRESS

1202 1162234.01 ANALYTICAL COMMENTS Aqueous 11/14/2019 10:22:00 AM 3 Reactivity, Corrosivity and Ignitability \*\* 7 Day TAT \*\* \* CONTAINERS COLLECTION DATE MATRIX >6 BOTTLE SOOHDPE TYPE CLIENT SAMPLE ID 1911679-001D Huerfano SAMPLE

ILEM

SPECIAL INSTRUCTIONS / COMMENTS.

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you

RAD SCREEN: <0.5 mR/hr FOR LAB USE ONLY COLL REPORT TRANSMITTAL DESIRED EMAIL EAX Tony of sumples 23:178,215 T HARDCOPY (extra cost) Dute Received By: RUSH SER AN Three 11 Date: 11/15/2019 Date FORZ TATE shed By: inquished By: inquished By

Pace Analytical National Center for Testing & Innovation Cooler Receipt Form	tion	
Client: HALLING AN	May!	
Cooler Received/Opened On: // // //19 Temperature: 22		
Received By: Willie Taylor		
Signature:		
Receipt Check List NP	Yes	No
COC Seal Present / Intact?	1	
COC Signed / Accurate?	1	
Bottles arrive intact?	-	
Correct bottles used?	XIX	M
Sufficient volume sent?		
If Applicable		
VOA Zero headspace?		
Preservation Correct / Checked?	1	

### Matt Shacklock



Login #: L1162234 Client:HALLENVANM Date:11/19/19 Evaluated by:Matt S

Non-Conformance (check applicable items)

	Sample Integrity	Chain of Custody Clarification	
	Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
1	Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
×	Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
	pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Col
	Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
	Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
	Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
	Broken container	Client did not "X" analysis.	Received by:
	Broken container:	Chain of Custody is missing	Date/Time:
	Sufficient sample remains		Temp./Cont. Rec./pH:
			Carrier:
		Maria Carlo	Tracking#

## Login Comments: Received FLASH in HDPE

Client informed by:	Call	Email	Voice Mail	Date: 11/19	Time:1201	
TSR Initials: DR	Client Conta	ict:				

Lowler Instructions:

Qualify and proceed with analysis

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: 100ng Ics	Sampl	ype: LC	S	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batc	h ID: R6	4562	F	RunNo: 6	4562				
Prep Date:	Analysis D	)ate: 1:	1/15/2019	5	SeqNo: 2	210714	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.4	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Chlorobenzene	20	1.0	20,00	0	102	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	82.7	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	81.7	70	130			
Surr. 1,2-Dichloroethane-d4	9.8		10.00		97.9	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.0	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr Toluene-d8	11		10.00		105	70	130			
Sample ID: rb1	Samp1	Type: ME	SI K	Tes	tCode: El	PA Method	8260B: VOL	ATII ES		

Client ID: PBW	Batc	h ID: R6	4562	F	RunNo: 6	4562				
Prep Date:	Analysis E	)ate: 11	/15/2019	5	SeqNo: 2	210733	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
,2-Dibromoethane (EDB)	ND	1.0								
Vaphthalene	ND	2.0								
I-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

#### Qualifiers:

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

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

Page 4 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679 03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: rb1 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW	Batc	h ID: R6	4562	F	RunNo: 6	4562				
Prep Date:	Analysis [	Date: 1	/15/2019	5	SeqNo: 2	210733	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
dis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

#### Qualifiers:

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

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

Page 5 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: rb1 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES

Client ID: PBW Batch ID: R64562 RunNo: 64562

Prep Date: Analysis Date: 11/15/2019 SeqNo: 2210733 Units: µg/L

Prep Date:	Analysis L	Jale: 1	1/15/2019		segivo: 2	210/33	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.5									
Surr: 1,2-Dichloroethane-d4	9,9		10,00		98.8	70	130				
Surr: 4-Bromofluorobenzene	9.3		10.00		92.9	70	130				
Surr: Dibromofluoromethane	11		10.00		107	70	130				
Surr: Toluene-d8	11		10.00		109	70	130				

#### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- I Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

Page 6 of 10

# Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: mb-48934 SampType: MBLK TestCode: EPA Method 8270C: PAHs

Client ID: PBW Batch ID: 48934 RunNo: 64751

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50								-3
I-Methylnaphthalene	ND	1.0								
-Methylnaphthalene	ND	1.0								
Acenaphthylene	ND	0.50								
cenaphthene	ND	0.50								
luorene	ND	0.50								
Phenanthrene	ND	0.50								
anthracene	ND	0.50								
luoranthene	ND	0.50								
yrene	ND	0.50								
Benz(a)anthracene	ND	0.50								
Chrysene	ND	0.50								
Benzo(b)fluoranthene	ND	0.50								
Benzo(k)fluoranthene	ND	0.50								
Benzo(a)pyrene	ND	0.50								
Dibenz(a,h)anthracene	ND	0.50								
Benzo(g,h,i)perylene	ND	0.50								
ndeno(1,2,3-cd)pyrene	ND	0.50								
Surr: N-hexadecane	61		87.60		69.2	20.4	126			
Surr: Benzo(e)pyrene	13		20.00		64.5	21.4	126			

Sample ID: Ics-48934	Sampl	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs				
Client ID: LCSW	Batci	h ID: 48	934	F	RunNo: 6	4751					
Prep Date: 11/21/2019	Analysis D	Date: 11	1/25/2019	\$	SeqNo: 2	219191	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Naphthalene	15	0.50	20.00	0	73.8	41.8	97.8				
1-Methylnaphthalene	14	1.0	20.00	0	68.3	44.7	104				
2-Methylnaphthalene	14	1.0	20.00	0	72.4	45	101				
Acenaphthylene	15	0.50	20.00	0	72.8	51.2	102				
Acenaphthene	14	0.50	20.00	0	71.8	53.2	101				
Fluorene	15	0.50	20.00	0	75.1	57.6	106				
Phenanthrene	15	0.50	20.00	0	75.6	57.6	109				
Anthracene	15	0.50	20.00	0	73.2	56.1	98.9				
Fluoranthene	16	0.50	20.00	0	81.9	61.4	114				
Pyrene	16	0.50	20.00	0	78.7	58	110				
Benz(a)anthracene	15	0.50	20.00	0	76.6	60	102				
Chrysene	14	0.50	20.00	0	70.9	50.8	93.4				
Benzo(b)fluoranthene	15	0.50	20.00	0	74.0	56.2	118				

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded Not Detected at the Reporting Limit

ND

PQL Practical Quantitative Limit.

% Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

Value above quantitation range E

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit

Page 7 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: Ics-48934 SampType: LCS TestCode: EPA Method 8270C: PAHs Client ID: LCSW Batch ID: 48934 RunNo: 64751 Prep Date: 11/21/2019 Analysis Date: 11/25/2019 SeqNo: 2219191 Units: µg/L Analyte Result PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual LowLimit HighLimit Benzo(k)fluoranthene 0.50 20.00 0 75.7 Benzo(a)pyrene 15 0.50 20.00 0 75.0 55.5 114 Dibenz(a,h)anthracene 0 15 0.50 20.00 75.5 53 110 Benzo(g,h,i)perylene 0.50 20.00 0 15 74.8 55 113 Indeno(1,2,3-cd)pyrene 15 0.50 20.00 0 75.5 51.2 115 Surr. N-hexadecane 67 87.60 76.4 20.4 126 Surr: Benzo(e)pyrene 14 20.00 126 68.3 21.4

Sample ID: Icsd-48934	Sampl	ype: LC	SD	TestCode: EPA Method 8270C: PAHs							
Client ID: LCSS02	Batc	h ID: 48	934	F	RunNo: 6	4751					
Prep Date: 11/21/2019	Analysis [	Date: 11	/25/2019	5	SeqNo: 2	219192	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Naphthalene	15	0.50	20.00	0	74.2	41.8	97.8	0.541	25.4		
1-Methylnaphthalene	15	1.0	20.00	0	73.8	44.7	104	7.74	21.5		
2-Methylnaphthalene	15	1.0	20.00	0	76.0	45	101	4.85	25.2		
Acenaphthylene	17	0.50	20.00	0	83.4	51.2	102	13.6	30.3		
Acenaphthene	16	0.50	20.00	0	81.6	53.2	101	12.8	28.1		
Fluorene	17	0.50	20.00	0	83.5	57.6	106	10.6	33		
Phenanthrene	15	0.50	20.00	0	74.8	57.6	109	1.06	24.5		
Anthracene	15	0.50	20.00	0	76.6	56.1	98.9	4.54	26.9		
Fluoranthene	17	0.50	20.00	0	83.2	61.4	114	1.57	21.8		
Pyrene	15	0.50	20.00	0	77.1	58	110	2.05	27		
Benz(a)anthracene	14	0.50	20.00	0	72.5	60	102	5.50	27.4		
Chrysene	14	0.50	20.00	0	68.6	50.8	93.4	3.30	20.4		
Benzo(b)fluoranthene	15	0.50	20.00	0	77.4	56.2	118	4.49	22.5		
Benzo(k)fluoranthene	17	0.50	20.00	0	83.3	57,7	119	9.56	24.1		
Benzo(a)pyrene	16	0.50	20.00	0	78.3	55.5	114	4.31	27.3		
Dibenz(a,h)anthracene	16	0.50	20.00	0	78.5	53	110	3.90	18.5		
Benzo(g,h,i)perylene	16	0.50	20.00	0	79.4	55	113	5.97	28.4		
Indeno(1,2,3-cd)pyrene	16	0.50	20.00	0	81.5	51.2	115	7.64	21.8		
Surr: N-hexadecane	70		87.60		79.8	20.4	126	0	0		
Surr: Benzo(e)pyrene	14		20.00		71.8	21.4	126	0	0		

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded II

Not Detected at the Reporting Limit ND

Practical Quanitative Limit POL

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits Sample pH Not In Range

Reporting Limit

Page 8 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: MB-48955

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Prep Date: 11/21/2019

Batch ID: 48955 Analysis Date: 11/22/2019 RunNo: 64701

SeqNo: 2217075

Units: mg/L

Analyte

PQL SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD **RPDLimit** 

Qual

Mercury

ND 0.00020

Sample ID: LCS-48955

SampType: LCS Batch ID: 48955

RunNo: 64701

Analyte

Client ID: LCSW

Prep Date: 11/21/2019

Analysis Date: 11/22/2019

SeqNo: 2217080

Units: mg/L HighLimit

%RPD

Qual

PQL SPK value SPK Ref Val %REC LowLimit

0.005000

**RPDLimit** 

Mercury

0.0048 0.00020

TestCode: EPA Method 7470: Mercury

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded 11

Not Detected at the Reporting Limit ND POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range E

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit

Page 9 of 10

### Hall Environmental Analysis Laboratory, Inc.

WO#:

1911679

03-Dec-19

Client: Souder, Miller and Associates

Project: Huerfano

Sample ID: MB-48826 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals Client ID: PBW Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219763 Units: mg/L SPK value SPK Ref Val %REC LowLimit **RPDLimit** Analyte Result PQL HighLimit %RPD Qual Barium ND 0.020 Cadmium ND 0.0020

 Cadmium
 ND
 0.0020

 Chromium
 ND
 0.0060

 Lead
 ND
 0.050

 Selenium
 ND
 0.050

 Silver
 ND
 0.0050

Sample ID: LCS-48826 TestCode: EPA 6010B: Total Recoverable Metals SampType: LCS Client ID: LCSW Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Analysis Date: 11/25/2019 Units: mg/L SeqNo: 2219768 Analyte %RPD **RPDLimit** Result POL SPK value SPK Ref Val %REC HighLimit Qual LowLimit Barium 0.47 0.020 0.5000 0 94.6 80 120 Cadmium 0.49 0.0020 0.5000 0 97.1 80 120 Chromium 0.0060 0.47 0.5000 0 95.0 80 120 0.50 0.0050 100 80 120 Lead 0.5000 0 Selenium 0.54 0.050 0.5000 0 107 80 120

Sample ID: MB-48826 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals Client ID: PBW Batch ID: 48826 RunNo: 64774 Prep Date: 11/15/2019 Units: mg/L Analysis Date: 11/25/2019 SeqNo: 2219851 %RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** Qual

0

95.0

80

120

Arsenic ND 0.020

Sample ID: LCS-48826 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: LCSW Batch ID: 48826 RunNo: 64774

0.0050

0.095

Prep Date: 11/15/2019 Analysis Date: 11/25/2019 SeqNo: 2219853 Units: mg/L

0.1000

Result SPK value SPK Ref Val %RPD **RPDLimit** Qual Analyte PQL %REC LowLimit HighLimit 0.50 80 0.020 0.5000 99.7 120 Arsenic 0

#### Qualifiers:

Silver

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

II Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due so dilution or matrix

B Analyte detected in the associated Method Blank

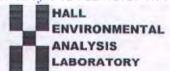
E Value above quantitation range

Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 10 of 10



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-FARM	Work Order Number	191	1679			RcptNo: 1
Received By: Juan Rojas	11/15/2019 8:00:00 AM	Λ				
Completed By: Desiree Dominguez	11/15/2019 8:37:26 AM	Л		TA		
Reviewed By: ENM	11/15/19				3	
Chain of Custody						
1. Is Chain of Custody complete?		Yes	~	No		Not Present
2. How was the sample delivered?		Cou	rier			
Log In						
3. Was an attempt made to cool the sample	s?	Yes	~	No		NA 🗆
4. Were all samples received at a temperatu	are 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 tes	t(s)?	Yes	~	No		
7. Are samples (except VOA and ONG) prop	perly preserved?	Yes	~	No		
8. Was preservative added to bottles?		Yes		No	<b>V</b>	NA 🗆
9. VOA vials have zero headspace?		Yes	~	No		No VOA Vials
0. Were any sample containers received bro	oken?	Yes		No	<b>V</b>	# of preserved
1. Does paperwork match bottle labels?		Yes	~	No		bottles checked for pH:
(Note discrepancies on chain of custody)		103	100			(<2/or >12 unless not
2. Are matrices correctly identified on Chain	of Custody?	Yes	~	No		Adjusted? 10
3. Is it clear what analyses were requested?		Yes		No		
4. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	~	No		Checked by: Dr 11/
Special Handling (if applicable)						
15, Was client notified of all discrepancies wi	th this order?	Yes		No		NA 🗸
Person Notified:	Date:				-	
By Whom:	Via:	eM	ail 🔲	Phone [	Fax	In Person
Regarding:						
Client Instructions:						
16. Additional remarks:						
17. Cooler Information						
Cooler No Temp °C Condition	Seal Intact Seal No 5	eal D	ate	Signed I	Ву	

Rece	ived b	y O	CD:	11/9/.	202.	8:3	38:17 A	$M^-$					T	T				T	Page	155 of 1
	ANALYSTS LABODATODY		www.nallenvironmental.com	10	Inal		SMIS QJ S, bOq	1)	.40 8 30 N	10 to 10 stals	ethce y 83 Me r, N (AO)	EDB (M PAHs by RCRA 8 S270 (Sa Total Co	X						8260 Full List Compound at TCLP Lunit	It IS 119 6:00 MNVOICE ENKIRONSC. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
			4901	Tel		(0					-	08:H9T		+			+		- sirks:	D C
						_						\ X3T8		1					Remarks:	MM
Turn-Around Time:	V Standard	Project Name:	Hacifano	Project #:		Project Manager:	AShly Maximed	Sampler: QW			Cooler Temp(including cF): 0.8-0.2-0.6	Container Preservative HEAL No. Type and # Type	S/WOOM/S	The state of the s					Received by: Via: Date Time IIII   14/15   #30   Received by: Via: Date Time	
Chain-of-Custody Record	ent: SmB		illing Address: 461 W Broadway	TOUTS MIN MA BRUOT	one #: 568 225 7535	ail or Fax#: CISINES MOXIMES!	/QC Package:  Standard   Level 4 (Full Validation)	preditation:   Az Compliance		EDD (Type)		e Time Matrix Sample Name	TIG 10:22 Agues Hyerfund	-					Time: Relinquished by: Time: Relinquished by:	If 1753 Computed to Hall Environmental may be subcontracted to other accredited laboratories.

#### Received by OCD: 11/9/2023 8:38:17 AM 1625 N. French Dr., Hobbs, NM 88240

1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410

<u>District IV</u> 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 Page 156 of 172 Form C-138 Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 R	eilly Ave, Farmingto				
2. Originating Site: MAPL Duran Pumping Station					
3. Location of Material (Street Addr UL M Section 1 Township 2North R					
4. Source and Description of Waste: Source: Water/Oil from the Non Exempt Description: Non Exempt/Non Hazardo Estimated Volume 80 yd3 bbl Kn	us Water from the con	npressor skids.			yd³/bbls
5. GENERA	ATOR CERTIFICAT	TION STATEMEN	T OF WASTE	STATUS	
I, Thomas Long , representative Generator Signature certify that according to the Resource Coregulatory determination, the above description of the control	onservation and Recoveribed waste is: (Check	very Act (RCRA) and k the appropriate clas	the US Enviror sification)	nmental Protection	
RCRA Exempt: Oil field waste exempt waste. Operator Use On	s generated from oil a ly: Waste Acceptance				
RCRA Non-Exempt: Oil field of characteristics established in RCRA subpart D, as amended. The following the appropriate items)	regulations, 40 CFR	261.21-261.24, or lis	ted hazardous w	aste as defined in	n 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Haz	ardous Waste Analys	is Process Know	wledge    Oth	ner (Provide desc	eription in Box 4)
GENERATOR 19.15.36.15	WASTE TESTING	CERTIFICATION	STATEMENT	FOR LANDFA	RMS
I, Thomas Long, representate  Generator Signature the required testing/sign the Generator V			orizes <u>Agua Mo</u>	ss, LLC to comp	lete
I, , represen	tative for	Agua Moss, L	LC	do hereby co	ertify that
representative samples of the oil field was have been found to conform to the speci of the representative samples are attached 19.15.36 NMAC.	aste have been subject fic requirements appli	ted to the paint filter to cable to landfarms pr	test and tested foursuant to Section	or chloride contents	nt and that the samples NMAC. The results
5. Transporter: To Be Determined					
OCD Permitted Surface Waste Man	agement Facility				
Name and Facility Permit #: *Agua M Address of Facility: SW/4 NW/4 Secti			sa, NM		
Method of Treatment and/or Disposal:  Evaporation I Waste Acceptance Status:	njection   Treatin	ng Plant 🔲 Landf	arm 🗌 Land	lfill  Other	
isoopunee butus.	☐ APPROVED		DENIED (M	ust Be Maintaine	d As Permanent Record)
PRINT NAME:		TITLE:		Γ	DATE:
SIGNATURE:		TELEPHO	NE NO.:		
Surface Waste Manageme	ent Facility Authorized Age				

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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-138 Revised 08/01/11

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

# REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: MAPL Duran Pumping Station
3. Location of Material (Street Address, City, State or ULSTR): UL M Section 1 Township 2North Range 16 East; 34.422612, -105.224238
4. Source and Description of Waste:  Source: Water/Oil from the Non Exempt WasteWater Tanks and from the compressor skid drains.  Description: Non Exempt/Non Hazardous Water from the compressor skids.  Estimated Volume 80 yd3 bbls Known Volume (to be entered by the operator at the end of the haul) yd3/bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS  I, Thomas Long  , representative or authorized agent for Enterprise Products Operating do hereby  Generator Signature  certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 198 regulatory determination, the above described waste is: (Check the appropriate classification)
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste.  **Operator Use Only: Waste Acceptance Frequency   Monthly   Weekly   Per Load**
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Che the appropriate items)
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Thomas Long , representative for Enterprise Products Operating authorizes <u>Agua Moss, LLC</u> to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.
I,, representative forAgua Moss, LLC do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the sample have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The result of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: To Be Determined
OCD Permitted Surface Waste Management Facility  Name and Facility Permit #: *Agua Moss, LLC - Permit #: NM-01-009  Address of Facility: SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM  Method of Treatment and/or Disposal:  Evaporation Injection Treating Plant Landfarm Landfill Other  Waste Acceptance Status:
☐ APPROVED ☐ DENIED (Must Be Maintained As Permanent Rec
PRINT NAME: TITLE: DATE: SIGNATURE: Surface Waste Management Facility Authorized Agent



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

December 04, 2019

Ashley Maxwell Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401 TEL: (505) 325-7535 FAX:

RE: Duran OrderNo.: 1911845

#### Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/18/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

#### **Analytical Report**

Lab Order 1911845

Date Reported: 12/4/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Duran

Lab ID: 1911845-001

Client Sample ID: Duran Non Exempt

Collection Date: 11/18/2019 9:00:00 AM Received Date: 11/18/2019 3:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	0.032	0.020		mg/L	10	11/22/2019 10:58:08 AM	1 48955
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	rde
Arsenic	ND	5.0		mg/L	1	11/25/2019 3:35:14 PM	
Barium	ND	100		mg/L	1	11/25/2019 3:35:14 FW	and the same
Cadmium	ND	1.0		mg/L	1	11/25/2019 12:19:59 PM	
Chromium	ND	5.0		mg/L	1	11/25/2019 12:19:59 PM	
Lead	ND	5.0		mg/L	1	11/25/2019 12:19:59 PM	
Selenium	ND	1.0		mg/L	1	11/25/2019 12:19:59 PM	
Silver	ND	5.0		mg/L	1	11/25/2019 12:19:59 PN	
EPA METHOD 8270C: PAHS		0.0		mgr		Analyst:	
Naphthalene	0.0						
1-Methylnaphthalene	9.2	5.0	D	µg/L	1	11/25/2019 5:24:34 PM	
	18	10	D	μg/L	1	11/25/2019 5:24:34 PM	48934
2-Methylnaphthalene	22	10	D	µg/L	1	11/25/2019 5:24:34 PM	
Acenaphthylene Acenaphthene	ND	5.0	D	μg/L	1	11/25/2019 5:24:34 PM	
Fluorene	ND	5.0	D	µg/L	1	11/25/2019 5:24:34 PM	
Phenanthrene	ND	5.0	D	µg/L	1	11/25/2019 5:24:34 PM	
Anthracene	ND	5.0	D	μg/L	1	11/25/2019 5:24:34 PM	
Fluoranthene	ND	5.0	D	µg/L	1	11/25/2019 5:24:34 PM	
	ND	5.0	D	μg/L	1	11/25/2019 5:24:34 PM	
Pyrene Ronz (a) anthropona	ND	5.0	D	µg/L	1	11/25/2019 5:24:34 PM	
Benz(a)anthracene	ND	5.0	D	µg/L	1	11/25/2019 5:24:34 PM	48934
Chrysene	ND	5.0	D	μg/L	1	11/25/2019 5:24:34 PM	
Benzo(b)fluoranthene	ND	50	D	μg/L	10	11/25/2019 5:00:34 PM	5 4 4 4
Benzo(k)fluoranthene	ND	50	D	µg/L	10	11/25/2019 5:00:34 PM	
Benzo(a)pyrene	ND	50	D	μg/L	10	11/25/2019 5:00:34 PM	337 A 74 A
Dibenz(a,h)anthracene	ND	50	D	μg/L	10	11/25/2019 5:00:34 PM	48934
Benzo(g,h,i)perylene	ND	50	D	μg/L	10	11/25/2019 5:00:34 PM	
Indeno(1,2,3-cd)pyrene	ND	50	D	μg/L	10	11/25/2019 5:00:34 PM	
Surr: N-hexadecane	92.7	20.4-126	D	%Rec	1	11/25/2019 5:24:34 PM	48934
Surr: Benzo(e)pyrene	0	21.4-126	SD	%Rec	10	11/25/2019 5:00:34 PM	
EPA METHOD 8260B: VOLATILES						Analyst:	DJF
Benzene	ND	0.50		mg/L	200	11/20/2019 2:23:29 PM	W6465
Toluene	ND	0.20		mg/L	200	11/20/2019 2:23:29 PM	W6465
Ethylbenzene	ND	0.20		mg/L	200	11/20/2019 2:23:29 PM	W6465
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	11/20/2019 2:23:29 PM	W6465
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	11/20/2019 2:23:29 PM	W6465
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	11/20/2019 2:23:29 PM	W6465
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	11/20/2019 2:23:29 PM	W6465

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

Matrix: AQUEOUS

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
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 1 of 10

#### **Analytical Report**

Lab Order 1911845

Date Reported: 12/4/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Lab ID: 1911845-001

Duran

Project:

Client Sample ID: Duran Non Exempt

Collection Date: 11/18/2019 9:00:00 AM

Received Date: 11/18/2019 3:00:00 PM

Analyses	Result	RL (	Qual Units	DF Date Analyzed Bate	ch
EPA METHOD 8260B: VOLATILES				Analyst: DJF	F
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Naphthalene	ND	0.40	mg/L	200 11/20/2019 2:23:29 PM W64	465
1-Methylnaphthalene	ND	0.80	mg/L	200 11/20/2019 2:23:29 PM W64	465
2-Methylnaphthalene	ND	0.80	mg/L	200 11/20/2019 2:23:29 PM W64	465
Acetone	ND	2.0	mg/L	200 11/20/2019 2:23:29 PM W64	465
Bromobenzene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Bromodichloromethane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Bromoform	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Bromomethane	ND	0.60	mg/L	200 11/20/2019 2:23:29 PM W64	465
2-Butanone	ND	2.0	mg/L	200 11/20/2019 2:23:29 PM W64	465
Carbon disulfide	ND	2.0	mg/L	200 11/20/2019 2:23:29 PM W64	465
Carbon Tetrachloride	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Chlorobenzene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Chloroethane	ND	0.40	mg/L	200 11/20/2019 2:23:29 PM W64	465
Chloroform	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Chloromethane	ND	0.60	mg/L	200 11/20/2019 2:23:29 PM W64	465
2-Chlorotoluene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
4-Chlorotoluene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
cis-1,2-DCE	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 11/20/2019 2:23:29 PM W64	465
Dibromochloromethane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Dibromomethane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,2-Dichlorobenzene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,3-Dichlorobenzene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,4-Dichlorobenzene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Dichlorodifluoromethane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,1-Dichloroethane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,1-Dichloroethene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,2-Dichloropropane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,3-Dichloropropane	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
2,2-Dichloropropane	ND	0.40	mg/L	200 11/20/2019 2:23:29 PM W64	465
1,1-Dichloropropene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
Hexachlorobutadiene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
2-Hexanone	ND	2.0	mg/L	200 11/20/2019 2:23:29 PM W64	465
Isopropylbenzene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	46
4-Isopropyltoluene	ND	0.20	mg/L	200 11/20/2019 2:23:29 PM W64	465
4-Methyl-2-pentanone	ND	2.0	mg/L	200 11/20/2019 2:23:29 PM W64	465
Methylene Chloride	ND	0.60	mg/L	200 11/20/2019 2:23:29 PM W64	465

Matrix: AQUEOUS

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
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

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

Page 2 of 10

## **Analytical Report**

Lab Order 1911845

Date Reported: 12/4/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Duran

Lab ID: 1911845-001

Client Sample ID: Duran Non Exempt

Collection Date: 11/18/2019 9:00:00 AM Received Date: 11/18/2019 3:00:00 PM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES					Analyst:	DJF
n-Butylbenzene	ND	0.60	mg/L	200	11/20/2019 2:23:29 PM	W64653
n-Propylbenzene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
sec-Butylbenzene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
Styrene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
tert-Butylbenzene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	11/20/2019 2:23:29 PM	W64653
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
trans-1,2-DCE	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,1,1-Trichloroethane	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,1,2-Trichloroethane	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
Trichloroethene (TCE)	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
Trichlorofluoromethane	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
1,2,3-Trichloropropane	ND	0.40	mg/L	200	11/20/2019 2:23:29 PM	W64653
Vinyl chloride	ND	0.20	mg/L	200	11/20/2019 2:23:29 PM	W64653
Xylenes, Total	ND	0.30	mg/L	200	11/20/2019 2:23:29 PM	W64653
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	200	11/20/2019 2:23:29 PM	W64653
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	200	11/20/2019 2:23:29 PM	W64653
Surr: Dibromofluoromethane	106	70-130	%Rec	200	11/20/2019 2:23:29 PM	W64653
Surr: Toluene-d8	111	70-130	%Rec	200	11/20/2019 2:23:29 PM	W64653

Matrix: AQUEOUS

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 Limit

Page 3 of 10



# ANALYTICAL REPORT

## Hall Environmental Analysis Laboratory

Sample Delivery Group:

L1162674

Samples Received:

11/20/2019

Project Number:

Description:

Report To:

4901 Hawkins NE

Albuquerque, NM 87109

Entire Report Reviewed By:

Naphne R Richards

Daphne Richards











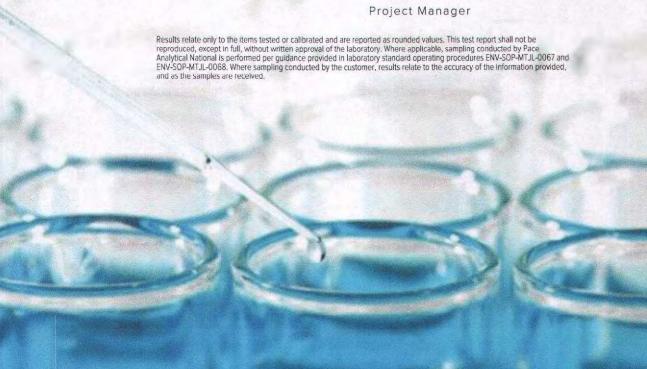












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Wet Chemistry by Method 4500 CN E-2011

Wet Chemistry by Method 4500H+ B-2011

Wet Chemistry by Method 9034-9030B

Wet Chemistry by Method D93/1010A

Method

### SAMPLE SUMMARY

Batch

WG1390298

WG1384269

WG1386612

WG1387864

Collected by

12/02/29 16:33

ONE LAB. NATIONWIDE.

Mt. Juliet, TN

1911845-001D DURAN NON EXEMPT L1162674-01 WW

		11/18/19 09:00	11/20/19 08:4	5
Dilution	Preparation	Analysis	Analyst	Location
	date/time	date/time		
1	12/03/19 20:31	12/04/19 10:57	SDL	Mt. Juliet, TN
1	11/20/19 20:00	11/20/19 20:00	ANP	Mt. Juliet, TN
1	11/25/19 13:04	11/25/19 13:04	MJA	Mt. Juliet, TN

12/02/29 16:33

Collected date/time Received date/time

KAB





















All sample aliquots were received at the correct temperature, in the proper containers, with the

appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples

have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my

knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been

knowingly withheld that would affect the quality of the data.





















Project Narrative

Daphne Richards Project Manager

apline R Richards

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

Collected date/time: 11/18/19 09:00

Received by OCD: 11/9/2023 8:38:17 AM 1911845-001D DURAN NON EXEMPT

# SAMPLE RESULTS - 01

Page 166 of ONE LAB. NATIONWIDE.

Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Reactive Cyanide	ND		0.00500	1	12/04/2019 10:57	WG1390298	

Wet Chemistry by Method 4500H+ B-2011

	Result	Qualifier	Dilution	Analysis	Batch	
Analyte	su			date / time		
Corrosivity by pH	7.52	<u>T8</u>	1	11/20/2019 20:00	WG1384269	

Sample Narrative:

L1162674-01 WG1384269: 7.52 at 19.2C

Wet Chemistry by Method 9034-9030B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Reactive Sulfide	0.681		0.0500	1	11/25/2019 13:04	WG1386612	

Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	deg F			date / time	
Flashpoint	150		1	12/02/2029 16:33	WG1387864

Qc

GI

Sc

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

Analyte

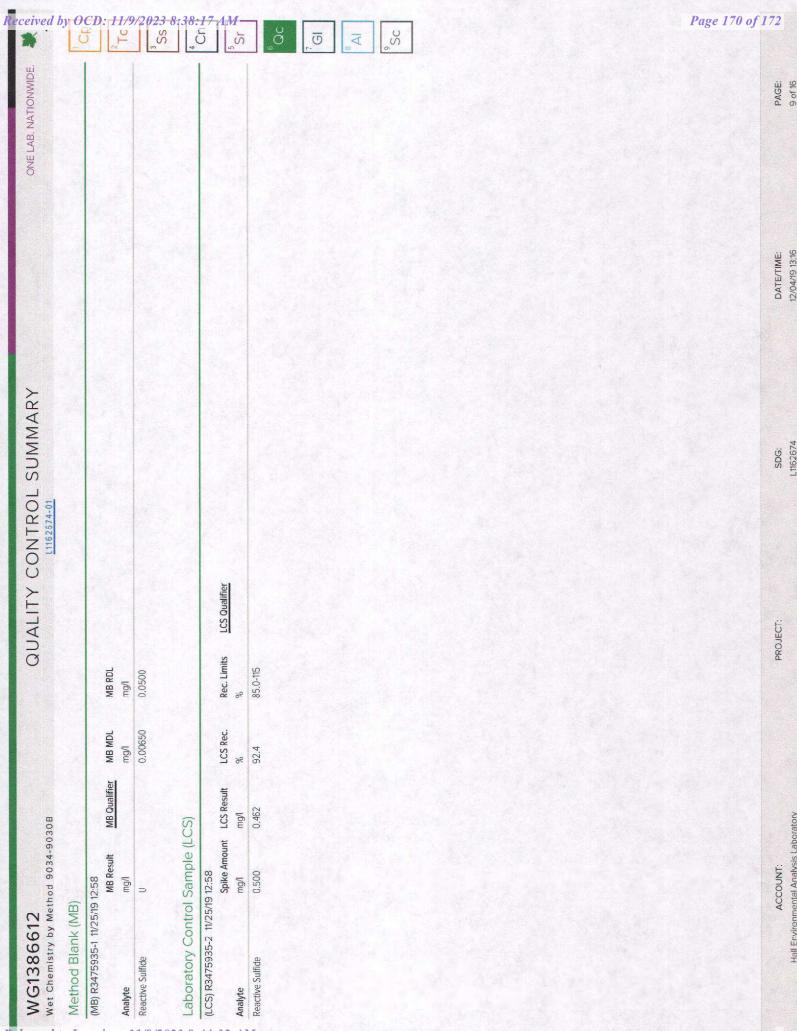
Reactive Cyanide

Reactive Cyanide

Analyte

WG1384269	WG1384269 Wet Chemistry by Method 4500H+ B-2011	3-2011			QUALITY CONTROL	ROL SUMMARY		ONE LAB. NATIONWIDE.
L1162674-01 OI	L1162674-01 Original Sample (OS) • Duplicate (DUP)	0S) • Dup	olicate (D)	UP)				
(0S) L1162674-01 11/	(OS) L1162674-01 11/20/19 20:00 • (DUP) R3474312-5 11/20/19 20:00 Original Result DUP Result Dilution DL	R3474312-5 DUP Result	11/20/19 20:0 Dilution	OO DUP RPD	DUP Qualifier Limits			
Analyte Corrosivity by pH	su 7.52	su 7,52		%	%			
Sample Narrative: 0S: 7.52 at 19.2C DUP: 7.52 at 19.5C								
L1162704-01 Or	L1162704-01 Original Sample (OS) • Duplicate (DUP)	dna · (so	dicate (DI	(AN				ਨ <b> </b>
(05) L1162704-01 11/.	(OS) L1162704-01 11/20/19 20:00 • (DUP) R3474312-6 11/20/19 20:00	33474312-6	11/20/19 20:C	00				
Analyte	Original Result DUP Result	DUP Result	Dilution DUP RPD %	DUP RPD %	DUP Qualifier Limits  %			
Corrosivity by pH	5.79	5.77	·	0.346				
Sample Narrative: 0S: 5.79 at 19C DUP: 5.77 at 19C L1162704-02	Sample Narrative: 0S: 5.79 at 19C DUP: 5.77 at 19C L1162704-02 Original Sample (OS) • Duplicate (DUP)	ing·(so)	olicate (D	(AD)				
05) L1162704-02 11,	(OS) L1162704-02 11/20/19 20:00 · (DUP) R3474312-7 11/20/19 20:00	R3474312-7	11/20/19 20:0	00				
	Original Result DUP Result	DUP Result	Dilution	DUP RPD	DUP Qualifier Limits			
Analyte	Su	Su		88	%			
Corrosivity by pH	5.26	5.28	1	0.380	-			
Sample Narrative: 0S: 5.26 at 18.8C DUP: 5.28 at 19.1C								
L1162704-03 O	L1162704-03 Original Sample (OS) • Duplicate (DUP)	ing • (so)	olicate (D	(An				
(05) L1162704-03 11,	(OS) L1162704-03 11/20/19 20:00 · (DUP) R3474312-8 11/20/19 20:00	R3474312-8	11/20/19 20:0	00				
	Original Result DUP Result	<b>DUP Result</b>	Dilution	DUP RPD	DUP Qualifier Limits			
Analyte	ns	ns		%	%			
Corrosivity by pH	6.22	6.20		0.322	_			
Sample Narrative:								
	ACCOUNT				PROJECT:	SDG:	DATE/TIME:	PAGE:
Hall Frvir	onmental Analysis Labo	ratory				L1162674	12/04/19 13:16	7 of 16

WG1384769		QUALITY COL	CONTROL SUMMARY	ONELA	ONE LAB. NATIONWIDE.
Wet Chemistry by Method 4500H+ B-2011					
L1162704-03 Original Sample (OS) • Duplicate (DUP)	licate (DUP)				
(OS) L1162704-03 11/20/19 20:00 • (DUP) R3474312-8 11/20/19 20:00	1/20/19 20:00				
Original Result DUP Result	Dilution DUP RPD	DUP Qualifier Limits			2
Analyte su su	%	%			A security for the second contract of the sec
05: 6.22 at 19.2 DUP: 6.2 at 19.2C					023 8:3
L1162704-04 Original Sample (OS) • Duplicate (DUP)	licate (DUP)				4
(OS) L1162704-04 11/20/19 20:00 • (DUP) R3474312-9 11/20/19 20:00	1/20/19 20:00				2 0
Original Result DUP Result	Dilution DUP RPD	DUP Qualifier Limits			,
Analyte su su	%	%			တိ
Corrosivity by pH 5.75 5.76	1 0.174				E
Sample Narrative: OS: 5.75 at 19.2C DUP: 5.76 at 19.3C					<u>0</u> <u></u>
Laboratory Control Sample (LCS)					S
(LCS) R3474312-1 11/20/19 20:00					
Amount LCS Result	LCS Rec. Rec. Limits	nits LCS Qualifier			
Analyte su su					
Corrosivity by pH 10.0 9.91	99.1 99.0-101				
Sample Narrative: LCS: 9.91 at 18.8C					
ACCOUNT:		PROJECT:	SDG:	DATE/TIME:	PAGE:
Hall Environmental Analysis Laboratory			L1162674	12/04/19 13:16	8 of 16



District I
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Phone: (575) 393-6161 Fax: (575) 393-0720

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1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

COMMENTS

Action 284238

#### **COMMENTS**

Operator:	OGRID:
AGUA MOSS, LLC	247130
P.O. Box 600	Action Number:
Farmington, NM 87499	284238
	Action Type:
	[UF-DP] Discharge Permit (DISCHARGE PERMIT)

#### COMMENTS

Crea	ited By	Comment	Comment Date
cch	navez	Quarterly Waste Analyses Information 2020 Submittal	11/9/2023

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P.O. Box 600	Action Number:
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	Action Type:
	[UF-DP] Discharge Permit (DISCHARGE PERMIT)

#### CONDITIONS

С	reated By	Condition	Condition Date
(	chavez	Condition of Approval: 1. Follow Discharge Permit Quarterly Report Guidelines, Content, and Deadline Dates for submittal of future reports.	11/9/2023