UICI - 5

WASTE ANALYSES INFO

2019

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



December 10, 2018

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

FAX

RE: Manzanares OrderNo.: 1811D91

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 11/29/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report Lab Order 1811D91

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Manzanares
 Collection Date: 11/28/2018 9:45:00 AM

 Lab ID:
 1811D91-001
 Matrix: AQUEOUS
 Received Date: 11/29/2018 7:00:00 AM

Analyses Result PQL Qual Units DF **Date Analyzed EPA METHOD 7470: MERCURY** Analyst: pmf 12/4/2018 1:18:53 PM Mercury ND 0.020 mg/L 1 **EPA 6010B: TOTAL RECOVERABLE METALS** Analyst: ELS 12/4/2018 9:09:30 AM Arsenic ND 50 mg/L 1 Barium ND 100 mg/L 1 12/4/2018 9:09:30 AM Cadmium 1 12/4/2018 9:09:30 AM ND 1.0 mg/L Chromium 5.0 1 12/4/2018 9:09:30 AM ND mg/L Lead 12/4/2018 12:18:39 PM ND 5.0 mg/L 1 Selenium 1 12/4/2018 9:09:30 AM ND 1.0 mg/L Silver ND 5.0 1 12/4/2018 9:09:30 AM mg/L **EPA METHOD 8270C: PAHS** Analyst: DAM Naphthalene 5.0 10 12/6/2018 12:28:04 PM ND D µg/L 1-Methylnaphthalene ND 5.0 D 10 12/6/2018 12:28:04 PM µg/L 12/6/2018 12:28:04 PM 2-Methylnaphthalene ND 5.0 D 10 µg/L µg/L Acenaphthylene 5.0 D 10 12/6/2018 12:28:04 PM ND µg/L 12/6/2018 12:28:04 PM Acenaphthene ND 5.0 D 10 12/6/2018 12:28:04 PM Fluorene D 10 ND 5.0 µg/L 12/6/2018 12:28:04 PM Phenanthrene ND 5.0 D µg/L 10 12/6/2018 12:28:04 PM Anthracene ND 5.0 D µg/L 10 Fluoranthene ND 5.0 D µg/L 10 12/6/2018 12:28:04 PM 12/6/2018 12:28:04 PM Pyrene ND 5.0 D µg/L 10 10 12/6/2018 12:28:04 PM Benz(a)anthracene ND 5.0 D µg/L 5.0 10 12/6/2018 12:28:04 PM Chrysene ND D µg/L 10 12/6/2018 12:28:04 PM Benzo(b)fluoranthene ND 5.0 D µg/L Benzo(k)fluoranthene 5.0 D 10 12/6/2018 12:28:04 PM ND µg/L Benzo(a)pyrene ND 5.0 D 10 12/6/2018 12:28:04 PM µg/L 12/6/2018 12:28:04 PM ND 10 Dibenz(a,h)anthracene 5.0 D µg/L 12/6/2018 12:28:04 PM Benzo(g,h,i)perylene ND 5.0 D µg/L 10 10 12/6/2018 12:28:04 PM Indeno(1,2,3-cd)pyrene ND 5.0 D µg/L %Rec 10 12/6/2018 12:28:04 PM Surr: N-hexadecane 0 35.2-113 SD 12/6/2018 12:28:04 PM SD Surr: Benzo(e)pyrene 0 48.3-123 %Rec 10 **EPA METHOD 8260B: VOLATILES** Analyst: RAA Benzene 11/29/2018 4:07:00 PM 200 ND 0.50 mg/L Toluene ND 0.20 mg/L 200 11/29/2018 4:07:00 PM Ethylbenzene ND 0.20 mg/L 200 11/29/2018 4:07:00 PM Methyl tert-butyl ether (MTBE) ND 0.20 mg/L 200 11/29/2018 4:07:00 PM 200 11/29/2018 4:07:00 PM 1,2,4-Trimethylbenzene ND 0.20 mg/L 1,3,5-Trimethylbenzene 0.20 200 11/29/2018 4:07:00 PM ND mg/L 11/29/2018 4:07:00 PM 1,2-Dichloroethane (EDC) ND 0.20 mg/L 200

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

0	ma	H	fia	rs:
v	ua			2 3.

- * 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 Page 1 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1811D91

Date Reported: 12/10/2018

Hall Environmental Analysis Laboratory, Inc.

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

 Project:
 Manzanares
 Collection Date: 11/28/2018 9:45:00 AM

 Lab ID:
 1811D91-001
 Matrix: AQUEOUS
 Received Date: 11/29/2018 7:00:00 AM

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES			-		Analyst: RAA
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Naphthalene	ND	0.40	mg/L	200	11/29/2018 4:07:00 PM
1-Methylnaphthalene	ND	0.80	mg/L	200	11/29/2018 4:07:00 PM
2-Methylnaphthalene	ND	0.80	mg/L	200	11/29/2018 4:07:00 PM
Acetone	ND	2.0	mg/L	200	11/29/2018 4:07:00 PM
Bromobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Bromodichloromethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Bromoform	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Bromomethane	ND	0.60	mg/L	200	11/29/2018 4:07:00 PM
2-Butanone	ND	2.0	mg/L	200	11/29/2018 4:07:00 PM
Carbon disulfide	ND	2.0	mg/L	200	11/29/2018 4:07:00 PM
Carbon Tetrachloride	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Chlorobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Chloroethane	ND	0.40	mg/L	200	11/29/2018 4:07:00 PM
Chloroform	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Chloromethane	ND	0.60	mg/L	200	11/29/2018 4:07:00 PM
2-Chlorotoluene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
4-Chlorotoluene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
cis-1,2-DCE	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
cis-1,3-Dichloropropene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200	11/29/2018 4:07:00 PM
Dibromochloromethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Dibromomethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,2-Dichlorobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,3-Dichlorobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,4-Dichlorobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Dichlorodifluoromethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,1-Dichloroethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,1-Dichloroethene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,2-Dichloropropane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,3-Dichloropropane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
2,2-Dichloropropane	ND	0.40	mg/L	200	11/29/2018 4:07:00 Pf
1,1-Dichloropropene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Hexachlorobutadiene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
2-Hexanone	ND	2.0	mg/L	200	11/29/2018 4:07:00 PM
Isopropylbenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 Pf
4-Isopropyltoluene	ND	0.20	mg/L	200	11/29/2018 4:07:00 Pf
4-Methyl-2-pentanone	ND	2.0	mg/L	200	11/29/2018 4:07:00 Pf
Methylene Chloride	ND	0.60	mg/L	200	11/29/2018 4:07:00 PM

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

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- 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 Page 2 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1811D91

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: Manzanares

Project: Manzanares

Collection Date: 11/28/2018 9:45:00 AM

Lab ID: 1811D91-001

Matrix: AQUEOUS

Received Date: 11/29/2018 7:00:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: RAA
n-Butylbenzene	ND	0.60	mg/L	200	11/29/2018 4:07:00 PM
n-Propylbenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
sec-Butylbenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Styrene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
tert-Butylbenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	11/29/2018 4:07:00 PM
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
trans-1,2-DCE	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,1,1-Trichloroethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,1,2-Trichloroethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Trichloroethene (TCE)	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Trichlorofluoromethane	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
1,2,3-Trichloropropane	ND	0.40	mg/L	200	11/29/2018 4:07:00 PM
Vinyl chloride	ND	0.20	mg/L	200	11/29/2018 4:07:00 PM
Xylenes, Total	ND	0.30	mg/L	200	11/29/2018 4:07:00 PM
Surr: 1,2-Dichloroethane-d4	98.3	70-130	%Rec	200	11/29/2018 4:07:00 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	200	11/29/2018 4:07:00 PM
Surr: Dibromofluoromethane	94.3	70-130	%Rec	200	11/29/2018 4:07:00 PM
Surr: Toluene-d8	94.1	70-130	%Rec	200	11/29/2018 4:07:00 PM

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- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 3 of 11
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analyte

Flashpoint

Received by OCD: 11/8/2023 4:42:52 PM 1811D91-001D MANZANARES

Collected date/time: 11/28/18 09:45

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.

Sc

Wet Chemistry	by	Method	4500	CN	E-2011
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Result

deg F

DNF at 170

Qualifier

Dilution

Analysis

date / time

12/01/2018 14:40

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Reactive Cyanide	ND		0.00500	1	12/05/2018 09:33	WG1203906	
Wet Chemistry by	Method 4500l	H+ B-2011					<u></u>
	Result	Qualifier	Dilution	Analysis	Batch		
Analyte	SU			date / time			1
Corrosivity by pH	6.55	<u>T8</u>	1	12/01/2018 13:46	WG1204036		
Sample Narrative: L1048596-01 WG1204036:	6.55 at 13.4C						5
Wet Chemistry by	Method 9034-	9030B					[s
	Result	Qualifier	RDL	Dilution	Analysis	Batch	7.0
Analyte	mg/l		mg/l		date / time		
leactive Sulfide	ND		0.0500	1	12/01/2018 13:33	WG1204157	
Wet Chemistry by							

Batch

WG1204067

ACCOUNT: Hall Environmental Analysis Laboratory PROJECT:

SDG: L1048596

DATE/TIME: 12/06/18 15:56

Method Blank (MB) MB) R365305-1 12/05/18 08:59													
WB) R3365305-1 12/	MB)												
Amalyte	OS/18 U8:59 MBResult	M8 Oualifier	MB MDL mg/l	MB REL									
Reactive Cyamick	э		0,00180	0.005/10									
L1048039-04 Original Sample (OS) - Duplicate (DUP)	rriginal Sample	(OS) • Du	plicate (DI	CPJ									
OS) L1048C39-04 12/05/18 09:13 - (DUP) 83365305-5 12/05/18 09:14	1/05/18 09:13 - (IDUF	A R3365305-5	12/05/18 09°	14	100								5
	Original Result	Original Result DUP Result	Dilution	DUP RPD DU	DUP Qualifier	DUP RPD Limits							
Analyte Reactive Cyanide	lg u	0.000	* 000	0.000		200							
.1048259-01 Original Sample (OS) • Duplicate (DUP)	riginal Sample	dra · iso)	licate (DL	(a)									<u> </u>
(OS) L1048259-01 12/05/18 09:29 - (DUP) R3365305-8 12/05/18 09:30	105/18 09.29 · (DUF	9 83365305-8	12/05/18 09:	30									
	Original Result DUP Result	DUP Result	Dilution DUP RPD		DUP Qualifier	DUP RPD Limits							
Analyte	Igm	l/gm	38			30							
Reactive Cyanide	CN	0,000	1 0	0.000		50							, y
Laboratory Control Sample (LCS)	tral Sample (L	(5)											
LCS) R3365305-2 12/05/18 09:00	00:60 81/50/2												
	Spike Amount LCS Result	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier	ie.							
Analyte Reactive Cyanide	0,100	/OLO	7 P	85.0-15									
L 1048039-01 Original Sample (OS) • Matrix Saike (MS) • Matrix Spike Duplicate (MSD)	riginal Sample	iOS] - Mat	rix Salke (MS) - Matri	× Spike [Suplicate (N	(05)						
IOS) L1048039-01 '2/05/18 09/06 - (IMS) R3365305-3 12/05/18 09:07 - (IMSD) R3365305-4 12/05/18 09:08	05/18 09:06 - (IMS)	R3365305-3 1	12/05/18 09:0	7 · [MSD] R336.	5305-4 12/1	5718 09:08							
Analyte	Spike Amount	Original Result MS Result	MS Result	MSD Result	MSRec.	MSD Rec.	Calution	Rec. Limits	MS Qualifier	MSD Qualifier		RPD Limits	
Reactive Cyanidle	00100	, ,	0.0593	52600	593	67.6	-	75.0-75	21	<u>@</u>	£6.	20	
L1048252-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)	riginal Sample	(05) • Mat	rix Soike (MS) - Matri	x Spike L	Suplicate (N	(QS)						
(OS) L1048252-01 (2/OS/18 0925 - (MS) R3365305-6 12/OS/18 09.26 - (MSD) R3365305-7 12/OS/18 09.27 Spite Amount Original Result MS Result MSD Re	(05/18 0925 - (MS) Spike Amount	0925 - (MS) R3365305-6 12/05/18 09 Spike Amount Original Result MS Result	12/05/18 09:2 MS Result	6 · (MSD) R336 MSD Result	5305-7 12/0 MSRec.	35/18 09:27 MSD Rec.	Cilution	Rec Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	Мр	liga	mg."	II-g/I	дe	ent		20			sê.	96	
Reactive Cyanide	0.100	0.00729	0.0988	1160.0	5116	90.4		75.0.75			1.12	20	
	ACCOUNT			300	nde icen								
				ALL	JUNE I			SDG:		40	DATE/TIME		

RPD Limits

LCS Qualifier LCSD Qualifier RPD

Roc Limits

LCSD Rec

39.0-101

5

300

0.398

12/D6/18 15:36 CATE/TIME

11048593 908

QUALITY CONTROL SUMMARY

ONE LAB NATIONWICE

Laboratory Control Sample (LCS) - Laboratory Control Sample Duplicate (LCSD)

Wet Chemistry by Method 4500H+ 8-2011

WG1204036

LCS Fee. (LCS) R3364437-1 12/01/18 13:46 - (LCSD) R3364437-2 12/01/18 13:46

LCSD Result 35 E Spike Amount LCS Result

Sul 0.01 100

Corroswity by pH Analyte

LCSD: 10.08 at 19.8C

LCS:10,04 et 19,70 Sample Narrative:

Released to Imaging: 11/8/2023 4:50:26 PM

PROJECT

Hall Environmental Analysis Laboratory ACCOUNT

Reactive Sulfide

Analyte

Reactive Sulfide

Arralyte

Method Blank (MB)

WG1204157

Result

Case Narrative (Cn)

Quality Control Summary (Qc)

Sample Chain of Custody (Sc)

J6

T8

TC

Ss

Cn

SI

Qc

Al

Sc

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE.

Guide to Reading and Understanding Your Laboratory Report

or report for this analyte.

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.

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

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

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.

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.

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. 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	J3	The associated batch QC was outside the established quality control range for precision.
Sample Results (Sr) 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. This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and	Qualifier	Description
Sample Results (Sr) 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)	times of preparation and/or analysis.
Sample Results (Sr) by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for	Sample Summans (Sc)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and
	Sample Results (Sr)	by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for

The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCOUNT: Hall Environmental Analysis Laboratory PROJECT:

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

L1048596

DATE/TIME: 12/06/18 15:56

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811D91

10-Dec-18

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID 100ng Ics	Samp	ype: LC	S	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: LCSW	Batc	h ID: R5	5969	F	RunNo: 5	5969				
Prep Date:	Analysis [Date: 11	1/29/2018		SeqNo: 1	868405	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	106	70	130	To la m		
Toluene	19	1.0	20.00	0	93.8	70	130			
Chlorobenzene	20	1.0	20.00	0	97.6	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	106	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.4	70	130			
Surr: Toluene-d8	9.1		10.00		90.8	70	130			

Sample ID rb	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batcl	n ID: RE	5969	F	RunNo: 5	5969				
Prep Date:	Analysis E	Date: 1	1/29/2018	8	SeqNo: 1	868406	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0			13,711					
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.

Sample Diluted Due to Matrix D

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

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

Page 4 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1811D91

10-Dec-18

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID rb	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batch	ID: RE	55969	F	RunNo: 5	5969				
Prep Date:	Analysis D	ate: 1	1/29/2018		SeqNo: 1	868406	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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								
,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								
lexachlorobutadiene	ND	1.0								
-Hexanone	ND	10								
sopropylbenzene	ND	1.0								
-lsopropyltoluene	ND	1.0								
-Methyl-2-pentanone	ND	10								
lethylene Chloride	ND	3.0								
-Butylbenzene	ND	3.0								
-Propylbenzene	ND	1.0								
ec-Butylbenzene	ND	1.0								
tyrene	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								
ans-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	ND	1.0								
richloroethene (TCE)	ND	1.0								
richlorofluoromethane										
	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 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
 - Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1811D91**

10-Dec-18

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID rb	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	h ID: R5	5969	F	RunNo: 5	5969				
Prep Date:	Analysis E	Date: 1	1/29/2018	S	SeqNo: 1	868406	Units: µg/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	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

Sample ID 1811d91-001ams	Samp	ype: MS	S	Tes	tCode: E	PA Method	8260B: VOL	ATILES		
Client ID: Manzanares	Batch ID: R55969			- F	RunNo: 5					
Prep Date:	Analysis E	Date: 1	1/29/2018	\$	SeqNo: 1	868419	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.3	0.20	4.000	0	107	60.5	137			
Toluene	3.9	0.20	4.000	0	97.5	70	130			
Chlorobenzene	3.9	0.20	4.000	0	96.5	70	130			
1,1-Dichloroethene	4.3	0.20	4.000	0	107	67.6	130			
Trichloroethene (TCE)	4.0	0.20	4.000	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	2.1		2.000		105	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.000		105	70	130			
Surr: Dibromofluoromethane	1.9		2.000		96.2	70	130			
Surr: Toluene-d8	1.9		2.000		93.2	70	130			

Sample ID 1811d91-001ams	d Samp1	Type: MS	SD	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: Manzanares	Batc	h ID: R5	5969	F	RunNo: 5	5969				
Prep Date:	Analysis E	Date: 11	1/29/2018	5	SeqNo: 1	868420	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.0	0.20	4.000	0	100	60.5	137	6.28	20	
Toluene	3.7	0.20	4.000	0	93.2	70	130	4.46	20	
Chlorobenzene	3.7	0.20	4.000	0	91.8	70	130	4.97	20	
1,1-Dichloroethene	3.8	0.20	4.000	0	95.1	67.6	130	11.6	20	
Trichloroethene (TCE)	3.8	0.20	4.000	0	95.9	70	130	5.02	20	
Surr: 1,2-Dichloroethane-d4	2.1		2.000		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.2		2.000		108	70	130	0	0	
Surr: Dibromofluoromethane	1.9		2.000		95.2	70	130	0	0	
Surr: Toluene-d8	1.9		2.000		93.9	70	130	0	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 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

Page 6 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 18

1811D91 10-Dec-18

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID Ics-41899	Sampl	ype: LC	s	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: LCSW	Batc	h ID: 41	899	F	RunNo: 5	6156				
Prep Date: 12/4/2018	Analysis D	Date: 12	2/6/2018	5	SeqNo: 1	875938	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	12	0.50	20.00	0	58.1	29.6	105			
1-Methylnaphthalene	13	0.50	20.00	0	62.8	33.4	112			
2-Methylnaphthalene	12	0.50	20.00	0	59.2	28.6	108			
Acenaphthylene	13	0.50	20.00	0	66.9	35.7	116			
Acenaphthene	14	0.50	20.00	0	69.8	32.4	118			
Fluorene	13	0.50	20.00	0	66.9	35.6	118			
Phenanthrene	17	0.50	20.00	0	86.5	36.3	130			
Anthracene	18	0.50	20.00	0	91.3	34.8	135			
Fluoranthene	20	0.50	20.00	0	99.6	41	136			
Pyrene	19	0.50	20.00	0	96.3	44.8	136			
Benz(a)anthracene	20	0.50	20.00	0	100	41.1	136			
Chrysene	17	0.50	20.00	0	84.1	37.9	132			
Benzo(b)fluoranthene	19	0.50	20.00	0	93.5	39	144			
Benzo(k)fluoranthene	18	0.50	20.00	0	91.6	40	144			
Benzo(a)pyrene	19	0.50	20.00	0	94.1	36.8	137			
Dibenz(a,h)anthracene	17	0.50	20.00	0	86.3	31.5	141			
Benzo(g,h,i)perylene	20	0.50	20.00	0	99.7	32.9	138			
Indeno(1,2,3-cd)pyrene	20	0.50	20.00	0	98.4	40.9	143			
Surr: N-hexadecane	71		87.60		81.1	35.2	113			
Surr: Benzo(e)pyrene	34		20.00		170	48.3	123			S

Sample ID Icsd-41899	SampT	ype: LC	SD	Tes	tCode: E	PA Method	8270C: PAHs	=		
Client ID: LCSS02	Batch	h ID: 41	899	F	RunNo: 5	6156				
Prep Date: 12/4/2018	Analysis E	Date: 12	2/6/2018	5	SeqNo: 1	875939	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	13	0.50	20.00	0	63.9	29.6	105	9.51	68.7	
1-Methylnaphthalene	13	0.50	20.00	0	66.8	33.4	112	6.17	66	
2-Methylnaphthalene	12	0.50	20.00	0	58.5	28.6	108	1.19	68.7	
Acenaphthylene	14	0.50	20.00	0	69.7	35.7	116	4.10	64.9	
Acenaphthene	15	0.50	20.00	0	72.7	32.4	118	4.07	53.2	
Fluorene	15	0.50	20.00	0	75.8	35.6	118	12.5	62.4	
Phenanthrene	20	0.50	20.00	0	102	36.3	130	16.4	62.6	
Anthracene	21	0.50	20.00	0	104	34.8	135	12.5	62.4	
Fluoranthene	20	0.50	20.00	0	101	41	136	1.49	59.4	
Pyrene	19	0.50	20.00	0	96.5	44.8	136	0.207	55.4	
Benz(a)anthracene	20	0.50	20.00	0	101	41.1	136	0.695	56.6	
Chrysene	17	0.50	20.00	0	83.0	37.9	132	1.32	51.9	
Benzo(b)fluoranthene	20	0.50	20.00	0	97.8	39	144	4.50	59.1	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1811D91

10-Dec-18

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID Icsd-41899	Samp	Type: LC	SD	Tes	tCode: E					
Client ID: LCSS02	Batc	h ID: 41	899	F	RunNo: 5	6156				
Prep Date: 12/4/2018	Analysis [Date: 1	2/6/2018		SeqNo: 1	875939	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	18	0.50	20.00	0	87.9	40	144	4.12	57	
Benzo(a)pyrene	19	0.50	20.00	0	94.4	36.8	137	0.318	60.2	
Dibenz(a,h)anthracene	17	0.50	20.00	0	84.0	31.5	141	2.70	64.7	
Benzo(g,h,i)perylene	20	0.50	20.00	0	101	32.9	138	1.39	61.5	
Indeno(1,2,3-cd)pyrene	20	0.50	20.00	0	97.9	40.9	143	0.509	61.1	
Surr: N-hexadecane	82		87.60		94.0	35.2	113	0	0	
Surr: Benzo(e)pyrene	31		20.00		157	48.3	123	0	0	S
Sample ID mb-41899	Samp	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: PBW	Batc	h ID: 41	899	F	RunNo: 5	6156				
Deep Date: 48/4/8949	A! -!- [A L D - L - 4010/0040					11-21- 0			

Cample 15 IIIb-41033	Oump	ype. INIE	JEIN	100	LOUGE. L	Aimetriou	0270C. FAITS			
Client ID: PBW	Batcl	h ID: 41	899	F	RunNo: 5	6156				
Prep Date: 12/4/2018	Analysis D	Date: 12	2/6/2018		SeqNo: 1	875940	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50						The second		
1-Methylnaphthalene	ND	0.50								
2-Methylnaphthalene	ND	0.50								
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	65		87.60		74.6	35.2	113			
Surr: Benzo(e)pyrene	20		20.00		101	48.3	123			

Qualifiers:

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

Analyte detected in the associated Method Blank

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1811D91

Qual

10-Dec-18

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID MB-41861

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Batch ID: 41861

PQL

RunNo: 56066

Prep Date: 12/3/2018 Analysis Date: 12/4/2018

SPK value SPK Ref Val %REC LowLimit

SeqNo: 1872280

Units: mg/L

%RPD RPDLimit

Analyte Mercury

ND 0.00020

Sample ID LCS-41861

SampType: LCS

TestCode: EPA Method 7470: Mercury

LowLimit

Client ID: LCSW

Batch ID: 41861

RunNo: 56066

HighLimit

Prep Date: 12/3/2018

Analysis Date: 12/4/2018

SeqNo: 1872287

Units: mg/L

Analyte

PQL SPK value SPK Ref Val %REC

HighLimit

%RPD **RPDLimit** Qual

83.3

Mercury 0.0042 0.00020 0.005000 0

80 120

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

PQL 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

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Sample pH Not In Range

Reporting Detection Limit RL

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1811

1811D91 10-Dec-18

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID MB-41840 Client ID: PBW Prep Date: 12/2/2018	SampType: MBLK Batch ID: 41840 Analysis Date: 12/4/2018			F	tCode: E RunNo: 5 SeqNo: 1	6059	: Total Recoverable Metals Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020						7.51.71		
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID LCS-41840	Samp	Type: LC	S	TestCode: EPA 6010B: Total Recoverable Metals								
Client ID: LCSW	Bato	ch ID: 41	840	F	RunNo: 56059							
Prep Date: 12/2/2018	Analysis	Date: 12	2/4/2018	5	SeqNo: 1	872023	Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Arsenic	0.51	0.020	0.5000	0	102	80	120					
Barium	0.50	0.020	0.5000	0	99.4	80	120					
Cadmium	0.50	0.0020	0.5000	0	100	80	120					
Chromium	0.50	0.0060	0.5000	0	101	80	120					
Selenium	0.51	0.050	0.5000	0	101	80	120					
Silver	0.099	0.0050	0.1000	0	99.4	80	120					

Sample ID 1811D91-001CMS Client ID: Manzanares Prep Date: 12/2/2018		Type: M \$ ch ID: 41 Date: 1 2		Tes	als					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.51	0.020	0.5000	0	101	75	125			
Barium	0.53	0.020	0.5000	0.04512	96.3	75	125			
Cadmium	0.48	0.0020	0.5000	0	96.5	75	125			
Chromium	0.47	0.0060	0.5000	0	94.7	75	125			
Selenium	0.49	0.050	0.5000	0	97.1	75	125			
Silver	0.096	0.0050	0.1000	0	95.7	75	125			

Sample ID 1811D91-001CM	SD Samp	Type: MS	SD	Tes	tCode: E	PA 6010B:	Total Recove	rable Met	als	
Client ID: Manzanares	Bato	h ID: 41	840	F	RunNo: 5	56059				
Prep Date: 12/2/2018	Analysis	Date: 12	2/4/2018	S	SeqNo: 1	1872043	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	97.4	75	125	4.06	20	
3arium Sarium	0.54	0.020	0.5000	0.04512	98.2	75	125	1.71	20	
Cadmium	0.49	0.0020	0.5000	0	98.5	75	125	2.04	20	
Chromium	0.48	0.0060	0.5000	0	95.7	75	125	1.04	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1811D91

10-Dec-18

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID 1811D91-001CMSD SampType: MSD TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Manzanares Batch ID: 41840 RunNo: 56059

Prep Date: 12/2/2018 Analysis Date: 12/4/2018 SeqNo: 1872043 Units: mg/L

SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual Analyte Result PQL LowLimit **HighLimit** 20 Selenium 0.52 0.050 0.5000 0 104 75 125 6.96 Silver 0.098 0.0050 0.1000 0 97.5 75 125 1.89 20

Sample ID MB-41840 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals

Client ID: PBW Batch ID: 41840 RunNo: 56059

Prep Date: 12/2/2018 Analysis Date: 12/4/2018 SeqNo: 1872094 Units: mg/L

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

Lead ND 0.0050

Sample ID LCS-41840 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: LCSW Batch ID: 41840 RunNo: 56059

Prep Date: 12/2/2018 Analysis Date: 12/4/2018 SeqNo: 1872095 Units: mg/L

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

Lead 0.49 0.0050 0.5000 0 97.4 80 120

Sample ID 1811D91-001CMS SampType: MS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Manzanares Batch ID: 41840 RunNo: 56059

Prep Date: 12/2/2018 Analysis Date: 12/4/2018 SeqNo: 1872113 Units: mg/L

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

Lead 0.48 0.0050 0.5000 0 95.7 75 125

Sample ID 1811D91-001CMSD SampType: MSD TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Manzanares Batch ID: 41840 RunNo: 56059

Prep Date: 12/2/2018 Analysis Date: 12/4/2018 SeqNo: 1872114 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Lead 0.49 0.0050 0.5000 98.1 2.47 20

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

POL 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

Page 11 of 11

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified



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 Num	ber: 1811	D91			RcptNo: 1	
Received By:	Anne Tho	me	11/29/2	018 7:00:00) AM		an	An		
Completed By:	Anne Tho	rne	11/29/20	018 8:55:46	S AM		A.	An		
Reviewed By:	SIO		11/29/	10			Cima	A,		
Latelel	2. A	11/291	17							
Chain of Cust		11/291								
1. Is Chain of Cu		lete?			Yes	V	No		Not Present	
2. How was the	ample deliv	ered?			Cour	ier				
Log In										
3. Was an attem	pt made to c	ool the samp	les?		Yes	<u> </u>	No		NA 🗆	
4. Were all samp	les received	at a tempera	ature of >0° C t	to 6.0°C	Yes	V	No		NA 🗆	
5. Sample(s) in p	roper contai	ner(s)?			Yes	V	No			
6. Sufficient samp	ole volume fo	or indicated to	est(s)?		Yes	~	No			
7. Are samples (e				ed?		V	No			
8. Was preservat					Yes		No	V	NA 🗆	
9. VOA vials have	zero heads	pace?			Yes		No		No VOA Viats	
10. Were any sam	ple containe	ers received b	proken?		Yes		No	~	# of preserved	
11. Does paperwo			n)		Yes	~	No		bottles checked for pH: 2	s noted)
12. Are matrices c	orrectly ident	lified on Chai	in of Custody?		Yes	V	No		Adjusted?	
13. Is it clear what	analyses we	ere requested	1?		Yes	~	No	Ц		
14. Were all holdin (If no, notify cu					Yes	✓	No		Checked by:	291.0
Special Handli 15. Was client not		100	with this order?		Yes	П	No		NA 🗹	
		screpancies	with this order?	Chris			INC	manuar.		
Person I	3	V-200		Date		a 🗖	Dhono 🗆	Env	□ In Bosses	
By Who				Via:	eMa	<u>" </u>	Phone	rax	In Person	
	structions:							***********		
16. Additional ren	narks:	TO THE REST OF THE WAY	me noncoron de apropriações		4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4 (4	atrice mitel	a seed the collect of the carbon sector	(45) 4 (16) (40) 40	WINNESSON STATE OF THE TAXABLE STATE OF TAXA	
17. Cooler Inform	<u>nation</u> │ Temp ºC	Condition	Seal Intact	Seal No	Seal Da	ite I	Signed I	Ву		
1	1.3	Good	Yes					m. 4711 h (2)		
		Charles and the Control of the Contr		A CONTRACTOR OF THE PARTY OF TH		are to annount the				

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107	EDB (Method 504.1) PAH's (8310 of 8228 SIMS) RCRA 8 Metals TCLP Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄) 8081 Pesticides / 8082 PCB's 8250B (VOA) 8250B (VOA) 1001 Air Bubbles (Y or N)	ス 3 3 3 4 4 4 1 1 1 1 1 1 1 1	Date Time Remarks: 82 Lac Flux U.S. H. Date Time The Compound @ Trup white Date Time I have the Compound @ Trup white U.S. H. Date Time I have the Compound of Trup white I have the I have the contracted data will be deanly notated on the analytical report.
HALL ANAL www.ha 4901 Hawkins NE Tel. 505-345-3975	BTEX + MTBE + TMB's (8021) BTEX + MTBE + TPH (Gas only) TPH 8015B (GRO / DRO / MRO) TPH (Method 418.1)		Remarks: 82 Report TC Involce 6 possibility. Any sub-conf
Tum-Around Time: 5 dey 7 At No Charter Standard Rush per Ands Project Name: May 2 analyses	Project Manager: Rampler: P. X. Yes On Ice: X. Yes Sample I emperature T. Y. C. T. J. Z. Y. Container Preservative Type and # Type Type and # Type		And by: And by: Item accredited laboratories.
Chain-of-Custody Record Client: Smp Mailing Address: 401 W Broadwan Farmung bon Nor 191401	WW.	uizalis 9:45 Agacs Manzanares	Date: Time: Relinquished by: Date: Time: Relinquished by: I By it KIM Mile Reconstructed to Hall Environmental may be subcontracted.

Received by OCD: 11/8/2023 4:42:52 PM

District II
1301 W. Grand Avenue, Artesia, NM 88240
District III
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.

EXP 26 FEB 27 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

	nerator Name and Address: prise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
	riginating Site: attlesnake Compressor Station
	ocation of Material (Street Address, City, State or ULSTR): UL H Section 16, T32N, R9W; 36.987603, -107.77771
Source Descri	e: Water from the Non Exempt Water Tanks and from the compressor skid drains. ption: Non Exempt/Non Hazardous Water from the compressor skids. ted Volume 160 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
certify	mas Long, representative or authorized agent for Enterprise Products Operating do hereby denerator Signature that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 tory 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- tempt waste. Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
ch	RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by aracteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, bpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check e appropriate items)
☐ MS	SDS Information RCRA Hazardous Waste Analysis Process Knowledge Other (Provide description in Box 4)
	GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
G	mas Long , representative for Enterprise Products Operating authorize to complete enerator Signature quired testing/sign the Generator Waste Testing Certification.
have b	, representative for Agua Moss, LLC do hereby certify that entative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples een found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 36 NMAC.
	ransporter: To Be Determine
Nam Addr	Permitted Surface Waste Management Facility te and Facility Permit #: *Agua Moss, LLC - Permit #: NM-01-009 tess of Facility: SW/4 NW/4 Section 2, Township 29N, Range Crouch Mesa, NM and of Treatment and/or Disposal:
	☐ Evaporation ☐ Injection ☐ Treating Plant ☐ Landfarm ☐ Landfill ☐ Other
was	te Acceptance Status: DENIED (Must Be Maintained As Permanent Record)
PRIN	TITLE: DATE:
	NATURE: TELEPHONE NO.: Surface Waste Management Facility Authorized Agent

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	n NM 87401	
2. Originating Site: Rattlesnake Compressor Station	_ 11111	
 Location of Material (Street Address, City, State or UL UL H Section 16, T32N, R9W; 36.987603, -107.77771 	STR):	
4. Source and Description of Waste: Source: Water from the Non Exempt Water Tanks and from the Description: Non Exempt/Non Hazardous Water from the commendated Volume 160 yd3 bbls Known Volume (to be extended)	pressor skids.	end of the haul) yd³/bbls
5. GENERATOR CERTIFICAT	TION STATEMENT OF W	ASTE STATUS
I, Thomas Long, representative or authorized agent for Generator Signature certify that according to the Resource Conservation and Recover regulatory determination, the above described waste is: (Check	ery Act (RCRA) and the US	Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil as exempt waste. Operator Use Only: Waste Acceptance		
RCRA Non-Exempt: Oil field waste which is non-haz characteristics established in RCRA regulations, 40 CFR 2 subpart D, as amended. The following documentation is a the appropriate items)	261.21-261.24, or listed hazar	dous waste as defined in 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysi	is Process Knowledge	☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING	CERTIFICATION STATE	MENT FOR LANDFARMS
I, Thomas Long , representative for Enterprise Proc Generator Signature the required testing/sign the Generator Waste Testing Certifica		omplete
I,, representative for representative samples of the oil field waste have been subjected have been found to conform to the specific requirements applied of the representative samples are attached to demonstrate the a 19.15.36 NMAC.	cable to landfarms pursuant to	Section 15 of 19.15.36 NMAC. The results
5. Transporter: To Be Determine		
OCD Permitted Surface Waste Management Facility		
Name and Facility Permit #: *Agua Moss, LLC - Permit #: Address of Facility: SW/4 NW/4 Section 2, Township 29N,		
Method of Treatment and/or Disposal: Evaporation Injection Treating Waste Acceptance Status:	g Plant	Landfill Other
APPROVED	☐ DENIE	ED (Must Be Maintained As Permanent Record)
PRINT NAME:SIGNATURE:	TITLE: TELEPHONE NO.:	DATE:
Surface Waste Management Facility Authorized Agen		



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

February 26, 2019

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

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

RE: Rattlesnake

OrderNo.: 1902632

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/14/2019 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 1902632

Date Reported: 2/26/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

1902632-001

Client Sample ID: Rattlesnake Non Exempt

Received Date: 2/14/2019 8:10:00 AM

Project: Rattlesnake Collection Date: 2/13/2019 8:52:00 AM Lab ID:

Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 7470: MERCURY						Analyst:	pmf
Mercury	ND	0.020		mg/L	1	2/21/2019 11:01:31 AM	43258
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst:	rde
Arsenic	ND	5.0		mg/L	1	2/21/2019 4:52:16 PM	43209
Barium	ND	100		mg/L	1	2/21/2019 4:52:16 PM	43209
Cadmium	ND	1.0		mg/L	1	2/21/2019 4:52:16 PM	43209
Chromium	ND	5.0		mg/L	1	2/21/2019 4:52:16 PM	43209
Lead	ND	5.0		mg/L	1	2/21/2019 4:52:16 PM	43209
Selenium	ND	1.0		mg/L	1	2/21/2019 4:52:16 PM	43209
Silver	ND	5.0		mg/L	1	2/21/2019 4:52:16 PM	43209
EPA METHOD 8270C: PAHS						Analyst:	DAM
Naphthalene	ND	50	D	μg/L	10	2/25/2019 1:37:43 PM	43179
1-Methylnaphthalene	ND	100	D	μg/L	10	2/25/2019 1:37:43 PM	43179
2-Methylnaphthalene	ND	100	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Acenaphthylene	ND	50	D	μg/L	10	2/25/2019 1:37:43 PM	43179
Acenaphthene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Fluorene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Phenanthrene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Anthracene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Fluoranthene	ND	50	D	ug/L	10	2/25/2019 1:37:43 PM	43179
Pyrene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Benz(a)anthracene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Chrysene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Benzo(b)fluoranthene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Benzo(k)fluoranthene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Benzo(a)pyrene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Dibenz(a,h)anthracene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Benzo(g,h,i)perylene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Indeno(1,2,3-cd)pyrene	ND	50	D	µg/L	10	2/25/2019 1:37:43 PM	43179
Surr: N-hexadecane	0	20.4-126	SD	%Rec	10	2/25/2019 1:37:43 PM	43179
Surr: Benzo(e)pyrene	0	21.4-126	SD	%Rec	10	2/25/2019 1:37:43 PM	43179
EPA METHOD 8260B: VOLATILES						Analyst	RAA
Benzene	ND	0.50		mg/L	200	2/16/2019 12:44:00 AM	B5775
Toluene	ND	0.20		mg/L	1000	2/16/2019 12:44:00 AM	
Ethylbenzene	ND	0.20		mg/L	200	2/16/2019 12:44:00 AM	B5775
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200		
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	2/16/2019 12:44:00 AM	B5775
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200		
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	2/16/2019 12:44:00 AM	B5775

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

- 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 Page 1 of 12
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Lab Order 1902632

Date Reported: 2/26/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: Rattlesnake Non Exempt

 Project:
 Rattlesnake
 Collection Date: 2/13/2019 8:52:00 AM

 Lab ID:
 1902632-001
 Matrix: AQUEOUS
 Received Date: 2/14/2019 8:10:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst:	RAA
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Naphthalene	ND	0.40	mg/L	200 2/16/2019 12:44:00 AM	B57754
1-Methylnaphthalene	ND	0.80	mg/L	200 2/16/2019 12:44:00 AM	B57754
2-Methylnaphthalene	ND	0.80	mg/L	200 2/16/2019 12:44:00 AM	B57754
Acetone	ND	2.0	mg/L	200 2/16/2019 12:44:00 AM	B57754
Bromobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Bromodichloromethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Bromoform	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Bromomethane	ND	0.60	mg/L	200 2/16/2019 12:44:00 AM	B57754
2-Butanone	ND	2.0	mg/L	200 2/16/2019 12:44:00 AM	B57754
Carbon disulfide	ND	2.0	mg/L	200 2/16/2019 12:44:00 AM	B57754
Carbon Tetrachloride	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Chlorobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Chloroethane	ND	0.40	mg/L	200 2/16/2019 12:44:00 AM	B57754
Chloroform	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Chloromethane	ND	0.60	mg/L	200 2/16/2019 12:44:00 AM	B57754
2-Chlorotoluene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
4-Chlorotoluene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
cis-1,2-DCE	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
cis-1,3-Dichloropropene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200 2/16/2019 12:44:00 AM	B57754
Dibromochloromethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Dibromomethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,2-Dichlorobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,3-Dichlorobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,4-Dichlorobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Dichlorodifluoromethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1-Dichloroethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1-Dichloroethene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,2-Dichloropropane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,3-Dichloropropane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
2,2-Dichloropropane	ND	0.40	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1-Dichloropropene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Hexachlorobutadiene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
2-Hexanone	ND	2.0	mg/L	200 2/16/2019 12:44:00 AM	B57754
Isopropylbenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
4-Isopropyltoluene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
4-Methyl-2-pentanone	ND	2.0	mg/L	200 2/16/2019 12:44:00 AM	B57754
Methylene Chloride	ND	0.60	mg/L	200 2/16/2019 12:44:00 AM	B57754

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

- 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
- PQL Practical Quanitative 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 Page 2 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Lab Order 1902632

Date Reported: 2/26/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Rattlesnake

Client Sample ID: Rattlesnake Non Exempt

Collection Date: 2/13/2019 8:52:00 AM

Lab ID: 1902632-001

Matrix: AQUEOUS

Received Date: 2/14/2019 8:10:00 AM

Analyses	Result	RL	Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES				Analyst	RAA
n-Butylbenzene	ND	0.60	mg/L	200 2/16/2019 12:44:00 AM	B57754
n-Propylbenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
sec-Butylbenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Styrene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
tert-Butylbenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200 2/16/2019 12:44:00 AM	B57754
Tetrachloroethene (PCE)	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
trans-1,2-DCE	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
trans-1,3-Dichloropropene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1,1-Trichloroethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,1,2-Trichloroethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Trichloroethene (TCE)	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Trichlorofluoromethane	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
1,2,3-Trichloropropane	ND	0.40	mg/L	200 2/16/2019 12:44:00 AM	B57754
Vinyl chloride	ND	0.20	mg/L	200 2/16/2019 12:44:00 AM	B57754
Xylenes, Total	ND	0.30	mg/L	200 2/16/2019 12:44:00 AM	B57754
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	200 2/16/2019 12:44:00 AM	B57754
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	200 2/16/2019 12:44:00 AM	B57754
Surr: Dibromofluoromethane	104	70-130	%Rec	200 2/16/2019 12:44:00 AM	B57754
Surr: Toluene-d8	93.9	70-130	%Rec	200 2/16/2019 12:44:00 AM	B57754

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

- * 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 Page 3 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

1902632-001D RATTLESNAKE NON EXEMPT

Collected date/time: 02/13/19 08:52

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.

Wet Chemistry by Method 4500 CN E-2011

Result Qualifier RDL Dilution Analysis Batch Analyte mg/l mg/I date / time Reactive Cyanide 0.00753 0.00500 02/22/2019 00:16 WG1239726

Wet Chemistry by Method 4500H+ B-2011

Result Dilution Analysis Batch Analyte 511 date / time Corrosivity by pH 6.12 T8 02/16/2019 11:58 WG1238087

Cn

Ss

Sample Narrative:

L1070772-01 WG1238087: 6.12 at 12C

Wet Chemistry by Method 9034-9030B

RDL Qualifier Dilution Analysis Batch Analyte mg/I mg/I date / time Reactive Sulfide 0.0640 0.0500 02/19/2019 11:48 WG1238965 GI

Sc

Qc

Wet Chemistry by Method D93/1010A

Qualifier Dilution Analysis Batch Analyte deg F date / time Flashpoint **DNF at 170** 02/20/2019 14:00

ACCOUNT:

Hall Environmental Analysis Laboratory

PROJECT:

SDG-L1070772

DATE/TIME: 02/22/19 12:40

Analyte

Analyte

02/22/19 12:40

Hall Environmental Analysis Laboratory

LCS: 9.98 at 18.4C Sample Narrative:

Corrosivity by pH Analyte

Hall Environmental Analysis Laboratory

Uncertainty

S

T8

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE



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.



Ss

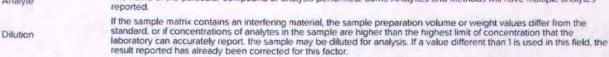
Cn

Qc

Sc

Abbreviations and Definitions

MDL	Method Detection Limit.
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).
Analyto	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analyses



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 pay Qualifier is provided within the Glosson, and Definition pays and

	potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was
Posult	no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL"

the seriod analysed in or 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

(Radiochemistry)	Conlidence 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

14-14	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
100	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
sumple summary (sa)	times of preparation and/or analysis.

Qualifier	Discoulation
Cualifie	Description

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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1902632

26-Feb-19

Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: 100ng Ics SampType: LCS			TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R57754 Analysis Date: 2/15/2019			F						
Prep Date:				5	SeqNo: 1	933095	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.3		10.00		92.9	70	130			

Sample ID: rb	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batch	ID: RE	7754	F	RunNo: 5	7754					
Prep Date:	Analysis Date: 2/15/2019			5	SeqNo: 1	933096	Units: %Re				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		99.7	70	130				
Surr: Dibromofluoromethane	10		10.00		102	70	130				
Surr: Toluene-d8	9.4		10.00		94.3	70	130				

Sample ID: 100ng ics2	SampT	ype: LC	S	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batc	ID: B5	7754	F	RunNo: 5	7754					
Prep Date:	Analysis Date: 2/15/2019			8	SeqNo: 1	933134	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	23	1.0	20.00	0	114	70	130				
Toluene	19	1.0	20.00	0	96.3	70	130				
Chlorobenzene	19	1.0	20.00	0	95.8	70	130				
1,1-Dichloroethene	23	1.0	20.00	0	115	70	130				
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130				
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130				
Surr: Dibromoffuoromethane	10		10.00		103	70	130				
Surr: Toluene-d8	9.4		10.00		93.6	70	130				

Sample ID: rb3	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW			F	RunNo: 5							
Prep Date:			\$	SeqNo: 1	933135	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									

- * 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
 - below quantitation limits Page 4 of 12
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1902632

26-Feb-19

Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: rb3	Samp	ype: ME	: MBLK TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: B57754			RunNo: 57754							
Prep Date:	Analysis Date: 2/15/2019		8	SeqNo: 1	933135	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
,3,5-Trimethylbenzene	ND	1.0									
,2-Dichloroethane (EDC)	ND	1.0									
,2-Dibromoethane (EDB)	ND	1.0									
laphthalene	ND	2.0									
-Methylnaphthalene	ND	4.0									
-Methylnaphthalene	ND	4.0									
cetone	ND	10									
romobenzene	ND	1.0									
romodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Iromomethane	ND	3.0									
-Butanone	ND	10									
arbon disulfide	ND	10									
arbon Tetrachloride	ND	1.0									
hlorobenzene	ND	1.0									
hloroethane	ND	2.0									
hloroform	ND	1.0									
hloromethane	ND	3.0									
-Chlorotoluene	ND	1.0									
-Chlorotoluene	ND	1.0									
s-1,2-DCE	ND	1.0									
is-1,3-Dichloropropene	ND	1.0									
,2-Dibromo-3-chloropropane	ND	2.0									
bibromochloromethane	ND	1.0									
ibromomethane	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									
lexachlorobutadiene	ND	1.0									
-Hexanone	ND	10									
sopropylbenzene	ND	1.0									
-Isopropyltoluene	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 5 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: 1902632

26-Feb-19

Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: rb3	lient ID: PBW Batch ID: B57754			Tes	TestCode: EPA Method 8260B: VOLATILES RunNo: 57754						
Client ID: PBW				F							
Prep Date:				5	SeqNo: 1	933135	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
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									
rans-1,2-DCE	ND	1.0									
rans-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									
Sur: 1,2-Dichloroethane-d4	10		10.00		103	70	130				
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130				
Surr: Dibromofluoromethane	10		10.00		103	70	130				
Surr: Toluene-d8	9.4		10.00		94.2	70	130				

Sample ID: 1902632-001ams Client ID: Rattlesnake Non Prep Date:		ype: MS n ID: B5 Date: 2/		F	tCode: El RunNo: 5 SeqNo: 1	7754	8260B: VOL	ATILES		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.5	0.20	4.000	0	112	70	130			
Toluene	3.8	0.20	4.000	0	94.2	70	130			
Chlorobenzene	3.7	0.20	4.000	0	93.4	70	130			
1,1-Dichloroethene	4.5	0.20	4.000	0	112	67.6	130			
Trichloroethene (TCE)	4.2	0.20	4.000	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	2.1		2.000		104	70	130			
Surr: 4-Bromofluorobenzene	2.0		2.000		100	70	130			
Surr: Dibromofluoromethane	2.1		2.000		103	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 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

Page 6 of 12

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1902632

26-Feb-19

Client:

Souder, Miller and Associates

Project:

Rattlesnake

Sample ID: 1902632-001ams

TestCode: EPA Method 8260B: VOLATILES

RunNo: 57754

Client ID: Rattlesnake Non Ex

Batch ID: **B57754**

PQL

SampType: MS

Prep Date: Analysis Date: 2/16/2019

SeqNo: 1933139

Units: mg/L

130

Analyte

Result 1.9

SPK value SPK Ref Val %REC LowLimit 2.000

HighLimit

%RPD

RPDLimit Qual

Surr: Toluene-d8

Sample ID: 1902632-001amsd

SampType: MSD

TestCode: EPA Method 8260B: VOLATILES RunNo: 57754

93.3

Client ID: Rattlesnake Non Ex Batch ID: B57754

Prep Date:	Analysis E	Date: 2/	16/2019	5	SeqNo: 1	933140	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.2	0.20	4.000	0	106	70	130	5.35	20	
Toluene	3.6	0.20	4.000	0	91.2	70	130	3.25	20	
Chlorobenzene	3.6	0.20	4.000	0	89.6	70	130	4.19	20	
1,1-Dichloroethene	4.3	0.20	4.000	0	107	67.6	130	4.42	20	
Trichloroethene (TCE)	4.0	0.20	4.000	0	101	70	130	3.51	20	
Surr: 1,2-Dichloroethane-d4	2.0		2.000		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.000		100	70	130	0	0	
Surr: Dibromofluoromethane	2.0		2.000		101	70	130	0	0	
Surr: Toluene-d8	1.9		2.000		94.6	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
- 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 Detection Limit
- Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1902632

26-Feb-19

Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: Ics-43179	SampT	ype: LC	S	Tes	tCode: El	A Method	8270C: PAHs			
Client ID: LCSW	Batch	h ID: 43	179	F	RunNo: 5	7933				
Prep Date: 2/15/2019	Analysis D)ate: 2/	25/2019	5	SeqNo: 1	939943	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	15	0.50	20.00	0	74.0	29.6	105			
1-Methylnaphthalene	16	1.0	20.00	0	77.5	33.4	112			
2-Methylnaphthalene	15	1.0	20.00	0	74.6	28.6	108			
Acenaphthylene	16	0.50	20.00	0	78.7	35.7	116			
Acenaphthene	16	0.50	20.00	0	79.0	32.4	118			
Fluorene	16	0.50	20.00	0	81.1	35.6	118			
Phenanthrene	15	0.50	20.00	0	75.8	36.3	130			
Anthracene	15	0.50	20.00	0	76.6	34.8	135			
Fluoranthene	16	0.50	20.00	0	79.4	41	136			
Pyrene	17	0.50	20.00	0	84.3	44.8	136			
Benz(a)anthracene	17	0.50	20.00	0	85.1	41.1	136			
Chrysene	17	0.50	20.00	0	85.5	37.9	132			
Benzo(b)fluoranthene	17	0.50	20.00	0	82.7	39	144			
Benzo(k)fluoranthene	15	0.50	20.00	0	77.4	40	144			
Benzo(a)pyrene	15	0.50	20.00	0	76.5	36.8	137			
Dibenz(a,h)anthracene	17	0.50	20.00	0	85.3	31.5	141			
Benzo(g,h,i)perylene	17	0.50	20.00	0	85.3	32.9	138			
ndeno(1,2,3-cd)pyrene	17	0.50	20.00	0	83.3	40.9	143			
Surr: N-hexadecane	55		87.60		62.3	20.4	126			
Surr: Benzo(e)pyrene	13		20.00		62.8	21.4	126			

Sample ID: Ics-43224	SampT	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAH	3		
Client ID: LCSW	Batch	ID: 43	224	F	RunNo: 5	7933				
Prep Date: 2/19/2019	Analysis D	ate: 2	/25/2019	8	SeqNo: 1	939944	Units: %Re	c		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: N-hexadecane	65		87.60		74.6	20.4	126			
Surr: Benzo(e)pyrene	17		20.00		86.5	21.4	126			

Sample ID: Icsd-43179	SampT	ype: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batch	ID: 43	179	F	RunNo: 5	7933				
Prep Date: 2/15/2019	Analysis D	ate: 2/	25/2019	8	SeqNo: 1	939945	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	13	0.50	20.00	0	67.1	29.6	105	9.78	68.7	
1-Methylnaphthalene	13	1.0	20.00	0	65.2	33.4	112	17.2	66	
2-Methylnaphthalene	13	1.0	20.00	0	64.1	28.6	108	15.1	68.7	
Acenaphthylene	13	0.50	20.00	0	66.1	35.7	116	17.4	64.9	
Acenaphthene	13	0.50	20.00	0	64.5	32.4	118	20.2	53.2	
Fluorene	13	0.50	20.00	0	65.7	35.6	118	21.0	62.4	

- 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
- Page 8 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1902632 26-Feb-19

Client:

Souder, Miller and Associates

Project:

Rattlesnake

Sample ID: Icsd-43179	SampT	Type: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batc	h ID: 43	179	F	RunNo: 5	7933				
Prep Date: 2/15/2019	Analysis D	Date: 2/	25/2019	5	SeqNo: 1	939945	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenanthrene	13	0.50	20.00	0	64.2	36.3	130	16.6	62.6	
Anthracene	12	0.50	20.00	0	62.5	34.8	135	20.3	62.4	
Fluoranthene	13	0.50	20.00	0	63.5	41	136	22.3	59.4	
Pyrene	13	0.50	20.00	0	67.2	44.8	136	22.6	55.4	
Benz(a)anthracene	13	0.50	20.00	0	66.7	41.1	136	24.2	56.6	
Chrysene	13	0.50	20.00	0	64.4	37.9	132	28.2	51.9	
Benzo(b)fluoranthene	13	0.50	20.00	0	66.1	39	144	22.3	59.1	
Benzo(k)fluoranthene	13	0.50	20.00	0	66.7	40	144	14.9	57	
Benzo(a)pyrene	13	0.50	20.00	0	63.9	36.8	137	17.9	60.2	
Dibenz(a,h)anthracene	13	0.50	20.00	0	66.1	31.5	141	25.4	64.7	
Benzo(g,h,i)perylene	13	0.50	20.00	0	66.0	32.9	138	25.5	61.5	
Indeno(1,2,3-cd)pyrene	13	0.50	20.00	0	64.8	40.9	143	25.0	61.1	
Surr: N-hexadecane	44		87.60		49.8	20.4	126	0	0	
Surr: Benzo(e)pyrene	11		20.00		54.2	21.4	126	0	0	

Sample ID: Icsd-43224	SampT	ype: LC	SD	Tes	Code: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batch	ID: 43	224	F	RunNo: 5	7933				
Prep Date: 2/19/2019	Analysis D	ate: 2/	25/2019	S	SeqNo: 1	939946	Units: %Red	:		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: N-hexadecane	73		87.60		83.4	20.4	126	0	0	
Sur: Benzo(e)pyrene	18		20.00		91.9	21.4	126	0	0	

Sample ID: mb-43179	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: PBW	Batcl	h ID: 43	179	F	RunNo: 5	7933				
Prep Date: 2/15/2019	Analysis D)ate: 2/	25/2019	\$	SeqNo: 1	939947	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								
henanthrene	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								

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- 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
 - Page 9 of 12
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1902632

26-Feb-19

Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: mb-43179 Client ID: PBW		ype: ME			tCode: El		8270C: PAHs			
Prep Date: 2/15/2019	Analysis D)ate: 2/	25/2019	5	SeqNo: 1	939947	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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	55		87.60		62.4	20.4	126			
Surr. Benzo(e)pyrene	14		20.00		68.4	21.4	126			

Sample ID: mb-43224	SampT	pe: Mi	BLK	Tes	tCode: El	PA Method	8270C: PAHs	3		
Client ID: PBW	Batch	ID: 43	224	F	RunNo: 5	7933				
Prep Date: 2/19/2019	Analysis Da	ate: 2	25/2019	5	SeqNo: 1	939948	Units: %Red	c		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: N-hexadecane	63		87.60		71.8	20.4	126			
Surr Benzo(e)nyrene	14		20.00		67.6	214	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 Detection Limit
- W Sample container temperature is out of limit as specified

Page 10 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: 1902632

26-Feb-19

Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: MB-43258 SampType: MBLK TestCode: EPA Method 7470: Mercury

Client ID: PBW Batch ID: 43258 RunNo: 57857

Prep Date: 2/20/2019 Analysis Date: 2/21/2019 SeqNo: 1937038 Units: mg/L

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

Mercury ND 0.00020

Sample ID: LCS-43258 SampType: LCS TestCode: EPA Method 7470: Mercury

Client ID: LCSW Batch ID: 43258 RunNo: 57857

Prep Date: 2/20/2019 Analysis Date: 2/21/2019 SeqNo: 1937039 Units: mg/L

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

Mercury 0.0045 0.00020 0.005000 0 90.0 80 120

- 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
- Page 11 of 12

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: 1902632

Page 12 of 12

26-Feb-19

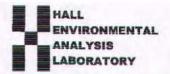
Client: Souder, Miller and Associates

Project: Rattlesnake

Sample ID: MB-43209	Samp	Type: ME	BLK	Tes	tCode: E	PA 6010B:	Total Recover	able Meta	als	
Client ID: PBW	Bato	ch ID: 43	209	F	RunNo: 5	7884				
Prep Date: 2/18/2019	Analysis	Date: 2/	21/2019	8	SeqNo: 1	938053	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020			10.7					
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
_ead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID: LCS-43209	Samp	Type: LC	5	ies	(Code: El	A 6010B:	Total Recove	rable Met	als	
Client ID: LCSW	Bato	ch ID: 43	209	F	RunNo: 5	7884				
Prep Date: 2/18/2019	Analysis	Date: 2/	21/2019	5	SeqNo: 1	938054	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.51	0.020	0.5000	0	103	80	120		3.00	
Barium	0.49	0.020	0.5000	0	97.9	80	120			
Cadmium	0.49	0.0020	0.5000	0	98.6	80	120			
Chromium	0.49	0.0060	0.5000	0	98.7	80	120			
Lead	0.50	0.0050	0.5000	0	99.8	80	120			
Selenium	0.51	0.050	0.5000	0	102	80	120			
Silver	0.10	0.0050	0.1000	0	100	80	120			

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



Hall Environmental Analysis Laboratory 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-FA	ARM	Work Order N	lumber: 1902632		RcptNo: 1
Received B	y: Erin M	elendrez	2/14/2019 8:10	:00 AM	una	, 3
Reviewed B	y: H	elendrez	2/14/2019 11:0	9:41 AM	in us	
-0,-		2/14/19	_			
Chain of C				_		To the second
1. Is Chain	of Custody co	mplete?		Yes 🗸	No 🗆	Not Present
2. How was	the sample d	elivered?		Courier		
Log In						
	ttempt made	to cool the san	ples?	Yes 🗸	No 🗆	NA 🗆
4. Were all s	amples receiv	ved at a tempe	rature of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗆
5. Sample(s) in proper co	ntainer(s)?		Yes 🗹	No 🗆	
& Sufficient	sample volum	ne for indicated	toot(a)2	Yes 🗸	No 🗆	
			properly preserved?		No M	DAD 2/14/19
8. Was prese			ropeny preserved?	Yes V		NA 🗆
o. was prese	ervative adder	d to bottles?		Yes 🛂	No 💌	NA 🗆
9. VOA vials	have zero he	adspace?		Yes 🗌	No 🗆	No VOA Vials ☑
10. Were any	sample conta	ainers received	broken?	Yes	No 🗹	# of preserved bottles checked
		bottle labels? chain of custor	ty)	Yes 🗸	No 🗆	for pH: 1.2 (②or >(3 unless noted)
12. Are matric	es correctly id	dentified on Ch	ain of Custody?	Yes 🔽	No 🗌	Adjusted? YES
3. Is it clear	what analyses	were requeste	ed?	Yes 🗹	No 🗌	
		able to be met? or authorization		Yes 🗹	No 🗆	Checked by: DAD 2/14/19
Special Ha	ndling (if a	pplicable)				
15. Was clier	nt notified of a	Il discrepancie	s with this order?	Yes 🗌	No 🗆	NA 🗹
Per	son Notified:			Date:		
By	Whom:		1	/ia: eMail :	Phone Fax	In Person
Reg	garding:					1
	ent Instruction		A P . AND POST . COMMAN			
16. Additiona	al remarks: A	dded DPP	rox. Iml. HN	03 to sample	0010	For acceptable PH.
			thrs. prior +			
17. Cooler I	Contraction of the		Seal Intact Seal I		Signed By	
1	3.7	Good	Yes	oear Date	olgried by	
2	2.4	Good	Yes	-	-	
3	1.5	Good	Yes			



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

OrderNo.: 1603245

April 06, 2016

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

FAX

RE: Manzanares (SJ) CS

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/4/2016 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Received by OCD: 11/8/2023 4:42:52 PM 1625 N. French Dr., Hobbs, NM 88240

1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 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

Good +111 3/19/2020 Page 46 of 173 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	on NM 87401	
2. Originating Site: Kutz Compressor Station		
3. Location of Material (Street Address, City, State or Ul UL N Section 31 Township 29 North Range 12 West; 36.		88655, San Juan County, NM
4. Source and Description of Waste: Source: Water/Oil from the Non Exempt WasteWater Tanks Description: Non Exempt/Non Hazardous Water from the con Estimated Volume 100 yd3 bbls Known Volume (to be	npressor skids.	
5. GENERATOR CERTIFICA	TION STATEM	MENT OF WASTE STATUS
I, Thomas Long for the property of authorized agent Generator Signature certify that according to the Resource Conservation and Recovergulatory determination, the above described waste is: (Check	very Act (RCRA	A) and the US Environmental Protection Agency's July 1988
		tion and production operations and are not mixed with non- Monthly Weekly Per Load
characteristics established in RCRA regulations, 40 CFR	261.21-261.24,	bes not exceed the minimum standards for waste hazardous be or listed hazardous waste as defined in 40 CFR, part 261, nonstrate the above-described waste is non-hazardous. (Check the contract of the contrac
☐ MSDS Information ☐ RCRA Hazardous Waste Analys	is Process	s Knowledge
GENERATOR 19.15.36.15 WASTE TESTING	CERTIFICAT	TION STATEMENT FOR LANDFARMS
I, Thomas Long Joy , representative for Enterprise Pro Generator Signature the required testing/sign the Generator Waste Testing Certification	ducts Operating	
representative samples of the oil field waste have been subject have been found to conform to the specific requirements applied the representative samples are attached to demonstrate the a 19.15.36 NMAC.	ed to the paint fi cable to landfarr	rms pursuant to Section 15 of 19.15.36 NMAC. The results
5. Transporter: Triple S Trucking		
OCD Permitted Surface Waste Management Facility		
Name and Facility Permit #: *Agua Moss, LLC - Permit #: Address of Facility: SW/4 NW/4 Section 2, Township 29N,		h Mesa, NM
Method of Treatment and/or Disposal: Evaporation Injection Treating Waste Acceptance Status:	ng Plant 🔲 L	Landfarm
APPROVED		DENIED (Must Be Maintained As Permanent Reco
PRINT NAME:SIGNATURE:	TITLE: _	PHONE NO.:
Surface Waste Management Facility Authorized Age	nt	



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

OrderNo.: 1903284

March 19, 2019

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

FAX

RE: Kutz

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/7/2019 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 1903284

Date Reported: 3/19/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Kutz

Lab ID: 1903284-001

.

Matrix: AQUEOUS

Collection Date: 3/6/2019 9:48:00 AM Received Date: 3/7/2019 7:10:00 AM

Client Sample ID: Kutz Non Exempt

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6020: TOTAL METALS		11-11				Analyst: DBK
Arsenic	ND	0.50		mg/L	5	3/13/2019 2:16:23 PM
Barium	ND	10		mg/L	5	3/13/2019 2:16:23 PM
Cadmium	ND	0.10		mg/L	5	3/12/2019 9:05:14 PM
Chromium	ND	0.50		mg/L	1	3/11/2019 11:27:14 PM
Lead	ND	0.50		mg/L	1	3/11/2019 11:27:14 PM
Selenium	ND	0.10		mg/L	5	3/13/2019 2:16:23 PM
Silver	ND	0.50		mg/L	1	3/18/2019 6:16:42 PM
EPA METHOD 7470: MERCURY						Analyst: pmf
Mercury	ND	0.020		mg/L	1	3/11/2019 7:07:05 PM
EPA METHOD 8270C: PAHS						Analyst: DAN
Naphthalene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
1-Methylnaphthalene	ND	50	D	μg/L	10	3/13/2019 6:20:51 PM
2-Methylnaphthalene	ND	50	D	μg/L	10	3/13/2019 6:20:51 PM
Acenaphthylene	ND	25	D	μg/L	10	3/13/2019 6:20:51 PM
Acenaphthene	ND	25	D	μg/L	10	3/13/2019 6:20:51 PM
Fluorene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Phenanthrene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Anthracene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Fluoranthene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Pyrene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Benz(a)anthracene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Chrysene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Benzo(b)fluoranthene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Benzo(k)fluoranthene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Benzo(a)pyrene	ND	25	D	μg/L	10	3/13/2019 6:20:51 PM
Dibenz(a,h)anthracene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Benzo(g,h,i)perylene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Indeno(1,2,3-cd)pyrene	ND	25	D	µg/L	10	3/13/2019 6:20:51 PM
Surr: N-hexadecane	0 2	20.4-126	SD	%Rec	10	3/13/2019 6:20:51 PM
Surr: Benzo(e)pyrene	0 2	21.4-126	SD	%Rec	10	3/13/2019 6:20:51 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.50		mg/L	200	3/12/2019 2:04:00 PM
Toluene	0.93	0.20		mg/L	200	3/12/2019 2:04:00 PM
Ethylbenzene	ND	0.20		mg/L	200	3/12/2019 2:04:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/12/2019 2:04:00 PM
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	3/12/2019 2:04:00 PM
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	3/12/2019 2:04:00 PM
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	3/12/2019 2:04:00 PM

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

- 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 Page 1 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1903284

Date Reported: 3/19/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Kutz

Lab ID: 1903284-001

Client Sample ID: Kutz Non Exempt

Collection Date: 3/6/2019 9:48:00 AM

Received Date: 3/7/2019 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: RAA
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Naphthalene	ND	0.40	mg/L	200	3/12/2019 2:04:00 PM
1-Methylnaphthalene	ND	0.80	mg/L	200	3/12/2019 2:04:00 PM
2-Methylnaphthalene	ND	0.80	mg/L	200	3/12/2019 2:04:00 PM
Acetone	ND	2.0	mg/L	200	3/12/2019 2:04:00 PM
Bromobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Bromodichloromethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Bromoform	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Bromomethane	ND	0.60	mg/L	200	3/12/2019 2:04:00 PM
2-Butanone	ND	2.0	mg/L	200	3/12/2019 2:04:00 PM
Carbon disulfide	ND	2.0	mg/L	200	3/12/2019 2:04:00 PM
Carbon Tetrachloride	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Chlorobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Chloroethane	ND	0.40	mg/L	200	3/12/2019 2:04:00 PM
Chloroform	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Chloromethane	ND	0.60	mg/L	200	3/12/2019 2:04:00 PM
2-Chlorotoluene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
4-Chlorotoluene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
cis-1,2-DCE	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
cis-1,3-Dichloropropene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200	3/12/2019 2:04:00 PM
Dibromochloromethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Dibromomethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,2-Dichlorobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,3-Dichlorobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,4-Dichlorobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Dichlorodifluoromethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,1-Dichloroethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,1-Dichloroethene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,2-Dichloropropane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,3-Dichloropropane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
2,2-Dichloropropane	ND	0.40	mg/L	200	3/12/2019 2:04:00 PM
1,1-Dichloropropene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Hexachlorobutadiene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
2-Hexanone	ND	2.0	mg/L	200	3/12/2019 2:04:00 PM
Isopropylbenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
4-Isopropyltoluene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
4-Methyl-2-pentanone	ND	2.0	mg/L	200	3/12/2019 2:04:00 PM
Methylene Chloride	ND	0.60	mg/L	200	3/12/2019 2:04:00 PM

Matrix: AQUEOUS

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

- 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 Page 2 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Analytical Report Lab Order 1903284

Date Reported: 3/19/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Kutz

Collection Date: 3/6/2019 9:48:00 AM

Lab ID: 1903284-001

Matrix: AQUEOUS

Client Sample ID: Kutz Non Exempt

Collection Date: 3/6/2019 9:48:00 AM

Received Date: 3/7/2019 7:10:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES	Mary Paragraphy				Analyst: RAA
n-Butylbenzene	ND	0.60	mg/L	200	3/12/2019 2:04:00 PM
n-Propylbenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
sec-Butylbenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Styrene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
tert-Butylbenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	3/12/2019 2:04:00 PM
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
trans-1,2-DCE	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,1,1-Trichloroethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,1,2-Trichloroethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Trichloroethene (TCE)	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Trichlorofluoromethane	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
1,2,3-Trichloropropane	ND	0.40	mg/L	200	3/12/2019 2:04:00 PM
Vinyl chloride	ND	0.20	mg/L	200	3/12/2019 2:04:00 PM
Xylenes, Total	ND	0.30	mg/L	200	3/12/2019 2:04:00 PM
Surr: 1,2-Dichloroethane-d4	98.3	70-130	%Rec	200	3/12/2019 2:04:00 PM
Surr: 4-Bromofluorobenzene	99.1	70-130	%Rec	200	3/12/2019 2:04:00 PM
Surr: Dibromofluoromethane	93.9	70-130	%Rec	200	3/12/2019 2:04:00 PM
Surr: Toluene-d8	95.3	70-130	%Rec	200	3/12/2019 2:04:00 PM

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

- 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 Page 3 of 13
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Flashpoint

DNF at 170

1903284-001D KUTZ NON EXEMPT Collected date/time: 03/06/19 09:48			SAM	IPLE RESULTS - C	ONE LAB. NATIONWIDE.	製	
Wet Chemistry by M	ethod 4500	CN E-2011					
	Result	Quelifier	ROL	Dilution Analysis	Batch		
Analyte	mg/l		mg/l	date / time			-
Reactive Cyanide	NO		0.00500	1 03/13/2019 15:13	WG1248453		Tr
Wet Chemistry by M	ethod 4500l	++ B-2011					Ss
	Resul.	Qualifier	D lution	Analysis Batch			22
Analyte	- 50			date / time			4
Corrosivity by pH	6.33	<u>18</u>	1	03/10/2019 09:00 <u>WG174765</u>	2		Cn
Sample Narrative: 11077049-01 WG1247550: 6.33	Fat 19.1C						⁵ Sr
Wet Chemistry by Mi		9030B					Qc
	Result	Qualifier	RDL	Dilution Analysis	Balch		17
Analyte	mg/l		mg/l	date / time			GI
Reactive Sulfide	ND		0.0500	1 03/09/2019 11.40	- WG1247121		
Wet Chemistry by Ma	ethod D93/I(MOA					AI
	Result	Qualifier	Dilutan	Analysis Eatch			Sc

03/14/2019 14:30

WG1250025

DATE/TIME: 03/14/19 17:09

\$D6:

### Result (MB) ### PDL ##	### Blank (MB) #### Blank (MB) ###################################	Wel Chemistry by Method 4500 CN E-2011	d 4500 CN	E-2011		o o	QUALITY CONTROL SUMMARY	UMMARY	ONE LAB. MATIONWIDE
Amount LCS Recult (LCS Rec. Climits LCS Qualifier mg) % % % % % % % % % % % % % % % % % % %	391267-1 03/13/19 12:593 MB Result MB Qualifier MB MDL MB RDL mg/l % % % Cyande 0.00 50 0 0.00 101 85.0-115 0.00 mg/l % % % Cyande 0.00 0 0.00 101 85.0-115 0.00 0.00 101 101 85.0-115 0.00 0.00 101	Method Blank (MB)							
WB Routh MB Qualifier MB MDL MB FDL mg/l	MB Result MB Qualifier MB MDL MB RDL mg/l mg/l mg/l mg/l mg/l cyanide U 0.0016C 0.00500 0.00500 0.0016C 0.00500 0.00500 0.0016C 0.00500 0.0016C 0.00500 0.0016C 0.0016C 0.00500 0.0016 mg/l % % % Cyanide 0.000 0.001 101 85.0-115	R3391267-1 03/13/19 12	69		THE REAL PROPERTY.				
Tight	Tracey Control Sample (LCS) 1391267-2 03:13rt9-13:0C Solke Amount LCS Kesult (LCS Rec. Limits right mgf % % % Solve Amount LCS Rec. Limits and mgf % % % Solve Amount LCS Rec. Limits and mgf % % % Solve Amount LCS Rec. Limits and mgf % % % Solve Amount LCS Rec. Limits and mgf % % % Solve Amount LCS Rec. Limits and mgf % % % Solve Amount LCS Rec. Limits and mgf % % % % Solve Amount LCS Rec. Limits % Solve Amount LCS Result (LCS Rec. Limits and mgf % % % % Mgf % Mg		AB Result	M8 Qualifier	MB MDL	MB RDL			
unount LCS Result LCS Rec. Rec. Limits LCS Qualifier mg/f % % 0.001 101 85.0-115	imount LCS Rec. Limits mgf % % % % % % % % % % % % % % % % % % %	Cyanide	5		0.00186	0.00500			
Unbount LCS Result LCS Res. Emits LCS Qualifier mg/f % % O.101 101 85.0-115	Unount LCS Result LCS Rec. Rec. Limits mg/l % % % % % 0.K01 101 85.0-115								
imple % % % % % % % % % % % % % % % % % % %	Impurit LCS Result LCS Rec. Rec. Linits ingd % % % % 0.151 0.151	saratory Control S	ample (Lo	Ñ					
Solve Amount LCS Rec. Limits LCS Qualifier ##\$\text{##\$ #\$ \$\text{**} \$\text	Solke Amount LLS Result LCS Rec. Rec. Limits mg/l	1 R3391267-2 03/13/19 L	3:00						
2000 0.001 101 85.0-115.	7. DTO O.C. 101	5	oike Amount	LCS Result	LCS Rec.	Rec, Limits	LCS Qualifier		
2000 0.00 101 85.0-115	0.100 0.101		- Dil	μẫιμ	*	34			
			8	101.0	101	85.0-115			

ACCOUNT: Hall Environmental Analysis

DATE/TIME. 03/14/19 17:09

SDG.

PROJECT:

ONE LAB NATIONWOF .		ř.	SS 5	S 0	TV C	X	
QUALITY CONTROL SUMMARY		Jimits LCS Gualifier					
NG1247650	aboratory Control Sample (LCS)	03/10/19 09:00 Spike Amount LCS Result LCS Rec. Limits Su % % % % % % % % % % % % % % % % % %					
WG1247650	iboratory Co.	CS; R3390229-1 O3/10/19 09:00 Spike Au adyre su arraying pH 10.0	ample Narrative: LCS: 9.95 at 19.1C				

Released to Imaging: 11/8/2023 4:50:26 PM

DATE/TIME: 03/14/19 17:09

506. L1077249

PROJECT.

ACCOUNT:

2 Z	1
Tc	
S. S.	
80	
5	
7	
3O	
5	
25	

DATE/TIME.

\$D6:

PROJECT:

WG1250025 Wet Chemistry by Method 093/1010A		QUALITY CONTROL SUMMARY	ONE LAB NATIONWIDE	*
1075108-14 Ong	L1075:08-14 Original Sample (OS) - Duplicate (DUP)			
351.L1075108-14 03/14	OSILI075108-14 03/14/19 14:30 (DUP) R3391647-2 03/14/19 14:30			
	Onginal Result DUP Rosult Diluton DUP RPD	DUP Gualifier Limits		
Analyte	deg F deg F %,			in the second
Vashpoint	DNF at 770 DNF at 179 1 6,000	D.		1
				1/3 //
077890-01 Orig	L1077890-01 Original Sample (OS) - Duplicate (DUP)			+
S, L'077890-01 03/1	IOS; L'077890-01 03/14/19 (4:30 - (DUP) R3391647-3 03/14/19 14:30			5
	Original Result - DUP Result - Difution - DUP RPD	DUP Qualifier Limits		U.
Analyte	dag F deg F %	\$0°		
Flashpoint	131 134 1 2.26			100
iboratory Contr	Laboratory Control Sample (LCS)			0
ACS) R3391647-1 03/14/19 14:30	1/19 14:30			
	Spike Amount LCS Resurt LCS Rec. Limits	uts LCS Qualifier		d
Analyte	deal F deal %			
Flachmint	82.0 ALL 114 GE 0.114			1

ACCOUNT: Hall Environmental Analysis Result

TB

GLOSSARY OF TERMS

DNE LAB NATIONWIDE



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.

Abbreviations and Definitions

		100
MDL	Method Detection Limit:	
ND.	Not detected at the Reporting Limit (or MDI, where applicable).	Poc.
RDL	Reported Detection Limit.	33
Rec.	Recovery.	14
RPD	Relative Percent Difference.	Cn
SDG	Sample Delivery Group.	
U	Not detected at the Reporting Limit (or MDL where applicable).	90
	The name of the section to the section of the secti	40

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

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.

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 enalysis will target all analytes recovered or duplicated within these ranges.

Original Sample

The non-spiked sample in the prepibatch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.

This set was a sample in the prepibate to determine the Relative Percent Difference (RPD) from a quality control.

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.

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 Lovels). The information in the results column should always be accompanied by either an MDL. (Method Detection Limit or RDL (Reporting Detection Limit) in that defines the lowest value that the laboratory could detect

(Method Detectable Levels). The information in the results column should elively 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.

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.

Ouelity Control

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 freeder 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 analysis.

Qualifier Description

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

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Qual

Client: Souder, Miller and Associates

Project:

Kutz

Sample ID: MB-43593

Client ID: PBW

SampType: MBLK

TestCode: EPA Method 6020: Total Metals

Batch ID: 43593

RunNo: 58277

Prep Date: 3/8/2019 Analysis Date: 3/11/2019 SeqNo: 1954831 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit Arsenic ND 0.0010

HighLimit %RPD **RPDLimit**

Chromium ND 0.0010 Lead ND 0.0010 Selenium ND 0.0010

Sample ID: MSLLLCS-43593

SampType: LCSLL

TestCode: EPA Method 6020: Total Metals

Client ID: **BatchQC**

Batch ID: 43593

RunNo: 58277

Units: mg/L

Prep Date: 3/8/2019 Analysis Date: 3/11/2019 SeqNo: 1954832

RPDLimit %RPD Qual

%RPD

RPDLimit

Qual

Analyte Result PQL SPK value SPK Ref Val %REC HighLimit LowLimit Arsenic 0.0010 ND 0.001000 0 85.7 70 Chromium 0.0010 0.0011 0.001000 0 70 111 130 Lead 0.0011 0.0010 0.001000 0 113 70 130 Selenium ND 0.0010 0.001000 0 86.4 70 130

Sample ID: MSLCS-43593

SampType: LCS

TestCode: EPA Method 6020: Total Metals

Client ID: LCSW Batch ID: 43593

RunNo: 58277

Prep Date: 3/8/2019 Analysis Date: 3/11/2019 SegNo: 1954833 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC %RPD LowLimit HighLimit **RPDLimit** Qual Arsenic 0.047 0.0010 0.05000 0 94.3 80 120 Chromium 0.053 0.0010 0.05000 0 106 80 120 Lead 0.052 0.0010 0.05000 0 104 80 120 Selenium 0.047 0.0010 0.05000 120 0 94 6 80

Sample ID: 1903284-001CMSLL

SampType: MS

TestCode: EPA Method 6020: Total Metals

Client ID: Kutz Non Exempt Batch ID: 43593

RunNo: 58277

Prep Date: 3/8/2019

Analysis Date: 3/11/2019

SeqNo: 1954838 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Chromium 0.054 0.0010 0.05000 0.002896 103 75 125 Lead 0.050 0.0010 0.05000 0.003128 93.7 75 125

Sample ID: 1903284-001CMSDL SampType: MSD

TestCode: EPA Method 6020: Total Metals

Client ID: **Kutz Non Exempt** Batch ID: 43593

RunNo: 58277

Prep Date: 3/8/2019

Analysis Date: 3/11/2019

SegNo: 1954839

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chromium	0.054	0.0010	0.05000	0.002896	102	75	125	0.844	20		
Lead	0.050	0.0010	0.05000	0.003128	93.5	75	125	0.204	20		

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

POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 4 of 13

P Sample pH Not In Range

RI. Reporting Detection Limit

Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client:

Souder, Miller and Associates

Project:

Kutz

Sample ID: MB-43593

SampType: MBLK

TestCode: EPA Method 6020: Total Metals

Client ID: PBW

Batch ID: 43593

RunNo: 58320

Prep Date: 3/8/2019

Analysis Date: 3/12/2019 PQL

SeqNo: 1956214

Units: mg/L HighLimit

RPDLimit

Qual

Analyte Cadmium

Client ID:

Prep Date:

ND 0.0010

Sample ID: MSLLLCS-43593

SampType: LCSLL

RunNo: 58320

TestCode: EPA Method 6020: Total Metals

Batch ID: 43593 Analysis Date: 3/12/2019

0

SPK value SPK Ref Val %REC LowLimit

SeqNo: 1956215

Units: mg/L

%RPD

Analyte Cadmium

BatchQC

3/8/2019

Result PQL

SPK value SPK Ref Val 0.0010 0.001000

%REC LowLimit 99.7

HighLimit 130 %RPD **RPDLimit**

%RPD

%RPD

Qual

Sample ID: MSLCS-43593

SampType: LCS

ND

Result

0.052

0.057

Result

0.057

TestCode: EPA Method 6020: Total Metals

120

125

Client ID: LCSW Prep Date: 3/8/2019

Batch ID: 43593

RunNo: 58320

Units: mg/L

Analyte

Analysis Date: 3/12/2019

PQL SPK value SPK Ref Val

0.05000

SPK value

0.05000

SeqNo: 1956216 %REC LowLimit

104

HighLimit

RPDLimit

Qual

Cadmium

Sample ID: 1903284-001CMSLL SampType: MS

TestCode: EPA Method 6020: Total Metals

LowLimit

Client ID: Kutz Non Exempt Prep Date: 3/8/2019

Batch ID: 43593

0.0010

RunNo: 58320

Analyte

Analysis Date: 3/12/2019 POL

0.0050

SegNo: 1956218

105

%REC

Units: mg/L **HighLimit**

RPDLimit

Qual

Qual

Qual

Cadmium

Sample ID: 1903284-001CMSDL SampType: MSD

0.004767

0.004767

SPK Ref Val

TestCode: EPA Method 6020: Total Metals

Client ID: Prep Date:

Kutz Non Exempt

Batch ID: 43593

PQL

0.0050

RunNo: 58320

Lowl imit

HighLimit

125

Analyte Cadmium 3/8/2019

Analysis Date: 3/12/2019

SPK value SPK Ref Val

0.05000

SeqNo: 1956219 %REC

104

Units: mg/L

%RPD

0.821

%RPD

RPDLimit 20

Sample ID: MB-43593

SampType: MBLK

TestCode: EPA Method 6020: Total Metals

Client ID:

PBW

Prep Date: 3/8/2019

Batch ID: 43593 Analysis Date: 3/13/2019

RunNo: 58341

SPK value SPK Ref Val %REC LowLimit

SeqNo: 1956953

Units: mg/L

HighLimit

RPDLimit

Page 5 of 13

Analyte Barium

Result PQL ND 0.0010

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Not Detected at the Reporting Limit ND POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

Holding times for preparation or analysis exceeded

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#:

Page 6 of 13

1903284

19-Mar-19

Client: Souder, Miller and Associates

Project: Kutz

Sample ID: MSLLLCS-43593 SampType: LCSLL TestCode: EPA Method 6020: Total Metals

Client ID: BatchQC Batch ID: 43593 RunNo: 58341

Prep Date: 3/8/2019 Analysis Date: 3/13/2019 SeqNo: 1956954 Units: mg/L

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

Barium 0.0012 0.0010 0.001000 0 115 70 130

Sample ID: MSLCS-43593 SampType: LCS TestCode: EPA Method 6020: Total Metals

Client ID: LCSW Batch ID: 43593 RunNo: 58341

Prep Date: 3/8/2019 Analysis Date: 3/13/2019 SeqNo: 1956955 Units: mg/L

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

Barium 0.049 0.0010 0.05000 0 98.2 80 120

Sample ID: 1903284-001CMSLL SampType: MS TestCode: EPA Method 6020: Total Metals

Client ID: Kutz Non Exempt Batch ID: 43593 RunNo: 58341

Prep Date: 3/8/2019 Analysis Date: 3/13/2019 SeqNo: 1956957 Units: mg/L

Analyte Result %RPD **RPDLimit** PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** Qual Arsenic 0.048 0.0050 0.05000 0 97.0 75 125 Barium 0.02166 0.074 0.0050 0.05000 105 75 125 Selenium 0.045 0.0050 0.05000 90.4 75 125

Sample ID: 1903284-001CMSDL SampType: MSD TestCode: EPA Method 6020: Total Metals

Client ID: Kutz Non Exempt Batch ID: 43593 RunNo: 58341

Prep Date: 3/8/2019 Analysis Date: 3/13/2019 SeqNo: 1956958 Units: mg/L

SPK value SPK Ref Val %RPD Analyte %REC **RPDLimit** Qual Result PQL LowLimit **HighLimit** Arsenic 0.049 75 20 0.0050 0.05000 0 98.6 125 1.70 Barium 0.072 0.0050 0.05000 0.02166 101 75 125 2.31 20 Selenium 0.046 0.0050 0.05000 92.1 75 125 1.95 20

Sample ID: MB-43704 SampType: MBLK TestCode: EPA Method 6020: Total Metals Client ID: PBW Batch ID: 43704 RunNo: 58442 Prep Date: 3/15/2019 Analysis Date: 3/18/2019 SeqNo: 1961412 Units: mg/L Result Analyte SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual PQL HighLimit

Silver ND 0.0010

Sample ID: MSLLLCS-43704 SampType: LCSLL TestCode: EPA Method 6020: Total Metals

Client ID: BatchQC Batch ID: 43704 RunNo: 58442

Prep Date: 3/15/2019 Analysis Date: 3/18/2019 SeqNo: 1961413 Units: mg/L

SPK Ref Val %REC %RPD **RPDLimit** Qual Analyte Result POL SPK value LowLimit HighLimit Silver 0.0011 0.0010 0.001000 0 106 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 Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Sample committee temperature to cut of man as a

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client:

Souder, Miller and Associates

Project:

Kutz

Sample ID: MSLCS-43704

SampType: LCS Batch ID: 43704 TestCode: EPA Method 6020: Total Metals

RunNo: 58442

Prep Date: 3/15/2019

Client ID: LCSW

Analysis Date: 3/18/2019

0.0010

SeqNo: 1961414 Units: mg/L

Qual

Analyte Silver

0.041

PQL

SPK value SPK Ref Val 0.05000

%REC LowLimit 82.6

HighLimit

RPDLimit

Sample ID: MSLCSD-43704

SampType: LCSD

TestCode: EPA Method 6020: Total Metals

Client ID: LCSS02 Prep Date: 3/15/2019

Batch ID: 43704

RunNo: 58442

Analyte

Analysis Date: 3/18/2019

PQL

SeqNo: 1961415 %REC

Units: mg/L HighLimit

%RPD

%RPD

RPDLimit Qual

Silver

0.0010

SPK value SPK Ref Val 0.05000

85.0

2.88

Result 0.042

120

20

LowLimit

Qualifiers:

H

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

Holding times for preparation or analysis exceeded

- Analyte detected in the associated Method Blank
- E Value above quantitation range J Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Detection Limit
- Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client:

Souder, Miller and Associates

Project:

Kutz

Sample ID: 100ng Ics	Samp1	ype: LC		100	todue. El	PA Method	OZOUB. VUL	AIILES		
Client ID: LCSW	Batcl	h ID: R5	8313	F	RunNo: 5	8313				
Prep Date:	Analysis D	Date: 3/	12/2019	8	SeqNo: 1	955790	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.2	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	85.9	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	87.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.8	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.2	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	70	130			
Sample ID: rb	SampType: MBLK									
Sample ID. PD	Sampi	ype. ME	SLK	Test	Code: El	A Method	8260B: VOL	AIILES		
Client ID: PBW							8260B: VOL	ATILES		
		n ID: R5	8313	R	tCode: El RunNo: 5 SegNo: 1	8313		ATILES		
Client ID: PBW	Batch	n ID: R5	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date:	Batch Analysis D	n ID: R5	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793		%RPD	RPDLimit	Qual
Client ID: PBW Prep Date: Analyte	Batch Analysis D Result	n ID: R5 Date: 3 /	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene	Analysis D Result ND	PQL 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene	Batch Analysis D Result ND ND	PQL 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene	Analysis D Result ND ND ND	PQL 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE)	Analysis D Result ND ND ND ND ND ND	PQL 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene	Analysis D Result ND	PQL 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	Result ND	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,2-Dichloroethane (EDC)	Result ND	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Genzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,2-Dichloroethane (EDC) 1,2-Dibromoethane (EDB)	Result ND	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene 1,3-5-Trimethylbenzene 1,2-Dichloroethane (EDC) 1,2-Dibromoethane (EDB) Naphthalene	Result ND ND ND ND ND ND ND ND ND N	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 2.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) ,2,4-Trimethylbenzene ,3,5-Trimethylbenzene ,2-Dichloroethane (EDC) ,2-Dibromoethane (EDB) Japhthalene -Methylnaphthalene	Result ND ND ND ND ND ND ND ND ND N	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Foluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,2-Dichloroethane (EDC) 1,2-Dibromoethane (EDB) NaphthaleneMethylnaphthalene	Result ND	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual
Client ID: PBW Prep Date: Analyte Benzene Coluene Ethylbenzene Methyl tert-butyl ether (MTBE) 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,2-Dichloroethane (EDC) 1,2-Dibromoethane (EDB) Naphthalene 1-Methylnaphthalene	Result ND	PQL 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	8313 12/2019	R	RunNo: 58 SeqNo: 19	8313 955793	Units: µg/L		RPDLimit	Qual

Qualifiers:

Bromomethane

Carbon disulfide

Chlorobenzene

Chloroethane

Chloromethane

2-Chlorotoluene

Chloroform

Carbon Tetrachloride

2-Butanone

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

ND

ND

ND

ND

ND

ND

ND

ND

ND

3.0

10

10

1.0

1.0

2.0

1.0

3.0

1.0

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Kutz

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client: Souder, Miller and Associates

Project:

Sample ID: rb	SampType: MBLK			Tes	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batch	h ID: R5	8313	F	RunNo: 5	8313					
Prep Date:	Analysis E	Date: 3/	12/2019	5	SeqNo: 1	955793	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
-Chlorotoluene	ND	1.0		To No							
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									
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									
lexachlorobutadiene	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.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client:

Souder, Miller and Associates

9.7

Project:

Surr: Toluene-d8

Kutz

Sample ID: rb	Samp	SampType: MBLK TestCode: EPA Method				PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	h ID: R5	8313	RunNo: 58313						
Prep Date:	Analysis [Date: 3/	12/2019	5	SeqNo: 1	955793	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	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			

96.8

70

130

10.00

Sample ID: 1903284-001ams SampType: MS TestCode: EPA Method 8260B: VOLATILES Client ID: **Kutz Non Exempt** RunNo: 58313 Batch ID: **R58313** Prep Date: Analysis Date: 3/12/2019 SeqNo: 1955823 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC **RPDLimit** LowLimit **HighLimit** %RPD Qual Benzene 4.1 0.20 0.4436 70 4.000 91.0 130 Toluene 4.7 0.20 4.000 0.9340 95.3 70 130 Chlorobenzene 3.8 0.20 4.000 0 95.6 70 130 1,1-Dichloroethene 3.5 0 0.20 4.000 86.6 67.6 130 Trichloroethene (TCE) 0 3.3 0.20 4.000 83.7 70 130 Surr: 1,2-Dichloroethane-d4 2.0 2.000 99.0 70 130 Surr: 4-Bromofluorobenzene 2.0 2.000 97.9 70 130 Surr: Dibromofluoromethane 1.9 2.000 93.1 70 130 Surr: Toluene-d8 2.000 1.9 95.2 70 130

Sample ID: 1903284-001amsd	Sample ID: 1903284-001amsd SampType: MSD						8260B: VOL	ATILES		
Client ID: Kutz Non Exempt	Batcl	h ID: R5	8313	F	RunNo: 5	8313				
Prep Date:	Analysis D	Date: 3/	12/2019		SeqNo: 1	955824	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.9	0.20	4.000	0.4436	86.8	70	130	4.14	20	
Toluene	4.5	0.20	4.000	0.9340	90.1	70	130	4.46	20	
Chlorobenzene	3.6	0.20	4.000	0	91.2	70	130	4.67	20	
1,1-Dichloroethene	3.2	0.20	4.000	0	80.2	67.6	130	7.71	20	
Trichloroethene (TCE)	3.2	0.20	4.000	0	79.0	70	130	5.85	20	
Surr: 1,2-Dichloroethane-d4	2.0		2.000		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.0		2.000		101	70	130	0	0	
Surr: Dibromofluoromethane	1.9		2.000		94.0	70	130	0	0	
Surr: Toluene-d8	1.9		2.000		96.2	70	130	0	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client:

Souder, Miller and Associates

12

12

12

46

11

0.50

0.50

0.50

20.00

20.00

20.00

87.60

20.00

Project:

Dibenz(a,h)anthracene

Indeno(1,2,3-cd)pyrene

Surr: N-hexadecane

Surr: Benzo(e)pyrene

Benzo(g,h,i)perylene

Kutz

Sample ID: Ics-43607 SampType: LCS TestCode: EPA Method 8270C: PAHs Client ID: LCSW Batch ID: 43607 RunNo: 58352 Prep Date: 3/11/2019 Analysis Date: 3/13/2019 SeqNo: 1957394 Units: µg/L Analyte Result SPK value SPK Ref Val PQL %REC LowLimit **HighLimit** %RPD **RPDLimit** Qual Naphthalene 9.3 0.50 20.00 0 46.6 29.6 105 1-Methylnaphthalene 9.5 1.0 20.00 0 47.4 33.4 112 2-Methylnaphthalene 9.3 1.0 20.00 46.4 28.6 0 108 Acenaphthylene 9.8 0.50 20.00 0 49.2 35.7 116 Acenaphthene 9.8 0.50 20.00 0 49.0 32.4 118 Fluorene 11 0.50 20.00 0 53.2 35.6 118 Phenanthrene 11 0.50 20.00 0 54.6 36.3 130 Anthracene 11 0.50 20.00 0 54.1 34.8 135 Fluoranthene 11 0.50 20.00 0 56.2 41 136 Pyrene 12 0.50 20.00 0 61.9 44.8 136 Benz(a)anthracene 12 0.50 20.00 0 60.4 41.1 136 Chrysene 12 0.50 20.00 0 37.9 58.3 132 Benzo(b)fluoranthene 11 0.50 20.00 0 57.4 39 144 Benzo(k)fluoranthene 11 0.50 20.00 0 53.9 40 144 Benzo(a)pyrene 11 0.50 20.00 0 53.7 36.8 137

0

0

59.5

60.8

60.9

52.6

55.1

31.5

32.9

40.9

20.4

21.4

141

138

143

126

126

RPD RPDLimit	Overl
RPD RPDLimit	Overal
RPD RPDLimit	Overl
	Qual
33.9 68.7	***************************************
33.8 66	
30.5 68.7	
33.6 64.9	
33.3 53.2	
29.8 62.4	
26.5 62.6	
29.9 62.4	
27.3 59.4	
26.0 55.4	
24.0 56.6	
27.9 51.9	
33.4 59.1	
3 3 3 14 14 14 14 14 14 14	30.5 68.7 33.6 64.9 33.3 53.2 29.8 62.4 26.5 62.6 29.9 62.4 27.3 59.4 26.0 55.4 24.0 56.6 27.9 51.9

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 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903284

19-Mar-19

Client:

Souder, Miller and Associates

Project:

Kutz

Sample ID: Icsd-43607	Samp	Type: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batc	h ID: 43	607	F	RunNo: 5	8352				
Prep Date: 3/11/2019	Analysis D	Date: 3/	13/2019	\$	SeqNo: 1	957395	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Benzo(k)fluoranthene	16	0.50	20.00	0	77.9	40	144	36.4	57	
Benzo(a)pyrene	15	0.50	20.00	0	75.5	36.8	137	33.7	60.2	
Dibenz(a,h)anthracene	16	0.50	20.00	0	82.5	31.5	141	32.4	64.7	
Benzo(g,h,i)perylene	18	0.50	20.00	0	87.7	32.9	138	36.2	61.5	
ndeno(1,2,3-cd)pyrene	17	0.50	20.00	0	84.9	40.9	143	32.9	61.1	
Surr: N-hexadecane	60		87.60		68.4	20.4	126	0	0	
Surr: Benzo(e)pyrene	15		20.00		74.3	21.4	126	0	0	
Sample ID: mb-43607	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: PBW	Batc	Batch ID: 43607			RunNo: 5					
Prep Date: 3/11/2019	Analysis [Date: 3/	13/2019	5	SeqNo: 1	957396	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qua
Naphthalene	ND	0.50		Will have						
I-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								
	NID	0.50								
Dibenz(a,h)anthracene	ND	0.00								
	ND	0.50								
Dibenz(a,h)anthracene Benzo(g,h,i)perylene ndeno(1,2,3-cd)pyrene										

20.00

Qualifiers:

Surr: Benzo(e)pyrene

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

16

- 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

21.4

126

E Value above quantitation range

81.3

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1903284

19-Mar-19

Client: Souder, Miller and Associates

Project: Kutz

Sample ID: MB-43610 SampType: MBLK TestCode: EPA Method 7470: Mercury

Client ID: PBW Batch ID: 43610 RunNo: 58296

Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1955319 Units: mg/L

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

ND 0.00020 Mercury

Sample ID: LCS-43610 SampType: LCS TestCode: EPA Method 7470: Mercury

Client ID: LCSW Batch ID: 43610 RunNo: 58296

Prep Date: 3/11/2019 Analysis Date: 3/11/2019 SeqNo: 1955320 Units: mg/L

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

Mercury 0.0048 0.00020 0.005000 95.9

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- 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 Detection Limit
- Sample container temperature is out of limit as specified

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Hall Environmensal Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

Albuquerque, NM 87109 Sample Log-In Check List

Client Name: SMA-FARM	Work Order Number:	1903284		RcptNo: 1
Received By: Anne Thorne	3/7/2019 7:10:00 AM		anne A.	
Completed By: Anne Thorne	3/7/2019 8:07:26 AM		an I.	
Labeled by: 16 214	3[7]19 H1 Y6 3[7]1	9		
Chain of Custody	" -			
1. Is Chain of Custody complete?		Yes 🗸	No 🗆	Not Present
2. How was the sample delivered?		Courier		
Log In				
Was an attempt made to cool the samples?		Yes 🗸	No 🗆	NA 🗆
4. Were all samples received at a temperature	of >0° C to 6.0°C	Yes 🔽	No 🗆	NA 🗆
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗆	
Sufficient sample volume for indicated test(s	117	Yes 🗸	No 🗌	
7. Are samples (except VOA and ONG) properly		Yes 🗸	No 🗆	
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆
VOA vials have zero headspace?		Yes 🗸	No 🗆	No VOA Vials
Were any sample containers received broke	nn?	Yes 🗆	No 🗸	# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸	No 🗆	bottles checked for pH:
12. Are matrices correctly identified on Chain of	Custody?	Yes V	No 🗆	Adjusted NO
13. Is it clear what analyses were requested?		Yes 🗸	No 🗆	V11
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗆	Checked by: Y 6 3 1
Special Handling (if applicable)				
15. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗆	NA 🗸
Person Notified:	Date			
By Whom:	Via:	eMail	Phone Fax	☐ In Person
Regarding: Client Instructions:				
16. Additional remarks:		90.11		
17. Cooler Information		eal Date	Signed By	

Page 1 of 1

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	FDB (Method 504.1) RCRA 8 Metals TCL CL, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄ S260 (VOA) 104al Collform (Present/Absent) Total Collform (Present/Absent)		Style Time Remarks: 82.00 Full UST +TOLP LIMITS Date Time Tour Company of +TOLP LIMITS SYNTYIC INVOICE ENTYPHISE OF Tom LONS This serves as notice of this ocesibility. Any sub-contracted data will be clearly notated on the analytical report.
4901 H	BTEX / MTBE / TMB's (8021) TPH:8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's		Remarks: 8 TCUP (Invoice
Turn-Around Time: 7 day 7747 Di-Standard IV Rush No Civarge Project Name: Kultz	Sampler: RAN MCXVVEVI Sampler: RAN On Ice: Rayes II No # of Coolers: Cooler Tempincusing crit. Container Preservative HEAL No. Type and # Type ACCOLOR COOLERS Type ACCOLOR Ty		VIA:
Client: SMP Mailing Address: 461 W Brandwon Faymung Imp., NM B1461 Phone #: 575 325 3535	email or Fax#. CS N I Language Wave Caved Package: Standard Accreditation: Az Compliance Defention of the Cample Name Date Time Matrix Sample Name	2 148 Falles	Date: Time: Relinquished by: 1840 Received by: 1814 Missing to Hall Environmental may be subcontracted to other



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

March 28, 2019

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

RE: Hart #1 SJ East

OrderNo.: 1903677

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/14/2019 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

Released to Imaging: 11/8/2023 4:50:26 PM

Analytical Report

Lab Order 1903677

Date Reported: 3/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Hart #1 SJ East

Lab ID: 1903677-001

Project:

Client Sample ID: Hart #1 SJ East

Collection Date: 3/13/2019 2:24:00 PM

Received Date: 3/14/2019 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6020: TOTAL METALS						Analyst: DBK
Arsenic	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
Barium	ND	10		mg/L	10	3/25/2019 5:47:37 PM
Cadmium	ND	0.10		mg/L	5	3/18/2019 6:20:25 PM
Chromium	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
Lead	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
Selenium	ND	0.10		mg/L	5	3/18/2019 6:20:25 PM
Silver	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
EPA METHOD 7470: MERCURY						Analyst: pmf
Mercury	ND	0.020		mg/L	1	3/20/2019 11:49:38 AM
EPA METHOD 8270C: PAHS						Analyst: DAM
Naphthalene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
1-Methylnaphthalene	ND	50	D	µg/L	10	3/21/2019 4:28:36 PM
2-Methylnaphthalene	ND	50	D	µg/L	10	3/21/2019 4:28:36 PM
Acenaphthylene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Acenaphthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Fluorene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Phenanthrene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Anthracene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Fluoranthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Pyrene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benz(a)anthracene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Chrysene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(b)fluoranthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(k)fluoranthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(a)pyrene	ND	25	D	μg/L	10	3/21/2019 4:28:36 PM
Dibenz(a,h)anthracene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(g,h,i)perylene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Indeno(1,2,3-cd)pyrene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Surr: N-hexadecane	0	20.4-126	SD	%Rec	10	3/21/2019 4:28:36 PM
Surr: Benzo(e)pyrene	0	21.4-126	SD	%Rec	10	3/21/2019 4:28:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.50		mg/L	200	3/15/2019 12:56:00 AM
Toluene	1.2	0.20		mg/L	200	3/15/2019 12:56:00 AM
Ethylbenzene	ND	0.20		mg/L	200	3/15/2019 12:56:00 AN
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	3/15/2019 12:56:00 AN
1,2,4-Trimethylbenzene	ND	0.20	1	mg/L	200	3/15/2019 12:56:00 AN
1,3,5-Trimethylbenzene	ND	0.20	1	mg/L	200	3/15/2019 12:56:00 AN
1,2-Dichloroethane (EDC)	ND	0.20)	mg/L	200	3/15/2019 12:56:00 AN

Matrix: AQUEOUS

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

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

POL Practical Quantative Limit

% Recovery outside of range due to dilution or matrix

Page 1 of 11

Analytical Report

Lab Order 1903677

Date Reported: 3/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Hart #1 SJ East

Lab ID: 1903677-001

Client Sample ID: Hart #1 SJ East

Collection Date: 3/13/2019 2:24:00 PM

Received Date: 3/14/2019 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: RAA
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Naphthalene	ND	0.40	mg/L	200	3/15/2019 12:56:00 AM
1-Methylnaphthalene	ND	0.80	mg/L	200	3/15/2019 12:56:00 AM
2-Methylnaphthalene	ND	0.80	mg/L	200	3/15/2019 12:56:00 AM
Acetone	ND	2.0	mg/L	200	3/15/2019 12:56:00 AM
Bromobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Bromodichloromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Bromoform	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Bromomethane	ND	0.60	mg/L	200	3/15/2019 12:56:00 AN
2-Butanone	ND	20	mg/L	200	3/15/2019 12:56:00 AN
Carbon disulfide	ND	2.0	mg/L	200	3/15/2019 12:56:00 AN
Carbon Tetrachloride	ND	0.20	mg/L	200	3/15/2019 12:56:00 AN
Chlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Chloroethane	ND	0.40	mg/L	200	3/15/2019 12:56:00 AM
Chloroform	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Chloromethane	ND	0.60	mg/L	200	3/15/2019 12:56:00 AM
2-Chlorotoluene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
4-Chlorotoluene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
cis-1,2-DCE	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
cis-1,3-Dichloropropene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200	3/15/2019 12:56:00 AM
Dibromochloromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Dibromomethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,2-Dichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,3-Dichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,4-Dichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Dichlorodifluoromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,1-Dichloroethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,1-Dichloroethene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,2-Dichloropropane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,3-Dichloropropane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
2,2-Dichloropropane	ND	0.40	mg/L	200	3/15/2019 12:56:00 AM
1,1-Dichloropropene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Hexachlorobutadiene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
2-Hexanone	ND	2.0	mg/L	200	3/15/2019 12:56:00 AM
Isopropylbenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
4-Isopropyltoluene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
4-Methyl-2-pentanone	ND	2.0	mg/L	200	3/15/2019 12:56:00 AM
Methylene Chloride	ND	0.60	mg/L	200	3/15/2019 12:56:00 AN

Matrix: AQUEOUS

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

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 2 of 11

Analytical Report

Lab Order 1903677

Date Reported: 3/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: Hart #1 SJ East

Project: Hart #1 SJ East

Collection Date: 3/13/2019 2:24:00 PM

Lab ID: 1903677-001

Matrix: AQUEOUS

Received Date: 3/14/2019 7:00:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: RAA
n-Butylbenzene	ND	0.60	mg/L	200	3/15/2019 12:56:00 AM
n-Propylbenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
sec-Butylbenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Styrene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
tert-Butylbenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	3/15/2019 12:56:00 AM
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
trans-1,2-DCE	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,1,1-Trichloroethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,1,2-Trichloroethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Trichloroethene (TCE)	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Trichlorofluoromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
1,2,3-Trichloropropane	ND	0.40	mg/L	200	3/15/2019 12:56:00 AM
Vinyl chloride	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Xylenes, Total	0.81	0.30	mg/L	200	3/15/2019 12:56:00 AM
Surr: 1,2-Dichloroethane-d4	89.5	70-130	%Rec	200	3/15/2019 12:56:00 AM
Surr: 4-Bromofluorobenzene	95.8	70-130	%Rec	200	3/15/2019 12:56:00 AM
Surr: Dibromofluoromethane	91.0	70-130	%Rec	200	3/15/2019 12:56:00 AM
Surr: Toluene-d8	93.1	70-130	%Rec	200	3/15/2019 12:56:00 AM

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

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: MB-43704	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	6020: Total M	etals			
Client ID: PBW	Bato	Batch ID: 43704			RunNo: 5	8442					
Prep Date: 3/15/2019	Analysis	Analysis Date: 3/18/2019		SeqNo: 1961412			Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	ND	0.0010									
Cadmium	ND	0.0010									
Chromium	ND	0.0010									
Lead	ND	0.0010									
Selenium	ND	0.0010									
Silver	ND	0.0010									

Sample ID: MSLLLCS-4	3704 Samp	Type: LC	SLL	Tes						
Client ID: BatchQC	Bate	ch ID: 43	704	F	RunNo: 5					
Prep Date: 3/15/2019	Analysis	Date: 3/	18/2019	5	SeqNo: 1	961413	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010	0.001000	0	89.1	70	130		_	
Cadmium	ND	0.0010	0.001000	0	95.1	70	130			
Chromium	0.0012	0.0010	0.001000	0	119	70	130			
Lead	ND	0.0010	0.001000	0	97.5	70	130			
Selenium	ND	0.0010	0.001000	0	82.6	70	130			
Silver	0.0011	0.0010	0.001000	0	106	70	130			

Sample ID: MSLCS-43704	Samp	Type: LC	S	TestCode: EPA Method 6020: Total Metals								
Client ID: LCSW	Bato	h ID: 43	704	F	RunNo: 5	8442						
Prep Date: 3/15/2019	Analysis	Analysis Date: 3/18/2019			SeqNo: 1	961414	Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Arsenic	0.046	0.0010	0.05000	0	92.1	80	120					
Cadmium	0.050	0.0010	0.05000	0	99.6	80	120					
Chromium	0.050	0.0010	0.05000	0	101	80	120					
Lead	0.048	0.0010	0.05000	0	95.9	80	120					
Selenium	0.046	0.0010	0.05000	0	92.2	80	120					
Silver	0.041	0.0010	0.05000	0	82.6	80	120					

Sample ID: MSLCSD-43704	Samp	Type: LC	SD	Tes	letals					
Client ID: LCSS02		h ID: 43		F	RunNo: 5	8442				
Prep Date: 3/15/2019	Analysis I	Date: 3/	18/2019	S	SeqNo: 1	961415	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.047	0.0010	0.05000	0	93.3	80	120	1.22	20	
Cadmium	0.051	0.0010	0.05000	0	102	80	120	2.67	20	
Chromium	0.051	0.0010	0.05000	0	103	80	120	1.74	20	
Lead	0.047	0.0010	0.05000	0	94.8	80	120	1.07	20	

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

% Recovery outside of range due to dilution or matrix

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID:	MSLCSD-4370
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SampType: LCSD

TestCode: EPA Method 6020: Total Metals

Client ID: LCSS02

Batch ID: 43704

RunNo: 58442

92.5

85.0

0

SPK value SPK Ref Val %REC LowLimit

Prep Date: 3/15/2019 Analysis Date: 3/18/2019 SeqNo: 1961415

Units: mg/L

80

80

Analyte Selenium

Result PQL 0.046 0.0010 0.05000 0.042 0.0010 0.05000

SPK value SPK Ref Val %REC LowLimit **HighLimit** %RPD **RPDLimit** Qual 120 0.308 20

2.88

Silver

Sample ID: MB-43704

SampType: MBLK

TestCode: EPA Method 6020: Total Metals

Prep Date: 3/15/2019

Client ID: PBW

Batch ID: 43704

PQL

RunNo: 58622

120

Analysis Date: 3/25/2019

SeqNo: 1968681

Units: mg/L HighLimit

%RPD **RPDLimit**

Qual

Qual

Analyte Barium

ND 0.0010

SampType: LCSLL

TestCode: EPA Method 6020: Total Metals

Client ID: BatchQC

Sample ID: MSLLLCS-43704

Batch ID: 43704

RunNo: 58622

Prep Date: 3/15/2019

Analysis Date: 3/25/2019

SeqNo: 1968682

Units: mg/L

%RPD

20

Result

PQL SPK value SPK Ref Val %REC

LowLimit

HighLimit 130 **RPDLimit** Qual

Barium

0.0012

0.051

0.0010 0.001000

117

Sample ID: MSLCS-43704 Client ID: LCSW

SampType: LCS

Prep Date: 3/15/2019

Batch ID: 43704

RunNo: 58622

TestCode: EPA Method 6020: Total Metals

Analysis Date: 3/25/2019

SeqNo: 1968683

Units: mg/L

Analyte

PQL SPK value SPK Ref Val

%REC Lowl imit

HighLimit %RPD

120

120

Barium

0.050 0.0010 0.05000 100

TestCode: EPA Method 6020: Total Metals

Client ID: LCSS02

Sample ID: MSLCSD-43704

SampType: LCSD Batch ID: 43704

RunNo: 58622

Prep Date: 3/15/2019

Analysis Date: 3/25/2019

SeqNo: 1968684

Units: mg/L

%RPD **RPDLimit** Qual

Barium

Analyte

PQL SPK value SPK Ref Val %REC 0.0010

0.05000

102

LowLimit **HighLimit**

1.51

RPDLimit

Qualifiers:

Value above quantitation range ND Not Detected at the Reporting Limit

Reporting Detection Limit Sample container temperature is out of limit as specified at testcode Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Page 5 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: 100ng Ics	Samp	Type: LC	S	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batc	h ID: R5	8384	F	RunNo: 5	8384					
Prep Date:	Analysis [Date: 3/	14/2019	5	SeqNo: 1	958378	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	16	1.0	20.00	0	77.5	70	130			-	
Toluene	17	1.0	20.00	0	87.1	70	130				
Chlorobenzene	18	1.0	20.00	0	89.8	70	130				
1,1-Dichloroethene	15	1.0	20.00	0	72.6	70	130				
Trichloroethene (TCE)	14	1.0	20.00	0	71.4	70	130				
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.7	70	130				
Surr: 4-Bromofluorobenzene	9.8		10.00		97.6	70	130				
Surr: Dibromofluoromethane	8.9		10.00		88.8	70	130				
Surr: Toluene-d8	9.9		10.00		98.6	70	130				
Sample ID: rb	Samn	Type: ME	RIK	TestCode: EPA Method 8260B: VOLATILES							

Client ID: PBW	Batc	h ID: R5	8384	. F	RunNo: 5	8384				
Prep Date:	Analysis [Date: 3/	14/2019	5	SeqNo: 1	958383	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								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Page 6 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: rb	Sampl	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	h ID: R	8384	F	RunNo: 5	8384				
Prep Date:	Analysis D	Date: 3	14/2019	8	SeqNo: 1	958383	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								4
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane		2.0								
1,2,5-Thichloropropane	ND	2.0								

Qualifiers

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 7 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

1.9

1.8

Project:

Hart #1 SJ East

Prep Date:	Analysis D	h ID: R			RunNo: 58 SeaNo: 19		Units: µa/L		
Top Date.	7 tridiyolo L	Jaic. J	14/2015	,	ocqivo. I	330303	Offits. pg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDL

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	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.5	70	130			
Surr: Dibromofluoromethane	9.0		10.00		89.7	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Sample ID: 1903677-001am	s Samp	Type: MS	3	TestCode: EPA Method 8260B: VOLATILES						
Client ID: Hart #1 SJ East	Batc	h ID: R5	8384	F	RunNo: 5					
Prep Date:	Analysis [Date: 3/	15/2019		SeqNo: 1	960600	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.4	0.20	4.000	0.2872	78.7	70	130			
Toluene	4.6	0.20	4.000	1.218	84.4	70	130			
Chlorobenzene	3.6	0.20	4.000	0.06360	88.9	70	130			
1,1-Dichloroethene	3.0	0.20	4.000	0	75.6	67.6	130			
Trichloroethene (TCE)	2.9	0.20	4.000	0	73.5	70	130			
Surr: 1,2-Dichloroethane-d4	1.8		2.000		90.4	70	130			

130

130

70

2.000

2.000

Suit. Toluelle-uo	1.5		2.000		94.4	70	130			
Sample ID: 1903677-001amsd	SampT	ype: MS	BD	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: Hart #1 SJ East	Batch	ID: R5	8384	F	RunNo: 5	8401				
Prep Date:	Analysis D	ate: 3/	15/2019	8	SeqNo: 1	960601	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.2	0.20	4.000	0.2872	97.7	70	130	19.9	20	
Toluene	5.2	0.20	4.000	1.218	100	70	130	12.9	20	
Chlorobenzene	4.5	0.20	4.000	0.06360	111	70	130	22.1	20	R
1.1-Dichlomethene	37	0.20	4 000	0	923	67.6	130	198	20	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	4.2	0.20	4.000	0.2872	97.7	70	130	19.9	20		П
Toluene	5.2	0.20	4.000	1.218	100	70	130	12.9	20		
Chlorobenzene	4.5	0.20	4.000	0.06360	111	70	130	22.1	20	R	
1,1-Dichloroethene	3.7	0.20	4.000	0	92.3	67.6	130	19.8	20		
Trichloroethene (TCE)	3.6	0.20	4.000	0	90.9	70	130	21.1	20	R	
Surr: 1,2-Dichloroethane-d4	1.9		2.000		92.5	70	130	0	0		
Surr: 4-Bromofluorobenzene	1.9		2.000		97.4	70	130	0	0		
Surr: Dibromofluoromethane	1.8		2.000		92.1	70	130	0	0		
Surr: Toluene-d8	1.9		2.000		96.0	70	130	0	0		

Qualifiers

E Value above quantitation range ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr Toluene d8

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 8 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID:	lcs-43758
Client ID:	LCSW

SampType: LCS Batch ID: 43758 TestCode: EPA Method 8270C: PAHs

RunNo: 58550

Prep Date: 3/19/2019	Analysis [Date: 3/	21/2019	8	SeqNo: 1	965840	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	16	0.50	20.00	0	80.1	29.6	105			
1-Methylnaphthalene	16	1.0	20.00	0	78.1	33.4	112			
2-Methylnaphthalene	15	1.0	20.00	0	77.2	28.6	108			
Acenaphthylene	17	0.50	20.00	0	83.9	35.7	116			
Acenaphthene	16	0.50	20.00	0	80.4	32.4	118			
Fluorene	16	0.50	20.00	0	80.9	35.6	118			
Phenanthrene	17	0.50	20.00	0	84.7	36.3	130			
Anthracene	17	0.50	20.00	0	84.8	34.8	135			
Fluoranthene	17	0.50	20.00	0	85.5	41	136			
Pyrene	18	0.50	20.00	0	91.1	44.8	136			
Benz(a)anthracene	18	0.50	20.00	0	91.0	41.1	136			
Chrysene	18	0.50	20.00	0	90.6	37.9	132			
Benzo(b)fluoranthene	19	0.50	20.00	0	94.3	39	144			
Benzo(k)fluoranthene	18	0.50	20.00	0	90.1	40	144			
Benzo(a)pyrene	18	0.50	20.00	0	87.6	36.8	137			
Dibenz(a,h)anthracene	18	0.50	20.00	0	91.9	31.5	141			
Benzo(g,h,i)perylene	20	0.50	20.00	0	97.6	32.9	138			
Indeno(1,2,3-cd)pyrene	19	0.50	20.00	0	95.6	40.9	143			
Surr: N-hexadecane	72		87.60		81.9	20.4	126			
Surr: Benzo(e)pyrene	17		20.00		85.8	21.4	126			

Sample ID: Icsd-43758	SampT	ype: LC	SD	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: LCSS02	Batc	h ID: 43	758	F	RunNo: 5	8550				
Prep Date: 3/19/2019	Analysis D	Date: 3/	21/2019		SeqNo: 1	965841	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	16	0.50	20.00	0	80.3	29.6	105	0.249	68.7	
1-Methylnaphthalene	16	1.0	20.00	0	80.1	33.4	112	2.53	66	
2-Methylnaphthalene	16	1.0	20.00	0	79.2	28.6	108	2.56	68.7	
Acenaphthylene	18	0.50	20.00	0	87.8	35.7	116	4.54	64.9	
Acenaphthene	18	0.50	20.00	0	87.7	32.4	118	8.69	53.2	
Fluorene	18	0.50	20.00	0	88.8	35.6	118	9.31	62.4	
Phenanthrene	19	0.50	20.00	0	93.4	36.3	130	9.77	62.6	
Anthracene	18	0.50	20.00	0	92.4	34.8	135	8.58	62.4	
Fluoranthene	20	0.50	20.00	0	99.1	41	136	14.7	59.4	
Pyrene	20	0.50	20.00	0	100	44.8	136	9.51	55.4	
Benz(a)anthracene	19	0.50	20.00	0	94.3	41.1	136	3.56	56.6	

0

0

Qualifiers:

Benzo(b)fluoranthene

Chrysene

E Value above quantitation range

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

19

19

0.50

0.50

20.00

20.00

Holding times for preparation or analysis exceeded

95.2

95.2

% Recovery outside of range due to dilution or matrix

37.9

39

Page 9 of 11

51.9

59.1

4.95

0.950

132

144

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: Icsd-43758	SampT	ype: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs		1000	
Client ID: LCSS02	Batch	n ID: 43	758	F	RunNo: 5	8550				
Prep Date: 3/19/2019	Analysis D	Date: 3/	21/2019	5	SeqNo: 1	965841	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	18	0.50	20.00	0	90.8	40	144	0.774	57	
Benzo(a)pyrene	18	0.50	20.00	0	90.4	36.8	137	3.15	60.2	
Dibenz(a,h)anthracene	19	0.50	20.00	0	94.6	31.5	141	2.90	64.7	
Benzo(g,h,i)perylene	20	0.50	20.00	0	102	32.9	138	4.51	61.5	
ndeno(1,2,3-cd)pyrene	20	0.50	20.00	0	98.7	40.9	143	3.19	61.1	
Surr: N-hexadecane	72		87.60		82.5	20.4	126	0	0	
Surr: Benzo(e)pyrene	18		20.00		90.3	21.4	126	0	0	
Sample ID: mb-43758	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: PBW		h ID: 43		F	RunNo: 5	8550				
Prep Date: 3/19/2019	Analysis D	Date: 3/	21/2019	5	SeqNo: 1	965842	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50				-				
-Methylnaphthalene	ND	1.0								
-Methylnaphthalene	ND	1.0								
cenaphthylene	ND	0.50								
Acenaphthene	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								
Chrysene Benzo(b)fluoranthene	ND ND	0.50 0.50								

Qualifiers:

Benzo(a)pyrene

Dibenz(a,h)anthracene

Indeno(1,2,3-cd)pyrene

Surr: N-hexadecane

Surr: Benzo(e)pyrene

Benzo(g,h,i)perylene

Value above quantitation range

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

ND

ND

ND

ND

67

15

0.50

0.50

0.50

0.50

87.60

20.00

H Holding times for preparation or analysis exceeded

76.1

77.3

% Recovery outside of range due to dilution or matrix

20.4

21.4

126

126

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Qual

Qual

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: MB-43775

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW Batch ID: 43775

RunNo: 58504

Prep Date: 3/19/2019

Analysis Date: 3/20/2019

SeqNo: 1963758

Units: mg/L

PQL

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

Mercury

ND 0.00020

Sample ID: LCS-43775

SampType: LCS

0.0050 0.00020

TestCode: EPA Method 7470: Mercury

LowLimit

Client ID: LCSW

Batch ID: 43775

PQL

RunNo: 58504

Prep Date: 3/19/2019 Analysis Date: 3/20/2019 SeqNo: 1963759

%REC

Units: mg/L **HighLimit**

RPDLimit

%RPD RPDLimit Qual

Analyte Mercury

Sample ID: LCSD-43775

SampType: LCSD

TestCode: EPA Method 7470: Mercury

101

120

Client ID: LCSS02

Batch ID: 43775

RunNo: 58504

Units: mg/L HighLimit

Prep Date: 3/19/2019

Analysis Date: 3/20/2019

SeqNo: 1963760

%RPD **RPDLimit**

Analyte Mercury

Result PQL SPK value SPK Ref Val %REC LowLimit 0.0050 0.00020 0.005000

SPK value SPK Ref Val

0.005000

100

0.516

Qualifiers:

Value above quantitation range

ND Not Detected at the Reporting Limit Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Page 11 of 11

1903677-001D HAR Collected date/lime: 0			SAM	PLE RE	SULTS - 01		ONE LAS NATIONWIDE	- Par
Wet Chemistry by	Method 4500	CN E-2011						
	Result	Qualfier	RDL	Dilution	Analysis	Batch		
Analyte	ngA		mg/l		date / time			E
Reactive Cyanide	0.0447		0.00500	1	03/20/2019 15/48	WG1257497		1
Wet Chemistry by	Method 4500H	+ B-2011						F
	Result	Qualifer	Dilution	Analysis	Batch		APPENDING S	L
Analyte	Su	NAME OF		date / time				1
Corresivity by pH	5.54	<u>T8</u>	1	03/15/2019 12:38	5 <u>WG1250855</u>			L
Sample Narrative: L1079321-01 WG1250855:	5.54 at 15.9C							COMMENT IN
Wet Chemistry by	Method 9034-9	9030E						
	Result	Qualifier	RDL	Diution	Analysis	Eatch		F
Analyte	трл		rrg/l		date / time			
Reactive Sulfide	0.0880		0.0500	1	C3/19/2019 12:01	WG1251593		F
Wet Chemistry by	Method D93/10	10A						-
	Result	Qualifier	Dilution	Analysis	Batch			1
Analyte	degF			date / time				1
Flashpoint	DNF at 170		4	03/21/2019 18:47	WG1252539			

ACCOUNT: Half Environmental Analysis Laboratory PROJECT:

SDG: 13079321 DATE/TIME: 03/27/19 14:33

DATE/TIME 03/22/19 14:33

SDG: 11079321

PROJECT

ACCOUNT: 108 Environmental Analysis Leboratory

WG1252497 Wet Chemistry by Method 4500 CN E-2011	-2011		OD	QUALITY CONTROL SUMMARY	ONELAB NATIONWIDE
Method Blank (MB)					
IMBI R3393470-1 03/20/9 15.17 M8 Result Analyze Ingl Avactive Cyanide U	Oualifier	MB MDL, mg/l e.ponse	MB RDL mgfl 0.00500		SS.
Laboratory Control Sample (LCS) AcS) R3399470-2 G2/20/19 15:18 Spile Amount LCS Result Analyte migh mgh Reactive Cyande 0.000 0.0940	Result	1CS Rec. 54 0	Rec. Limits as p-ris	LCS Gualiffer	5 5 5 5

CS/22/19 14.33

SDG

ACCOUNT:

## 18 PRO MR PRO	VG1251593 et Chemistry by Method 9034-90308 lethod Blank (MB)	ethod 9034-9	80308		ō	JALITY C	QUALITY CONTROL SUMMARY	UMMARY		ONE LAB. NATIONWIDE	THE STATE OF THE S
atory Control Sample (LCS) 992964-2 C3/9/19/12:00 Spike Amount LCS Result LCS Rec Rec Linits mg/l % % % % within mg/l % % % % % within 0.562 0.562 19.2 IIS.0-115	R3392984-1 03/15 rie the Suffde	MB Result mg/l U		MB NDL mgd 0.00650	MB PDL mg/l 0.0520						
392984-2 C3/19/19 t2:00 Solike Amount LCS Feaut LCS Fee. Rec. Lents right mg/l % % % % % without 0.512 102 US.0-15 uitide: 0.500 0.512 102 US.0-15	oratory Contr	ol Sample (I	SS								8
uffice 0.502 192	R3392984-2 C3/	9/19 12:00 Soike Amoun	t LCS Result	LCS Rec.	Rec. Lmits	LCS Dusifier					
	ive Suffice	0030	0.512	102	85.0-115						

DATE/TIME 03/22/19 14:33

SDG [1079321

PROJECT:

WG1252539 Wet Chemistry by Method D93/1010A	9 Wethed 093/1010	A.		0	UALI	QUALITY CONTROL SUMMARY	ONE LAE NATIONNIDE	高
L1079359-04 Original Sample (OS) - Duplicate (DUP)	riginal Sample	(OS) - Dr	plicated	(dnc				
(OS) LI079359-04 03/21/19 18:47 - (DUP) R3393973-2 03/2/19 18:47	V21/19 18:47 - (DUP)	R3393973-2	03/2V19 18	47				
	Criginal Result	Original Result DUP Result	Dilutan DUP 390		DUP Gualifier	Dup spo		E
Analyte	degf	degf		-		*		
Flashpoint	DNF at 170	CNF at 170	-	0.000		p		1/1
L1079930-02 Original Sample (OS) - Duplicate (DUP)	eldmas lan gin	(OS) - Dr	plicate	Jane				,5
(05 L1079930-02 03/21/91847 - (DUP) R3393973-3 03/21/191847	V21/19 18:47 - (DUP)	R3393973-3	03/21/1918	47				
	Original Result DUP Result	DUP Result	Disution DUP RPD		DUP Qualifier	DUP RPC Limits		(10)
Analyte	100	4 gab	1	2.93		% Q1		
Laboratory Control Sample (LCS)	rol Sample (L.C	S						S
(LCS) R3393973-1 03/21/19 18:47	21/19 18:47							
	Spike Amount LCS Fesuit	LCS Result	LCS Rec.	Rec. Lmts	LCS Juniffer	sifier		N
Analyte	1 Bac	4 flab	×	18				
Elaberant	0.02	923	401	96.0304				-

ACCOUNT Hall Cruronmental Analysis Lebo Qualifier

GLOSSARY OF TERMS

DAELAS NATIONWIDE



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.

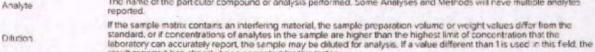
Ss

Cn

Qc

Abbreviations and Definitions

MDL	Melhad Detection Limit
ROL	Reported Detection Limit.
Rec	Recovery
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Economical Imit for MOI where emplicable)



result reported has already been corrected for this factor

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 Limits duplicated within these ranges.

The non-spiked sample in the prepiatch used to determine the Relative Percent Difference (RPD) from a quality control Original Sample sample. The Original Sample may not be included within the reported SDG

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.

The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes

The actual enalytical 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) are RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect Result or report for this analyte.

Uncertainty (Radiochemistry) Confidence level of 2 sigma.

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. Case Narrative (Cn)

This section of the report includes the results of the laboratory quality control analyses required by procedure or Quality Control 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. Summary (Qc)

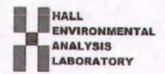
This is the document created in the field when your samples were initially collected. This is used to verry the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also columnities all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. Sample Chain of Custody (Sc)

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 Results (Sr)

This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and Sample Summary (Ss) times of preparation and/or analysis.

Qualifier Description

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



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87199 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.haileavironmenial.com

Sample Log-In Check List

Client Name: SMA-FARM	Work Order Nur	mber: 1903677		RoptNo: 1
Received By: Anne Thorne	3/14/2019 7:00:00	AM C	an I.	
Completed By: Victoria Zellar	3/14/2019 8:34:16	5 AM	Victoria Sel	llas i
Reviewed By: ENM	3/14/19			YG 3/14/19
Chain of Custody				10 01.11.1
1. Is Chain of Custody complete?		Yes 🗸	No 🗌	Not Present
2. How was the sample delivered?		Courier		
Login				
3. Was an attempt made to cool the sam	ples?	Yes 🗹	No 🗆	NA 🗆
4. Were all samples received at a temper	ature of >0° C to 6.0°C	Yes 🗸	No 🗆	NA 🗆
5. Sample(s) in proper container(s)?		Yes 🔽	No 🗆	
6. Sufficient sample volume for indicated	test(s)?	Yes 🗹	No 🗌	
7. Are samples (except VOA and ONG) p	roperly preserved?	Yes 🗹	No 🗌	
B. Was preservative added to bottles?		Yes 🗆	No 🗸	NA 🗆
9. VOA vials have zero headspace?		Yes 🗹	No 🗆	No VCA Vials
10. Were any sample containers received	broken?	Yes 🗆	No 🗸	# of preserved
Does paperwork match bottle labels? (Note discrepancies on chain of custod)	v	Yes 🔽	No 🗆	for pH: (E2or 12)unless noted)
12. Are matrices correctly identified on Cha		Yes V	No 🗌	Adjusted? NO
13. Is it clear what analyses were requeste	d?	Yes V	No 🗆	VC White
14. Were all holding times able to be met? (If no, notify customer for authorization.		Yes 🗹	No 🗆	Checked by: Y G 3/19/1/
Special Handling (if applicable)				
15. Was client notified of all discrepancies	with this order?	Yes 🗌	No 🗆	NA 🗹
Person Notified	Date	0:		
By Whom:	Via	eMail F	Phone Fax	☐ In Person
Regarding: Client Instructions:				
16. Additional remarks:				
17. Cooler Information Cooler No Temp °C Condition 1 1.0 Good	Seal Intact Seal No Yes	Seal Date	Signed By	

Page 1 of 1

Time Matrix Sample Name Type and # Type and	HALL ENVIRONMENTAL
Time Matrix Sample Name Type and # Type and	ANALYSIS LABORATOR
Time: Reinguished by: True Are Recogned by: New York Seminary Time: Reinguished by: Name True Recogned by: Name Tr	www.hallenvironmental.com
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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

March 28, 2019

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

RE: Hart #1 SJ East

OrderNo.: 1903677

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/14/2019 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 1903677

Date Reported: 3/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Hart #1 SJ East

Lab ID: 1903677-001

Project:

Client Sample ID: Hart #1 SJ East

Collection Date: 3/13/2019 2:24:00 PM

Received Date: 3/14/2019 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 6020: TOTAL METALS						Analyst: DBK
Arsenic	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
Barium	ND	10		mg/L	10	3/25/2019 5:47:37 PM
Cadmium	ND	0.10		mg/L	5	3/18/2019 6:20:25 PM
Chromium	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
Lead	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
Selenium	ND	0.10		mg/L	5	3/18/2019 6:20:25 PM
Silver	ND	0.50		mg/L	5	3/18/2019 6:20:25 PM
EPA METHOD 7470: MERCURY						Analyst: pmf
Mercury	ND	0.020		mg/L	1	3/20/2019 11:49:38 AM
EPA METHOD 8270C: PAHS						Analyst: DAM
Naphthalene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
1-Methylnaphthalene	ND	50	D	µg/L	10	3/21/2019 4:28:36 PM
2-Methylnaphthalene	ND	50	D	µg/L	10	3/21/2019 4:28:36 PM
Acenaphthylene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Acenaphthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Fluorene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Phenanthrene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Anthracene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Fluoranthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Pyrene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benz(a)anthracene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Chrysene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(b)fluoranthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(k)fluoranthene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(a)pyrene	ND	25	D	μg/L	10	3/21/2019 4:28:36 PM
Dibenz(a,h)anthracene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Benzo(g,h,i)perylene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Indeno(1,2,3-cd)pyrene	ND	25	D	µg/L	10	3/21/2019 4:28:36 PM
Surr: N-hexadecane	0	20.4-126	SD	%Rec	10	3/21/2019 4:28:36 PM
Surr: Benzo(e)pyrene	0	21.4-126	SD	%Rec	10	3/21/2019 4:28:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: RAA
Benzene	ND	0.50)	mg/L	200	3/15/2019 12:56:00 AM
Toluene	1.2	0.20)	mg/L	200	3/15/2019 12:56:00 AM
Ethylbenzene	ND	0.20)	mg/L	200	3/15/2019 12:56:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.20)	mg/L	200	3/15/2019 12:56:00 AM
1,2,4-Trimethylbenzene	ND	0.20)	mg/L	200	3/15/2019 12:56:00 AM
1,3,5-Trimethylbenzene	ND	0.20)	mg/L	200	3/15/2019 12:56:00 AM
1,2-Dichloroethane (EDC)	ND	0.20)	mg/L	200	3/15/2019 12:56:00 AM

Matrix: AQUEOUS

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

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantative Limit

S % Recovery outside of range due to dilution or matrix

Page 1 of 11

Analytical Report

Lab Order 1903677

Date Reported: 3/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Hart #1 SJ East

Lab ID: 1903677-001

Client Sample ID: Hart #1 SJ East

Collection Date: 3/13/2019 2:24:00 PM

Received Date: 3/14/2019 7:00:00 AM

Analyses	Result	RL Qua	d Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: RAA
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Naphthalene	ND	0.40	mg/L	200	3/15/2019 12:56:00 AN
1-Methylnaphthalene	ND	0.80	mg/L	200	3/15/2019 12:56:00 AN
2-Methylnaphthalene	ND	0.80	mg/L	200	3/15/2019 12:56:00 AM
Acetone	ND	2.0	mg/L	200	3/15/2019 12:56:00 AN
Bromobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 AM
Bromodichloromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 Af
Bromoform	ND	0.20	mg/L	200	3/15/2019 12:56:00 Af
Bromomethane	ND	0.60	mg/L	200	3/15/2019 12:56:00 Al
2-Butanone	ND	20	mg/L	200	3/15/2019 12:56:00 Af
Carbon disulfide	ND	2.0	mg/L	200	3/15/2019 12:56:00 Af
Carbon Tetrachloride	ND	0.20	mg/L	200	3/15/2019 12:56:00 Al
Chlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 Al
Chloroethane	ND	0.40	mg/L	200	3/15/2019 12:56:00 Al
Chloroform	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
Chloromethane	ND	0.60	mg/L	200	3/15/2019 12:56:00 A
2-Chlorotoluene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
4-Chlorotoluene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
cis-1,2-DCE	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
cis-1,3-Dichloropropene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200	3/15/2019 12:56:00 A
Dibromochloromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
Dibromomethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,2-Dichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,3-Dichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,4-Dichlorobenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
Dichlorodifluoromethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,1-Dichloroethane	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,1-Dichloroethene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,2-Dichloropropane	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
1,3-Dichloropropane	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
2,2-Dichloropropane	ND	0.40	mg/L	200	3/15/2019 12:56:00 A
1,1-Dichloropropene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
Hexachlorobutadiene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
2-Hexanone	ND	2.0	mg/L	200	3/15/2019 12:56:00 A
Isopropylbenzene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
4-Isopropyltoluene	ND	0.20	mg/L	200	3/15/2019 12:56:00 A
4-Methyl-2-pentanone	ND	2.0	mg/L	200	3/15/2019 12:56:00 A
Methylene Chloride	ND	0.60	mg/L	200	3/15/2019 12:56:00 Al

Matrix: AQUEOUS

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

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 2 of 11

Analytical Report

Lab Order 1903677

Date Reported: 3/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Hart #1 SJ East

Surr: Dibromofluoromethane

Sur: Toluene-d8

Souder, Willer and Associates

Lab ID: 1903677-001

Project:

Client Sample ID: Hart #1 SJ East

Collection Date: 3/13/2019 2:24:00 PM Received Date: 3/14/2019 7:00:00 AM

Analyses DF Result RL Qual Units Date Analyzed **EPA METHOD 8260B: VOLATILES** Analyst: RAA n-Butylbenzene ND 0.60 200 3/15/2019 12:56:00 AM mg/L n-Propylbenzene 0.20 200 3/15/2019 12:56:00 AM ND mg/L sec-Butylbenzene ND 0.20 mg/L 200 3/15/2019 12:56:00 AM Styrene ND 0.20 mg/L 200 3/15/2019 12:56:00 AM tert-Butylbenzene 3/15/2019 12:56:00 AM ND 0.20 mg/L 200 1,1,1,2-Tetrachloroethane ND 0.20 mg/L 200 3/15/2019 12:56:00 AM 1,1,2,2-Tetrachloroethane ND 0.40 mg/L 200 3/15/2019 12:56:00 AM Tetrachloroethene (PCE) ND 0.20 mg/L 200 3/15/2019 12:56:00 AM trans-1,2-DCE 0.20 200 3/15/2019 12:56:00 AM ND mg/L trans-1,3-Dichloropropene ND 0.20 200 3/15/2019 12:56:00 AM mg/L 1,2,3-Trichlorobenzene 0.20 200 3/15/2019 12:56:00 AM ND mg/L 1,2,4-Trichlorobenzene ND 0.20 mg/L 200 3/15/2019 12:56:00 AM 1.1.1-Trichloroethane ND 0.20 mg/L 200 3/15/2019 12:56:00 AM 1,1,2-Trichloroethane 200 3/15/2019 12:56:00 AM ND 0.20 mg/L Trichloroethene (TCE) ND 0.20 mg/L 200 3/15/2019 12:56:00 AM Trichlorofluoromethane 200 3/15/2019 12:56:00 AM ND 0.20 mg/L 1,2,3-Trichloropropane 3/15/2019 12:56:00 AM ND 0.40 mg/L 200 Vinyl chloride 200 3/15/2019 12:56:00 AM ND 0.20 mg/L Xylenes, Total 0.30 200 3/15/2019 12:56:00 AM 0.81 mg/L Surr: 1,2-Dichloroethane-d4 89.5 200 3/15/2019 12:56:00 AM 70-130 %Rec Surr: 4-Bromofluorobenzene 95.8 70-130 %Rec 200 3/15/2019 12:56:00 AM

91.0

93.1

70-130

70-130

%Rec

%Rec

200

200

3/15/2019 12:56:00 AM

3/15/2019 12:56:00 AM

Matrix: AQUEOUS

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

Qualifiers:

Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

Page 3 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: MB-43704 Client ID: PBW		Type: ME			Code: El		6020: Total M	etals		
Prep Date: 3/15/2019	Analysis I		17.		SeaNo: 1		Units: mg/L			
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010								
Cadmium	ND	0.0010								
Chromium	ND	0.0010								
_ead	ND	0.0010								
Selenium	ND	0.0010								
Silver	ND	0.0010								

Sample ID: MSLLLCS-43704	Samp	Type: LC	LCSLL TestCode: EPA Method 6020: Total Metals							
Client ID: BatchQC	Bate	ch ID: 43	704	F	RunNo: 5	8442				
Prep Date: 3/15/2019	Analysis	Date: 3/	18/2019	5	SeqNo: 1	961413	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010	0.001000	0	89.1	70	130		-	
Cadmium	ND	0.0010	0.001000	0	95.1	70	130			
Chromium	0.0012	0.0010	0.001000	0	119	70	130			
Lead	ND	0.0010	0.001000	0	97.5	70	130			
Selenium	ND	0.0010	0.001000	0	82.6	70	130			
Silver	0.0011	0.0010	0.001000	0	106	70	130			

Sample ID: MSLCS-43704	Samp	SampType: LCS			TestCode: EPA Method 6020: Total Metals						
Client ID: LCSW	Bato	h ID: 43	704	F	RunNo: 5	8442					
Prep Date: 3/15/2019	Analysis	Date: 3/	18/2019	5	SeqNo: 1	961414	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.046	0.0010	0.05000	0	92.1	80	120				
Cadmium	0.050	0.0010	0.05000	0	99.6	80	120				
Chromium	0.050	0.0010	0.05000	0	101	80	120				
Lead	0.048	0.0010	0.05000	0	95.9	80	120				
Selenium	0.046	0.0010	0.05000	0	92.2	80	120				
Silver	0.041	0.0010	0.05000	0	82.6	80	120				

Sample ID: MSLCSD-43704	Samp	Type: LC	SD	Tes	TestCode: EPA Method 6020: Total Metals						
Client ID: LCSS02		th ID: 43			RunNo: 5		11-7-				
Prep Date: 3/15/2019 Analyte	Analysis I Result	PQL	18/2019 SPK value	SPK Ref Val	%REC	961415 LowLimit	Units: mg/L HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.047	0.0010	0.05000	0	93.3	80	120	1.22	20		
Cadmium	0.051	0.0010	0.05000	0	102	80	120	2.67	20		
Chromium	0.051	0.0010	0.05000	0	103	80	120	1.74	20		
Lead	0.047	0.0010	0.05000	0	94.8	80	120	1.07	20		

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

% Recovery outside of range due to dilution or matrix

Page 4 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677 28-Mar-19

Client: Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: MSLCSD-43704 SampType: LCSD TestCode: EPA Method 6020: Total Metals Client ID: LCSS02

Batch ID: 43704 RunNo: 58442

Prep Date: 3/15/2019 Analysis Date: 3/18/2019 SeqNo: 1961415 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC **HighLimit** %RPD **RPDLimit** LowLimit Qual Selenium 0.046 0.0010 0.05000 92.5 80 120 0.308 20 Silver 0.042 0.0010 0.05000 0 85.0 80 120 2.88 20

Sample ID: MB-43704 SampType: MBLK TestCode: EPA Method 6020: Total Metals

Client ID: PBW Batch ID: 43704 RunNo: 58622

Prep Date: 3/15/2019 Analysis Date: 3/25/2019 SeqNo: 1968681 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Barium ND 0.0010

Sample ID: MSLLLCS-43704 SampType: LCSLL TestCode: EPA Method 6020: Total Metals

Client ID: BatchQC Batch ID: 43704 RunNo: 58622

Prep Date: 3/15/2019 Analysis Date: 3/25/2019 SeqNo: 1968682 Units: mg/L

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

Barium 0.0012 0.0010 0.001000 117 130

Sample ID: MSLCS-43704 SampType: LCS TestCode: EPA Method 6020: Total Metals

Client ID: LCSW Batch ID: 43704 RunNo: 58622

Prep Date: 3/15/2019 Analysis Date: 3/25/2019 SeqNo: 1968683 Units: mg/L

Analyte SPK value SPK Ref Val PQL %REC HighLimit %RPD **RPDLimit** Qual Lowl imit

Barium 0.050 0.0010 0.05000 100 120

Sample ID: MSLCSD-43704 SampType: LCSD TestCode: EPA Method 6020: Total Metals

Client ID: LCSS02 Batch ID: 43704 RunNo: 58622

Prep Date: 3/15/2019 Analysis Date: 3/25/2019 SeqNo: 1968684 Units: mg/L

Analyte PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** %RPD **RPDLimit** Qual Barium 0.051 0.0010 0.05000 102 120 1.51

Qualifiers:

Value above quantitation range

ND Not Detected at the Reporting Limit

Reporting Detection Limit Sample container temperature is out of limit as specified at testcode Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Page 5 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

SampType: MBLK

1.0

3.0

1.0

ND

ND

Project:

Sample ID: rb

Hart #1 SJ East

Sample ID: 100ng Ics	Samp	Type: LC	S	TestCode: EPA Method 8260B: VOLATILES						
Client ID: LCSW	Batc	h ID: R5	8384	F	RunNo: 5	8384				
Prep Date:	Analysis [Date: 3/	14/2019	5	SeqNo: 1	958378	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	16	1.0	20.00	0	77.5	70	130			
Toluene	17	1.0	20.00	0	87.1	70	130			
Chlorobenzene	18	1.0	20.00	0	89.8	70	130			
1,1-Dichloroethene	15	1.0	20.00	0	72.6	70	130			
Trichloroethene (TCE)	14	1.0	20.00	0	71.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.7	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.6	70	130			
Surr: Dibromofluoromethane	8.9		10.00		88.8	70	130			
Surr: Toluene-d8	9.9		10.00		98.6	70	130			

TestCode: EPA Method 8260B: VOLATILES

Batc	h ID: R5	8384	. F	RunNo: 5	8384				
Analysis D	Date: 3/	14/2019	8	SeqNo: 1	958383	Units: µg/L			
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ND	1.0								
ND	1.0								
ND	1.0								
ND	1.0								
ND	1.0								
ND	1.0								
ND	1.0								
ND	1.0								
ND	2.0								
ND	4.0								
ND	4.0								
ND	10								
ND	1.0								
ND	1.0								
ND	1.0								
ND	3.0								
ND	10								
ND	10								
ND	1.0								
ND	1.0								
ND	2.0								
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Qualifiers:

Chloroform

Chloromethane

2-Chlorotoluene

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 6 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677 28-Mar-19

Client: Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: rb SampType: MBLK TestCode: EPA Method 8260B: VOLATILES Client ID: Batch ID: R58384 RunNo: 58384 Prep Date: Analysis Date: 3/14/2019 SeqNo: 1958383 Units: µg/L Analyte PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** LowLimit HighLimit Qual 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 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 ND Methylene Chloride 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:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 7 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

TestCode: EPA Method 8260B: VOLATILES

1903677

28-Mar-19

Client:

Souder, Miller and Associates

SampType: MS

Project:

Sample ID: 1903677-001ams

Hart #1 SJ East

Sample ID: rb	Samp	Гуре: МЕ	BLK	Tes	TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW	Batc	Batch ID: R58384			RunNo: 5	8384					
Prep Date:	Analysis [Date: 3/	14/2019	5	SeqNo: 1	958383	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	9.2		10.00		91.9	70	130				
Surr: 4-Bromofluorobenzene	9.5		10.00		95.5	70	130				
Surr: Dibromofluoromethane	9.0		10.00		89.7	70	130				
Surr: Toluene-d8	9.5		10.00		94.7	70	130				

Client ID: Hart #1 SJ East	Batc	h ID: R5	8384	F	8401					
Prep Date:	Analysis [Date: 3/	15/2019	5	SeqNo: 1	960600	Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.4	0.20	4.000	0.2872	78.7	70	130			
Toluene	4.6	0.20	4.000	1.218	84.4	70	130			
Chlorobenzene	3.6	0.20	4.000	0.06360	88.9	70	130			
1,1-Dichloroethene	3.0	0.20	4.000	0	75.6	67.6	130			
Trichloroethene (TCE)	2.9	0.20	4.000	0	73.5	70	130			
Surr: 1,2-Dichloroethane-d4	1.8		2.000		90.4	70	130			
Surr: 4-Bromofluorobenzene	1.9		2.000		97.5	70	130			
Surr: Dibromofluoromethane	1.8		2.000		89.7	70	130			
Surr: Toluene-d8	1.9		2.000		94.4	70	130			

Sample ID: 1903677-001amsd	SampT	ype: MS	D	Tes	ATILES					
Client ID: Hart #1 SJ East	Batch	n ID: R5	8384	F	RunNo: 5					
Prep Date:	Analysis D)ate: 3/	15/2019	8	SeqNo: 1960601 Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.2	0.20	4.000	0.2872	97.7	70	130	19.9	20	
Toluene	5.2	0.20	4.000	1.218	100	70	130	12.9	20	
Chlorobenzene	4.5	0.20	4.000	0.06360	111	70	130	22.1	20	R
1,1-Dichloroethene	3.7	0.20	4.000	0	92.3	67.6	130	19.8	20	
Trichloroethene (TCE)	3.6	0.20	4.000	0	90.9	70	130	21.1	20	R
Surr: 1,2-Dichloroethane-d4	1.9		2.000		92.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.9		2.000		97.4	70	130	0	0	
Surr: Dibromofluoromethane	1.8		2.000		92.1	70	130	0	0	
Surr: Toluene-d8	1.9		2.000		96.0	70	130	0	0	

E Value above quantitation range Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Page 8 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

17

20.00

Project:

Hart #1 SJ East

Sample ID: Ics-43758	Samp1	ype: LC	S	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: LCSW	Batc	n ID: 43	758	F	RunNo: 8	58550				
Prep Date: 3/19/2019	Analysis E	Date: 3/	21/2019	\$	SeqNo: 1	1965840	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	16	0.50	20.00	0	80.1	29.6	105			
1-Methylnaphthalene	16	1.0	20.00	0	78.1	33.4	112			
2-Methylnaphthalene	15	1.0	20.00	0	77.2	28.6	108			
Acenaphthylene	17	0.50	20.00	0	83.9	35.7	116			
Acenaphthene	16	0.50	20.00	0	80.4	32.4	118			
Fluorene	16	0.50	20.00	0	80.9	35.6	118			
Phenanthrene	17	0.50	20.00	0	84.7	36.3	130			
Anthracene	17	0.50	20.00	0	84.8	34.8	135			
Fluoranthene	17	0.50	20.00	0	85.5	41	136			
Pyrene	18	0.50	20.00	0	91.1	44.8	136			
Benz(a)anthracene	18	0.50	20.00	0	91.0	41.1	136			
Chrysene	18	0.50	20.00	0	90.6	37.9	132			
Benzo(b)fluoranthene	19	0.50	20.00	0	94.3	39	144			
Benzo(k)fluoranthene	18	0.50	20.00	0	90.1	40	144			
Benzo(a)pyrene	18	0.50	20.00	0	87.6	36.8	137			
Dibenz(a,h)anthracene	18	0.50	20.00	0	91.9	31.5	141			
Benzo(g,h,i)perylene	20	0.50	20.00	0	97.6	32.9	138			
Indeno(1,2,3-cd)pyrene	19	0.50	20.00	0	95.6	40.9	143			
Surr: N-hexadecane	72		87.60		81.9	20.4	126			

Sample ID: Icsd-43758	SampT	SampType: LCSD			Code: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batch ID: 43758			F	RunNo: 5	8550				
Prep Date: 3/19/2019	Analysis D	Date: 3/	21/2019		SeqNo: 1	965841	Units: µg/L			
Analyte	Result PQL SPK value		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Naphthalene	16	0.50	20.00	0	80.3	29.6	105	0.249	68.7	
-Methylnaphthalene	16	1.0	20.00	0	80.1	33.4	112	2.53	66	
2-Methylnaphthalene	16	1.0	20.00	0	79.2	28.6	108	2.56	68.7	
Acenaphthylene	18	0.50	20.00	0	87.8	35.7	116	4.54	64.9	
Acenaphthene	18	0.50	20.00	0	87.7	32.4	118	8.69	53.2	
Fluorene	18	0.50	20.00	0	88.8	35.6	118	9.31	62.4	
Phenanthrene	19	0.50	20.00	0	93.4	36.3	130	9.77	62.6	
Anthracene	18	0.50	20.00	0	92.4	34.8	135	8.58	62.4	
Fluoranthene	20	0.50	20.00	0	99.1	41	136	14.7	59.4	
Pyrene	20	0.50	20.00	0	100	44.8	136	9.51	55.4	
Benz(a)anthracene	19	0.50	20.00	0	94.3	41.1	136	3.56	56.6	
Chrysene	19	0.50	20.00	0	95.2	37.9	132	4.95	51.9	
Benzo(b)fluoranthene	19	0.50	20.00	0	95.2	39	144	0.950	59.1	

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Surr: Benzo(e)pyrene

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

85.8

21.4

126

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 9 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: Icsd-43758	Samp	Type: LC	SD	TestCode: EPA Method			8270C: PAHs			
Client ID: LCSS02	Batc	h ID: 43	758	F	RunNo: 5	8550				
Prep Date: 3/19/2019	Analysis [Date: 3/	21/2019	8	SeqNo: 1	965841	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	18	0.50	20.00	0	90.8	40	144	0.774	57	
Benzo(a)pyrene	18	0.50	20.00	0	90.4	4 36.8	137	3.15	60.2	
Dibenz(a,h)anthracene	19	0.50	20.00	0	94.6	31.5	141	2.90	64.7	
Benzo(g,h,i)perylene	perylene 20 0.50 20.00		0	102	32.9	138	4.51	61.5		
Indeno(1,2,3-cd)pyrene	o(1,2,3-cd)pyrene 20 0.50 20.00 0 98.7		40.9	143	3.19	61.1				
Surr: N-hexadecane 72 87.60			82.5	20.4	126	0	0			
Surr: Benzo(e)pyrene 18 20.00			90.3	21.4	126	0	0			
Sample ID: mb-43758	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8270C: PAHs			

		Jpo. III		Totodo. El Amedioa el roc. I Alla						
Client ID: PBW	Batc	h ID: 43	758	F	RunNo: 5	8550				
Prep Date: 3/19/2019	Analysis D	Date: 3/	21/2019	8	SeqNo: 1	965842	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		76.1	20.4	126			
Surr: Benzo(e)pyrene	15		20.00		77.3	21.4	126			

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

Page 10 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1903677

28-Mar-19

Client:

Souder, Miller and Associates

Project:

Hart #1 SJ East

Sample ID: MB-43775

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Batch ID: 43775

RunNo: 58504

Prep Date: 3/19/2019

Analysis Date: 3/20/2019

PQL

SeqNo: 1963758

Units: mg/L

SPK value SPK Ref Val %REC LowLimit

HighLimit %RPD

RPDLimit Qual

Qual

Qual

Mercury

ND 0.00020

Sample ID: LCS-43775

SampType: LCS

TestCode: EPA Method 7470: Mercury

Client ID: LCSW

Batch ID: 43775

RunNo: 58504

Prep Date: 3/19/2019 Analysis Date: 3/20/2019 SeqNo: 1963759

Units: mg/L

%RPD RPDLimit

120

Analyte PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** Mercury 0.0050 0.00020 0.005000 101

Sample ID: LCSD-43775

Client ID: LCSS02

SampType: LCSD Batch ID: 43775 TestCode: EPA Method 7470: Mercury

RunNo: 58504

HighLimit

Prep Date: 3/19/2019

Analysis Date: 3/20/2019

SeqNo: 1963760

Units: mg/L

%RPD

RPDLimit

Analyte Mercury

Result PQL SPK value SPK Ref Val %REC LowLimit 0.0050 0.00020 0.005000

100

0.516

Qualifiers:

Value above quantitation range ND Not Detected at the Reporting Limit

Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Page 11 of 11

1903677-001D HAR Collected date/lime. 0			SAM	PLE RE	SULTS - 01		ONE LAS NATIONWIDE	n
Wet Chemistry by	Method 4500	CN E-2011						
	Result	Qualfier	RCL	Dilution	Analysis	Batch		
Analyte	ngA		mg/l		date / time			1
Reactive Cyanide	0.0447		0.00500	1	03/20/2019 15/48	WG1257497		
Wet Chemistry by	Method 4500H	H+ B-2011						5
	Result	Qualifer	Dilution	Analysis	Batch	7-7-1705-18	A PART OF THE PART	L
Analyte	Sti			date / time				10
Corrosivity by ph	5.54	<u>T8</u>	1	03/15/2019 12:3	5 <u>WG1250855</u>			L
Sample Narrative: L1079321-01 WG*250855:	5.54 at 15.90							The second
Wet Chemistry by	Method 9034-	9030B						0
	Result	Qualifier	RDL	Diution	Analysis	Eatch		Fe
Analyte	mg/l		mg/l		date / time			1
Reactive Sulfide	0.0880		0.0500	1	C3/19/2019 12:01	WG1251593		F
Wet Chemistry by	Method D93/10	010A						
	Result	Qualifier	Dilution	Analysis	Batch			S
Analyte	deg F			date / time				-
-lashpoint	DNF at 170		4	03/21/2019 18:4	7 9051252536			

ACCOUNT: Hall Environmental Analysis Laboratory PROJECT:

SDG: 13079321 DATE/TIME: 03/27/19 14:33

DATE/TIME 03/22/19 14:33

SDG: LN079321

PROJECT

ACCOUNT:
-las Environments Analysis Leboratory

WG1252497 Wet Chemistry by Method 4500 CN E-2011	0	QUALITY CONTROL SUMMARY	ONELAB NATIONWIDE
Method Blank (MB)			
(MB) R3393470-1 03/20/1915:17 MB Result MB Cualiffer M Analyce Ing/ Reactive Cyanide U	MB MD. MB RDI. mg/l mg/l o.poned o.oosoo) J.
Laboratory Control Sample (LCS)			5
Analyte mg/l CS Result LCS Result	S Sec. Rec. Limits S S S S S S S S S S S S S S S S S S S	LCS Gundiffor	

CS/22/19 14.33

SDG

ACCOUNT:

WG1251593	VG1251593	9328		10	JALITY C	QUALITY CONTROL SUMMARY	ONE LAR NATIONWIDE
ABI R3392984-1 03/19/19 12:00 MB Re rative Suffice U	PS TZ OO MB Result mg/l	MB Gualifier	MB MDL rigd 0.00650	MB PDL mpil 0.0520			3 3
-2 C3/19	esboratory Control Sample (LCS) CS) R3392984-2 C3/19/19 12:00 Spike Amount LCS rayl mg notive Suificie 0:500 0.5	Sample (LCS) 12:00 Spike Amount LCS Result mg/l mg/l 05:00 0:512	LCS Rec. 35 1922	Rec. Lmits	LCS Duatifier		5 5 5 5
							Z 25

DA_E/TIME-03/22/19 14:33

SDG [1079321

PROJECT:

WG1252539 Wet Chemistry by Method D93/1010A	9 Wethed 093/1010	*		0	NALI	QUALITY CONTROL SUMMARY	ONE LAB. NATIONNIDE	
L1079359-04 Original Sample (OS) - Duplicate (DUP)	riginal Sample	(OS) - Dr	plicate ((dnc				
(OS) L1079359-04 03/21/19 18:47 - (DUP) R3393373-2 03/2/19 18:47	V21/19 18:47 - (DUP)	R3393973-2	03/27/918	47				
	Original Result DUP Result	DUP Result	Dilutan DUP 39D	Oct and	DUP Gualifier	Dup seo		1
Analyte	degf	deaf		16				
Flashpoint	ONF at 170	CNF at 170	-	0.000		9		(/) (/)
L1079930-02 Original Sample (OS) - Duplicate (DUP)	eldmas lample	(OS) - Dr	plicate (Jane				,5
(05) L1079930-02 03/21/19 18:47 • (DUP) R3393973-3 03/21/19 18:47	V21/19 18:47 - (DUP)	R3393973-3	03/21/19 18	47				_
	Original Result DUP Result	DUP Result	Disution DUP RPD		DUP Qualifier	DUP RPD		(i)
Analyte	4 600	4 gab		200		W 1		1 80
rinapean	2	5	1	967				0
Laboratory Control Sample (LCS)	rol Sample (LC	(52)						0
ACS) R3393973-1 03/21/1918:47	21/19/18:47							1 E
	Spike Amount LCS Result	LCS Result	LCS Rec.	Rec. Lmts	LCS Qualifier	nifier		M
Analyte	1 got	4 flap	R	il.				4
Elaberin	0.00	920	4034	06.0304				0

ACCOUNT Hall Cryinonmental Analysis Lettor Result

Custody (Sc)

GLOSSARY OF TERMS

DAELAS NATIONWIDE



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.



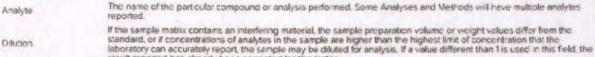
Ss

Cn

Qc

Abbreviations and Definitions

MDL	Melhod Detection Limit
	NEW NO DESCRIPTIONS
RDL	Reported Detection Limit.
Rec	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group
U	Not detected at the Reporting Limit for MOL where applicable)



result reported has already been corrected for this factor

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 Limits duplicated within these ranges. The non-spiked sample in the prepiatch used to determine the Relative Percent Difference (RPD) from a quality control Original Sample

sample. The Original Sample may not be included within the reported SDG 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. Qualifier

The actual enalytical 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) are 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.

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. Case Narrative (Cn)

This section of the report includes the results of the laboratory quality control analyses required by procedure or Quality Control 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. Summary (Qc)

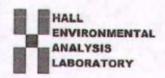
This is the document created in the field when your samples were initially collected. This is used to verry the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also columnities all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis. Sample Chain of

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 Results (Sr)

This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and Sample Summary (Ss) times of preparation and/or analysis.

Qualifier Description

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



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87199 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.haileavironmenial.com

Sample Log-In Check List

Client Name: SMA-FARM	Work Order Nu	mber: 1903677		RoptNo: 1	1
Received By: Anne Thorne	3/14/2019 7:00:00	O AM	an A.		
Completed By: Victoria Zellar	3/14/2019 8:34:18	5 AM	Victoria Se	llas	Land I
Reviewed By: ENM	3/14/19			YG 3/1	
Chain of Custody				10 01.	11.1
1. Is Chain of Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courer			
Log In					
3. Was an attempt made to cool the samp	les?	Yes 🔽	No 🗆	NA 🗆	
4. Were all samples received at a tempera	ture 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 to	est(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) pro	operly preserved?	Yes 🗷	No 🗆		
B. Was preservative added to bottles?		Yes 🗆	No 🗸	NA 🗆	
9. VOA vials have zero headspace?		Yes 🗸	No 🗆	No VOA Vials	
10. Were any sample containers received b	roken?	Yes 🗆	No 🗸	# of preserved	
 Does paperwork match bottle labels? (Note discrepancies on chain of custody 	,	Yes 🔽	No 🗆	for pH:	2 12 unless noted)
12. Are matrices correctly identified on Chair	n of Custody?	Yes 🗸	No 🗌	Adjusted?	VU
13. Is it clear what analyses were requested	?	Yes 🗸	No 🗆	V	c almilia
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗆	Checked by:	6 3/14/19
Special Handling (if applicable)					
15. Was client notified of all discrepancies v	with this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified:	Dat	e: [
By Whom.	Via	eMail I	Phone Fax	In Person	
Regarding:	of the second				
Client Instructions:					
16. Additional remarks:					
17. Cooler Information Cooler No Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By		
1 1.0 Good	Yes	West State	3,500 0)		

Page 1 of 1

Chain-of-Custody Record	Time		HALL		VIE	SON	ENVIRONMENTAL	
Jung.	Standard WRush + Standard		ANALYSIS	LYS	SI	ABO	ABORATORY	
			WWW.h	www.hallenvironmental.com	nemno	tal.com		
Mailing Address: 401 W. Breaks word	HART * 1 SIEAR	4901 H	4901 Hawkins NE -		nbuent	Albuquerque, NM 87109	7109	
Parining by	Project #.	Tel. 50	505-345-3975	5 Fax		505-345-4107	20	
Phone #: 454 325-7535				Inal	is Req	Request		
email or Fax#:	Project Manager.			10		(10		
ige:	Actile min wil	AM \	-			əsqv		
☐ Standard ☐ Level 4 (Full Validation)		05	_	_		//Ju		
on: 🗆 Az Compliance	5.7	IO/	123	_	(1	9361		
Other	Unice: Vies INO	SRC	0 0	_	VO:	d) (
EDU (1)pe)	# of Coolers:	o(c	158	NC		nio		
	0"	M \ X 8168	(Met) 3 yd 31 10 8 M	, Br.	(Seu	II Colif		
Date Time Matrix Sample Name	Type and # Type	HdI	H∀d	CI' E		EloT S		
2-13-17 14-24 Acces HART #1 5553+	4		7 ×	X	7	X		
State: Time: Reinguished by Date: Time: Reinguished by Martin 1804	Received by: Via: Date Time 1/28 Received by: Via: Date Time 1/28	Remarks: 82 Te 14 Ca		Johnson	- t	Tech	P Cincif	- N 0

Received by OCD: 11/8/2023 4:42:52 PM
District 1
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

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, Farm	nington NM 87401
2. Originating Site: Chaco Plant	
3. Location of Material (Street Address, City, State or ULS UL M Section 16, T26N, R12W; 36.482905, -108.119193	TR):
4. Source and Description of Waste:	
Source: Description: Hydrocarbon impacted soil associated blow down	
Estimated Volume 500 yd ³ / obls Known Volume	yd³/bbls
5. GENERATOR CEL	16.
	, ,
I, Thomas Long Than Joy, representative or authoriz	
Generator Signature	18 18
certify that according to the Resource Conservation a	tection Agency's July 1988
I, Thomas Long , representative or authoriz Generator Signature certify that according to the Resource Conservation a regulatory determination, the above described waste RCRA Exempt: Oil field wastes generated to exempt waste. Operator Use Only: Waste A	19
RCRA Exempt: Oil field wastes generated t	d are not mixed with non-
exempt waste.	<u>Load</u>
RCRA Non-Exempt: Oil field waste which	ards for waste hazardous by
characteristics established in RCRA regulations, subpart D, as amended. The following document	ned in 40 CFR, part 261, te is non-hazardous. (Check
the appropriate items)	ic is non-nazardous. (Check
☐ MSDS Information ☐ RCRA Hazardous Waste	description in Box 4)
GENERATOR 19.15.36.15 WASTE TE	DFARMS
Thomas Long	
I, Thomas Long , representative for Enterprise Pro	ducts Operating authorize Agua Moss, LLC to complete
Generator Signature	
the required testing/sign the Generator Waste Testing Certification	on.
I, , representative for	Agua Moss, Inc. do hereby certify that
	to the paint filter test and tested for chloride content and that the samples
	ble to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the about 19.15.36 NMAC.	ove-described waste conform to the requirements of Section 15 of
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,	
MALLET A VENT	
Method of Treatment and/or Disposal: ☐ Evaporation ☐ Injection ☐ Treating P	lant
Waste Acceptance Status:	
☐ APPROVED	☐ DENIED (Must Be Maintained As Permanent Record)
DDINT NAME.	TITLE: DATE:
PRINT NAME:SIGNATURE:	TITLE: DATE: TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent	

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



June 28, 2019

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

FAX

RE: Chaco Plant OrderNo.: 1906755

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/14/2019 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 1906755

Date Reported: 6/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Chaco Plant

Client Sample ID: Chaco Non Exempt

Collection Date: 6/13/2019 8:31:00 AM

Lab ID: 1906755-001 Matrix: AQUEOUS Received Date: 6/14/2019 7:55:00 AM

Analyses	Result	RL	Qual Unit	s DF	Date Analyzed
EPA METHOD 7470: MERCURY		The state of		THE REST	Analyst: rde
Mercury	0.0015	0.00020	mg/	1	6/25/2019 6:13:08 PM
EPA 6010B: TOTAL RECOVERABLE METALS					Analyst: ELS
Arsenic	ND	0.10	mg/	_ 5	6/19/2019 8:38:52 AM
Barium	0.30	0.10	mg/		6/19/2019 8:38:52 AM
Cadmium	ND	0.010	mg/		6/19/2019 8:38:52 AM
Chromium	0.083	0.030	mg/		6/19/2019 8:38:52 AM
Lead	ND	0.025	mg/		6/19/2019 9:48:38 AM
Selenium	ND	0.25	mg/		6/19/2019 8:38:52 AM
Silver	ND	0.025	mg/		6/19/2019 8:38:52 AM
EPA METHOD 8270C: PAHS					Analyst: JDC
Naphthalene	ND	5.0	µg/L	1	6/20/2019 8:55:11 AM
1-Methylnaphthalene	ND	10	μg/L		6/20/2019 8:55:11 AM
2-Methylnaphthalene	ND	10	μg/L		6/20/2019 8:55:11 AM
Acenaphthylene	ND	5.0	μg/L		6/20/2019 8:55:11 AM
Acenaphthene	ND	5.0	μg/L		6/20/2019 8:55:11 AM
Fluorene	ND	5.0	µg/L		6/20/2019 8:55:11 AM
Phenanthrene	ND	5.0	μg/L		6/20/2019 8:55:11 AM
Anthracene	ND	5.0	μg/L		6/20/2019 8:55:11 AM
Fluoranthene	ND	5.0	μg/L		6/20/2019 8:55:11 AM
Pyrene	ND	5.0	μg/l	1	6/20/2019 8:55:11 AM
Benz(a)anthracene	ND	5.0	μg/L	1	6/20/2019 8:55:11 AM
Chrysene	ND	5.0	μg/L	. 1	6/20/2019 8:55:11 AM
Benzo(b)fluoranthene	ND	5.0	μg/l	. 1	6/20/2019 8:55:11 AM
Benzo(k)fluoranthene	ND	5.0	μg/L	. 1	6/20/2019 8:55:11 AM
Benzo(a)pyrene	ND	5.0	µg/L	. 1	6/20/2019 8:55:11 AM
Dibenz(a,h)anthracene	ND	5.0	μg/L	. 1	6/20/2019 8:55:11 AM
Benzo(g,h,i)perylene	ND	5.0	μg/l	. 1	6/20/2019 8:55:11 AM
Indeno(1,2,3-cd)pyrene	ND	5.0	μg/l	. 1	6/20/2019 8:55:11 AM
Surr: N-hexadecane	52.8	20.4-126	%R	ec 1	6/20/2019 8:55:11 AM
Surr: Benzo(e)pyrene	57.7	21.4-126	%R	ec 1	6/20/2019 8:55:11 AM
EPA METHOD 8260B: VOLATILES					Analyst: RAA
Benzene	ND	0.50	mg/	L 200	6/15/2019 12:51:00 AM
Toluene	0.45	0.20	mg/	L 200	6/15/2019 12:51:00 AM
Ethylbenzene	ND	0.20	mg/	L 200	6/15/2019 12:51:00 AM
Methyl tert-butyl ether (MTBE)	ND	0.20	mg/	L 200	6/15/2019 12:51:00 AM
1,2,4-Trimethylbenzene	ND	0.20	mg/	L 200	6/15/2019 12:51:00 AM
1,3,5-Trimethylbenzene	ND	0.20	mg/	L 200	6/15/2019 12:51:00 AM
1,2-Dichloroethane (EDC)	ND	0.20	mg/	L 200	6/15/2019 12:51:00 AM

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 1 of 12

Analytical Report

Lab Order 1906755

Date Reported: 6/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Chaco Plant

Lab ID: 1906755-001

Matrix: AQUEOUS

Collection Date: 6/13/2019 8:31:00 AM **Received Date:** 6/14/2019 7:55:00 AM

Client Sample ID: Chaco Non Exempt

1.2-Dibromoethane (EDB) ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Naphthalene ND 0.40 mg/L 200 6/15/2019 12:51:00 AM 1-Methylnaphthalene ND 0.80 mg/L 200 6/15/2019 12:51:00 AM Acetone ND 0.80 mg/L 200 6/15/2019 12:51:00 AM Acetone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Acetone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Acetone ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Bromobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Bromoform ND 0.60 mg/L 200 6/15/2019 12:51:00 AM Bromoform ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Carbon disulfide ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Carbon disulfide ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Carbon disulfide ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chloroethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chloroethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chloroethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorotethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Cis-1,3-Dichlorotethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Cis-1,3-Dichlorotethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Cis-1,3-Dichlorotethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Cis-1,0-Dichlorotethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM	Analyses	Result	RL Qua	al Units	DF	Date Analyzed
Naphthalene	EPA METHOD 8260B: VOLATILES		THE ROLL		H	Analyst: RAA
1-Methylnaphthalene	1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
2-Methylnaphthalene	Naphthalene	ND	0.40	mg/L	200	6/15/2019 12:51:00 AM
Acetone	1-Methylnaphthalene	ND	0.80	mg/L	200	6/15/2019 12:51:00 AM
Bromobenzene	2-Methylnaphthalene	ND	0.80	mg/L	200	6/15/2019 12:51:00 AM
Bromodichloromethane	Acetone	ND	2.0	mg/L	200	6/15/2019 12:51:00 AM
Bromoform	Bromobenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Bromomethane	Bromodichloromethane	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
2-Butanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Carbon disulfide ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Carbon Tetrachloride ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chloroform ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Chloroform ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorofoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropane ND 0.20 mg/L <	Bromoform	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Carbon disulfide ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Carbon Tetrachloride ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorobenzene ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Chloroform ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorofoluene ND 0.60 mg/L 200 6/15/2019 12:51:00 AM Cb-Chlorofoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorofoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorofoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorofoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichloropropane ND 0.20 mg/L<	Bromomethane	ND	0.60	mg/L	200	6/15/2019 12:51:00 AM
Carbon Tetrachloride ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorotethane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Chlorotor ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloroberropane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L	2-Butanone	ND	2.0	mg/L	200	6/15/2019 12:51:00 AM
Chlorobenzene	Carbon disulfide	ND	2.0	mg/L	200	6/15/2019 12:51:00 AM
Chloroethane	Carbon Tetrachloride	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Chloroform ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Chloromethane ND 0.60 mg/L 200 6/15/2019 12:51:00 AM 2-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,2-DCE ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichlorogropane ND 0.20 <td>Chlorobenzene</td> <td>ND</td> <td>0.20</td> <td>mg/L</td> <td>200</td> <td>6/15/2019 12:51:00 AN</td>	Chlorobenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
Chloromethane ND 0.60 mg/L 200 6/15/2019 12:51:00 AM 2-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,2-DCE ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichlorodifluoromethane </td <td>Chloroethane</td> <td>ND</td> <td>0.40</td> <td>mg/L</td> <td>200</td> <td>6/15/2019 12:51:00 AN</td>	Chloroethane	ND	0.40	mg/L	200	6/15/2019 12:51:00 AN
2-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,2-DCE ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Dibromomethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichloroprobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichloropropane ND	Chloroform	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
4-Chlorotoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,2-DCE ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichloropethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichloropethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichloropropane <	Chloromethane	ND	0.60	mg/L	200	6/15/2019 12:51:00 AN
cis-1,2-DCE ND 0.20 mg/L 200 6/15/2019 12:51:00 AM cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropene ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Dibromomethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichloroptopane ND <td>2-Chlorotoluene</td> <td>ND</td> <td>0.20</td> <td>mg/L</td> <td>200</td> <td>6/15/2019 12:51:00 AN</td>	2-Chlorotoluene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
cis-1,3-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Dibromomethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichloropethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichloropropane <t< td=""><td>4-Chlorotoluene</td><td>ND</td><td>0.20</td><td>mg/L</td><td>200</td><td>6/15/2019 12:51:00 AN</td></t<>	4-Chlorotoluene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
1,2-Dibromo-3-chloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM Dibromochloromethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Dibromomethane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,4-Dichlorobenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichloroptenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,2-Dichloropropane ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 1,3-Dichloropropane ND 0.40 mg/L 200 6/15/2019 12:51:00 AM 1,1-Dichloropropane N	cis-1,2-DCE	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
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1,1-Dichloropropene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM Hexachlorobutadiene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 2-Hexanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Isopropylbenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Isopropyltoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Methyl-2-pentanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM	1,3-Dichloropropane	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
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2-Hexanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM Isopropylbenzene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Isopropyltoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AM 4-Methyl-2-pentanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM	1,1-Dichloropropene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
Isopropylbenzene	Hexachlorobutadiene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
4-Isopropyltoluene ND 0.20 mg/L 200 6/15/2019 12:51:00 AN 4-Methyl-2-pentanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AN	2-Hexanone	ND	2.0	mg/L	200	6/15/2019 12:51:00 AN
4-Methyl-2-pentanone ND 2.0 mg/L 200 6/15/2019 12:51:00 AM	Isopropylbenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AN
	4-Isopropyltoluene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Methylene Chloride ND 0.60 mg/L 200 6/15/2019 12:51:00 AM	4-Methyl-2-pentanone	ND	2.0	mg/L	200	6/15/2019 12:51:00 AM
	Methylene Chloride	ND	0.60	mg/L	200	6/15/2019 12:51:00 AM

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 12

Lab ID:

Analytical Report

Lab Order 1906755

Date Reported: 6/28/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Chaco Plant

1906755-001

Matrix: AQUEOUS

Collection Date: 6/13/2019 8:31:00 AM Received Date: 6/14/2019 7:55:00 AM

Client Sample ID: Chaco Non Exempt

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES			N. T.		Analyst: RAA
n-Butylbenzene	ND	0.60	mg/L	200	6/15/2019 12:51:00 AM
n-Propylbenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
sec-Butylbenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Styrene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
tert-Butylbenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	6/15/2019 12:51:00 AM
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
trans-1,2-DCE	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,1,1-Trichloroethane	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,1,2-Trichloroethane	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Trichloroethene (TCE)	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Trichlorofluoromethane	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
1,2,3-Trichloropropane	ND	0.40	mg/L	200	6/15/2019 12:51:00 AM
Vinyl chloride	ND	0.20	mg/L	200	6/15/2019 12:51:00 AM
Xylenes, Total	ND	0.30	mg/L	200	6/15/2019 12:51:00 AM
Surr: 1,2-Dichloroethane-d4	97.1	70-130	%Rec	200	6/15/2019 12:51:00 AM
Surr: 4-Bromofluorobenzene	91.7	70-130	%Rec	200	6/15/2019 12:51:00 AM
Surr: Dibromofluoromethane	96.8	70-130	%Rec	200	6/15/2019 12:51:00 AM
Surr: Toluene-d8	90.8	70-130	%Rec	200	6/15/2019 12:51:00 AM

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
- 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
- RL Reporting Limit

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1906755-001D CHACO NON EXEMPT Collected date/time: 06/13/19 08:31

SAMPLE RESULTS - 01

ONE LAB. NATIONWIDE.

E. 1

Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/I		mg/I		date / time	
Reactive Cyanide	0.0162		0.00500	1	06/28/2019 13:21	WG1302668



Wet Chemistry by Method 4500H+ B-2011

	Result	Qualifier	Dilution	Analysis	<u>Batch</u>	
Analyte	Su			date / time		
Corrosivity by pH	6.76	<u>T8</u>	1	06/19/2019 10:00	WG1298240	



Sample Narrative:

L1110050-01 WG1298240: 6.76 at 15.6C





Wet Chemistry by Method 9034-9030B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/l		date / time		
Reactive Sulfide	0.0780		0.0500	1	06/20/2019 18:26	WG1299038	



Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	deg F			date / time	
Flashpoint	DNF at 170		1	06/26/2019 17:41	WG1302077

Analyte

Analyte

Analyte

Analyte

Analyte

Analyte

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

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DATE/TIME: 06/28/19 14:46

SDG:

Rec. Limits

LCS Rec. % % 99.5

Spike Amount LCS Result

Wet Chemistry by Method 4500H+ B-2011

WG1298240

Laboratory Control Sample (LCS)

(LCS) R3422350-1 06/19/19 10:00

101-0.66

su 9.95

su 10.01

Analyte Corrosivity by pH Sample Narrative: LCS: 9.95 at 21.3C Sc

DATE/TIME: 06/28/19 14:46

SDG:

ACCOUNT: Hall Environmental Analysis Laboratory

PROJECT:

0.00650

Mg/I

MB MDL

MB Qualifier

MB Result

I/Gm

Reactive Sulfide

Analyte

(MB) R3423170-1 06/20/19 18:16

Method Blank (MB)

Wet Chemistry by Method 9034-9030B

WG1299038

LCS Rec.

LCS Result mg/l 0.531

Spike Amount

Laboratory Control Sample (LCS)

(LCS) R3423170-2 06/20/19 18:16

301

mg/l 0.500

Reactive Sulfide

Analyte

LCS Rec. 702

LCS Result

Spike Amount

Laboratory Control Sample (LCS)

(LCS) R3425069-1 06/26/19 17:41

deg F 83.5

deg F 82.0

Flashpoint

Analyte

06/28/19 14:46 DATE/TIME:

L1110050 SDG:

PROJECT:

Original Result DUP Result

Wet Chemistry by Method D93/1010A

WG1302077

DNF at 170

DNF at 170 deg F

Flashpoint

Analyte

deg F

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE



Cn

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.

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.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision,
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ACCOUNT: Hall Environmental Analysis Laboratory PROJECT:

SDG: L1110050

DATE/TIME: 06/28/19 14:46

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Ss

Cn

GI

Sc

PAGE:

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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 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.

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	TN00C03	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina 1	DW21704
Georgia	NELAP	North Carolina 3	41
Georgia 1	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
lowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky 1 6	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	Al30792	Tennessee 1 4	2006
Louisiana 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	AZLA

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		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

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.



Hall Environmental Analysis Laboratory, Inc.

WO#:

1906755

28-Jun-19

Client:

Souder, Miller and Associates

Project:

Chaco Plant

Sample ID: 100ng lcs2 Client ID: LCSW		ype: LC			tCode: El		8260B: VOL	ATILES		
Prep Date:	Analysis E	Date: 6/	15/2019	8	SeqNo: 2	053350	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130		14	
Toluene	22	1.0	20.00	0	110	70	130			
Chlorobenzene	23	1.0	20.00	0	115	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.2	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.5	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	9.1		10.00		90.7	70	130			

Sample ID: rb2	Samp	SampType: MBLK			TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batc	n ID: B6	0679	F	RunNo: 6	0679						
Prep Date:	Analysis [)ate: 6/	15/2019		SeqNo: 2	053351	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	1.0		No.	200	100						
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										

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

ND

1.0

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

1,2-Dibromoethane (EDB)

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

8 % 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

Hall Environmental Analysis Laboratory, Inc.

WO#: 1906755

28-Jun-19

Client: Souder, Miller and Associates

Chaco Plant Project:

Sample ID: rb2	Samp	ype: ME	BLK	Tes	tCode: EF	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	n ID: B6	0679	F	RunNo: 60	0679				
Prep Date:	Analysis [)ate: 6/	15/2019	8	SeqNo: 20	053351	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0						No a Proper		
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								
,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								
,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
sopropylbenzene	ND	1.0								
l-Isopropyltoluene	ND	1.0								
I-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 ND	1.0								
1,1,2,2-Tetrachloroethane	ND ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
rans-1,2-DCE	ND	1.0								
rans-1,2-DGE 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								
1,1,2-Trichloroethane	ND	1.0								
Frichloroethene (TCE)	ND	1.0								
Frichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1906755

28-Jun-19

Client: Souder, Miller and Associates

Project: Chaco Plant

Sample ID: rb2 SampType: MBLK TestCode: EPA Method 8260B: VOLATILES Client ID: PBW Batch ID: **B60679** RunNo: 60679 Prep Date: Analysis Date: 6/15/2019 SeqNo: 2053351 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 9.6 10.00 96.4 70 130 Surr: 4-Bromofluorobenzene 9.3 10.00 93.1 70 130 Surr: Dibromofluoromethane 9.7 10.00 96.9 70 130 Surr: Toluene-d8 9.1 10.00 91.5 70 130

Sample ID: 1906755-001ams SampType: MS TestCode: EPA Method 8260B: VOLATILES Client ID: Chaco Non Exempt Batch ID: B60679 RunNo: 60679 Prep Date: Analysis Date: 6/15/2019 SeqNo: 2053353 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC %RPD LowLimit HighLimit **RPDLimit** Qual Benzene 4.4 0.20 4.000 0.1536 70 107 130 Toluene 4.6 0.20 0.4532 70 4.000 105 130 Chlorobenzene 4.5 0.20 4.000 0 111 70 130 1,1-Dichloroethene 4.1 0.20 4.000 0 103 67.6 130 Trichloroethene (TCE) 4.1 0.20 4.000 103 70 130 Surr: 1,2-Dichloroethane-d4 2.0 2.000 99.4 70 130 Surr: 4-Bromofluorobenzene 1.9 2.000 95.1 70 130 Surr: Dibromofluoromethane 2.0 2.000 99.0 70 130 Surr: Toluene-d8 1.9 2.000 92.7 70 130

Sample ID: 1906755-001amsd	I Samp7	ype: MS	SD	TestCode: EPA Method 8260B: VOLATILES							
Client ID: Chaco Non Exem	pt Batc	h ID: B6	0679	F	RunNo: 6	0679					
Prep Date:	Analysis D)ate: 6/	15/2019	5	SeqNo: 2	053354	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	4.3	0.20	4.000	0.1536	103	70	130	4.13	20		
Toluene	4.5	0.20	4.000	0.4532	100	70	130	3.78	20		
Chlorobenzene	4.2	0.20	4.000	0	106	70	130	4.89	20		
1,1-Dichloroethene	3.9	0.20	4.000	0	97.9	67.6	130	4.84	20		
Trichloroethene (TCE)	3.9	0.20	4.000	0	98.6	70	130	4.00	20		
Surr: 1,2-Dichloroethane-d4	1.9		2.000		96.1	70	130	0	0		
Surr: 4-Bromofluorobenzene	1.9		2.000		95.3	70	130	0	0		
Surr: Dibromofluoromethane	2.0		2.000		98.6	70	130	0	0		
Surr: Toluene-d8	1.8		2.000		91.7	70	130	0	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 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 6 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#:

1906755

28-Jun-19

Client:

Souder, Miller and Associates

Project:

Chaco Plant

Sample ID: mb-45675	Sampl	ype: ME	BLK	Tes	tCode: E	PA Method	8270C: PAHs				
Client ID: PBW	Batc	h ID: 45	675	F	RunNo: 6	0788					
Prep Date: 6/19/2019	Analysis [Date: 6/	20/2019		SeqNo: 2	057895	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Naphthalene	ND	0.50				1111					
1-Methylnaphthalene	ND	1.0									
2-Methylnaphthalene	ND	1.0								4	
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									
ndeno(1,2,3-cd)pyrene	ND	0.50									
Surr: N-hexadecane	59		87.60		67.0	20.4	126				
Surr: Benzo(e)pyrene	15		20.00		76.4	21.4	126				

Sample ID: Ics-45675	SampT	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSW	Batcl	n ID: 45	675	F	RunNo: 6	0788				
Prep Date: 6/19/2019	Analysis D	ate: 6/	20/2019	S	SeqNo: 2	057896	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluorene	7.3	0.50	8.032	0	91.1	35.6	118			
Phenanthrene	3.5	0.50	4.004	0	86.9	36.3	130			
Anthracene	3.6	0.50	4.004	0	88.9	34.8	135			
Fluoranthene	7.4	0.50	8.014	0	92.6	41	136			
Pyrene	7.5	0.50	8.032	0	93.9	44.8	136			
Benz(a)anthracene	0.70	0.50	0.8020	0	87.3	41.1	136			
Chrysene	3.3	0.50	4.000	0	83.5	37.9	132			
Benzo(b)fluoranthene	0.84	0.50	1.000	0	84.0	39	144			
Benzo(k)fluoranthene	ND	0.50	0.5000	0	88.0	40	144			
Benzo(a)pyrene	ND	0.50	0.5000	0	44.0	36.8	137			
Dibenz(a,h)anthracene	1.1	0.50	1.004	0	106	31.5	141			
Benzo(g,h,i)perylene	1.0	0.50	1.000	0	102	32.9	138			
Indeno(1,2,3-cd)pyrene	1.6	0.50	2.006	0	80.8	40.9	143			

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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1906755

28-Jun-19

Client:

Souder, Miller and Associates

SampType: LCSD

Project:

Sample ID: Icsd-45675

Chaco Plant

Sample ID: Ics-45675	SampT	SampType: LCS			tCode: El	PA Method	8270C: PAH	3		
Client ID: LCSW	Batc	Batch ID: 45675			RunNo: 6	0788				
Prep Date: 6/19/2019	Analysis E)ate: 6	/20/2019	5	SeqNo: 2	057896	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: N-hexadecane	60		87.60		68.6	20.4	126	1	-	-200
Surr: Benzo(e)nyrene	14		20.00		72.2	21 4	126			

SampT	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs			
Batch	Batch ID: 45675			RunNo: 6	0788				
Analysis D	ate: 6/	20/2019		SeqNo: 2	057897	Units: µg/L			
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
61	2.0	80.26	0	75.9	29.6	105			T. III
72	4.0	80.14	0	89.5	33.4	112			
67	4.0	80.24	0	83.0	28.6	108			
67	2.0	80.32	0	83.8	35.7	116			
66	2.0	80.30	0	82.4	32.4	118			
	Batch Analysis D Result 61 72 67	Batch ID: 45 Analysis Date: 6/ Result PQL 61 2.0 72 4.0 67 4.0 67 2.0	Analysis Date: 6/20/2019 Result PQL SPK value 61 2.0 80.26 72 4.0 80.14 67 4.0 80.24 67 2.0 80.32	Batch ID: 45675 F Analysis Date: 6/20/2019 S Result PQL SPK value SPK Ref Val 61 2.0 80.26 0 72 4.0 80.14 0 67 4.0 80.24 0 67 2.0 80.32 0	Batch ID: 45675 RunNo: 6 Analysis Date: 6/20/2019 SeqNo: 2 Result PQL SPK value SPK Ref Val %REC 61 2.0 80.26 0 75.9 72 4.0 80.14 0 89.5 67 4.0 80.24 0 83.0 67 2.0 80.32 0 83.8	Batch ID: 45675 RunNo: 60788 Analysis Date: 6/20/2019 SeqNo: 2057897 Result PQL SPK value SPK Ref Val %REC LowLimit 61 2.0 80.26 0 75.9 29.6 72 4.0 80.14 0 89.5 33.4 67 4.0 80.24 0 83.0 28.6 67 2.0 80.32 0 83.8 35.7	Batch ID: 45675 RunNo: 60788 Analysis Date: 6/20/2019 SeqNo: 2057897 Units: μg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 61 2.0 80.26 0 75.9 29.6 105 72 4.0 80.14 0 89.5 33.4 112 67 4.0 80.24 0 83.0 28.6 108 67 2.0 80.32 0 83.8 35.7 116	Batch ID: 45675 RunNo: 60788 Analysis Date: 6/20/2019 SeqNo: 2057897 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 61 2.0 80.26 0 75.9 29.6 105 72 4.0 80.14 0 89.5 33.4 112 67 4.0 80.24 0 83.0 28.6 108 67 2.0 80.32 0 83.8 35.7 116	Batch ID: 45675 RunNo: 60788 Analysis Date: 6/20/2019 SeqNo: 2057897 Units: μg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 61 2.0 80.26 0 75.9 29.6 105 72 4.0 80.14 0 89.5 33.4 112 67 4.0 80.24 0 83.0 28.6 108 67 2.0 80.32 0 83.8 35.7 116

TestCode: EPA Method 8270C: PAHs

Client ID: LCSS02	Batc	h ID: 45	675	F	RunNo: 6	0788				
Prep Date: 6/19/2019	Analysis [Date: 6/	20/2019		SeqNo: 2	057898	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluorene	8.0	0.50	8.032	0	99.9	35.6	118	9.13	62.4	
Phenanthrene	3.9	0.50	4.004	0	98.4	36.3	130	12.4	62.6	
Anthracene	4.0	0.50	4.004	0	98.9	34.8	135	10.6	62.4	
Fluoranthene	7.9	0.50	8.014	0	98.6	41	136	6.27	59.4	
Pyrene	8.7	0.50	8.032	0	108	44.8	136	13.8	55.4	
Benz(a)anthracene	0.82	0.50	0.8020	0	102	41.1	136	15.8	56.6	
Chrysene	3.9	0.50	4.000	0	96.5	37.9	132	14.4	51.9	
Benzo(b)fluoranthene	1.0	0.50	1.000	0	100	39	144	17.4	59.1	
Benzo(k)fluoranthene	0.52	0.50	0.5000	0	104	40	144	16.7	57	
Benzo(a)pyrene	ND	0.50	0.5000	0	52.0	36.8	137	0	60.2	
Dibenz(a,h)anthracene	1.1	0.50	1.004	0	112	31.5	141	5.50	64.7	
Benzo(g,h,i)perylene	1.2	0.50	1.000	0	116	32.9	138	12.8	61.5	
Indeno(1,2,3-cd)pyrene	1.8	0.50	2.006	0	89.7	40.9	143	10.5	61.1	
Surr: N-hexadecane	68		87.60		78.0	20.4	126	0	0	
Surr: Benzo(e)pyrene	17		20.00		82.7	21.4	126	0	0	

Sample ID: Icsd-45675	SampTy	SampType: LCSD		Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batch	ID: 45	675	F	RunNo: 6	0788				
Prep Date: 6/19/2019	Analysis Da	ate: 6/	20/2019	\$	SeqNo: 2	057899	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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#:

1906755

28-Jun-19

Client: Souder, Miller and Associates

Project: Chaco Plant

Sample ID: Icsd-45675 Client ID: LCSS02		SampType: LCSD TestCode: EPA Method 8 Batch ID: 45675 RunNo: 60788 Analysis Date: 6/20/2019 SeqNo: 2057899					8270C: PAHs			
Prep Date: 6/19/2019	Analysis D				Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	50	2.0	80.26	0	62.1	29.6	105	27.8	68.7	
I-Methylnaphthalene	58	4.0	80.14	0	72.7	33.4	112	24.6	66	
2-Methylnaphthalene	55	4.0	80.24	0	68.5	28.6	108	22.7	68.7	
Acenaphthylene	56	2.0	80.32	0	69.4	35.7	116	20.5	64.9	
Acenaphthene	54 2.0 80.30			0	66.8	32.4	118	18.8	53.2	

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

- B 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 12

Hall Environmental Analysis Laboratory, Inc.

WO#:

1906755

28-Jun-19

Client:

Souder, Miller and Associates

Project:

Chaco Plant

Client ID: PBW

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Sample ID: MB-45805

Batch ID: 45805

RunNo: 60927

Prep Date: 6/25/2019

Analysis Date: 6/25/2019

SeqNo: 2062499 Units: mg/L

HighLimit

HighLimit

%RPD

%RPD

Qual

Qual

RPDLimit

RPDLimit

Analyte Mercury

PQL SPK value SPK Ref Val %REC LowLimit ND 0.00020

Sample ID: LCS-45805

SampType: LCS

TestCode: EPA Method 7470: Mercury

Client ID: LCSW Prep Date: 6/25/2019 Batch ID: 45805

RunNo: 60927

Analysis Date: 6/25/2019

SeqNo: 2062500 Units: mg/L

Analyte PQL SPK value SPK Ref Val %REC LowLimit Mercury 0.0053 0.00020 0.005000 0 107

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
- 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
- Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

WO#: 19

1906755

28-Jun-19

Client: Souder, Miller and Associates

Project: Chaco Plant

Sample ID: MB-45652 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals

Client ID: PBW Batch ID: 45652 RunNo: 60759

Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056516 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 Selenium ND 0.050 Silver ND 0.0050

Sample ID: LCS-45652 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals Client ID: LCSW Batch ID: 45652 RunNo: 60759 Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056517 Units: mg/L Analyte Result %RPD **RPDLimit** PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** Qual Arsenic 0.48 0.020 0 0.5000 95.7 80 120 Barium 0.48 0.020 0 120 0.5000 95.5 80 Cadmium 0.50 0.0020 0.5000 80 120 0 101 Chromium 0.49 0.0060 0.5000 0 97.7 80 120 Selenium 0.50 0.050 0.5000 0 101 80 120 Silver 0.099 0.0050 0.1000 80 120 99.1

Sample ID: 1906755-001CMS SampType: MS TestCode: EPA 6010B: Total Recoverable Metals Client ID: Chaco Non Exempt Batch ID: 45652 RunNo: 60759 Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056520 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC LowLimit **HighLimit** %RPD **RPDLimit** Qual 0.50 Arsenic 0.10 0.5000 100 75 125 0 Barium 0.75 0.10 0.5000 0.2959 91.1 75 125 Cadmium 0.46 0.010 0.5000 0 92.0 75 125 Chromium 0.55 0.030 0.5000 0.08303 93.8 75 125 Selenium 0.56 0.25 0.5000 0 112 75 125

Sample ID: 1906755-001CM	D	TestCode: EPA 6010B: Total Recoverable Metals									
Client ID: Chaco Non Exempt Batch ID: 45652 Prep Date: 6/18/2019 Analysis Date: 6/19/2019					RunNo: 60 BeaNo: 20	7.7.7.7	Units: ma/L				
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.52	0.10	0.5000	0	103	75	125	3.12	20	Quai	
Barium	0.77	0.10	0.5000	0.2959	94.8	75	125	2.42	20		
Cadmium	0.47	0.010	0.5000	0	94.4	75	125	2.55	20		
Chromium	0.57	0.030	0.5000	0.08303	97.3	75	125	3.19	20		

0

Qualifiers:

Silver

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

0.056

0.025

0.1000

- 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

56.2

75

125

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

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S

Hall Environmental Analysis Laboratory, Inc.

WO#: 190

1906755

28-Jun-19

Client:

Souder, Miller and Associates

Project:

Chaco Plant

Sample ID: 1906755-001CMSD
Client ID: Chaco Non Exempt

SampType: MSD TestCode: EPA 6010B: Total Recoverable Metals

Batch ID: 45652 RunNo: 60759

Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SegNo: 2056521 Units: mg/L

%REC %RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val LowLimit HighLimit Qual Selenium 0.54 0.25 0.5000 0 109 75 125 2.71 20 Silver 0.057 0.025 0.1000 0 56.7 75 125 0.857 20 S

Sample iD: MB-45652 SampType: MBLK TestCode: EPA 6010B: Total Recoverable Metals

Client ID: PBW Batch ID: 45652 RunNo: 60759

Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056550 Units: mg/L

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

Lead ND 0.0050

Sample ID: LCS-45652 SampType: LCS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: LCSW Batch ID: 45652 RunNo: 60759

Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056551 Units: mg/L

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

Lead 0.50 0.0050 0.5000 0 99.5 80 120

Sample ID: 1906755-001CMS SampType: MS TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Chaco Non Exempt Batch ID: 45652 RunNo: 60759

Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056554 Units: mg/L

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Lead 0.52 0.025 125 0.5000 0.02383 98.3 75

Sample ID: 1906755-001CMSD SampType: MSD TestCode: EPA 6010B: Total Recoverable Metals

Client ID: Chaco Non Exempt Batch ID: 45652 RunNo: 60759

Prep Date: 6/18/2019 Analysis Date: 6/19/2019 SeqNo: 2056555 Units: mg/L

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

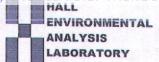
 Lead
 0.56
 0.025
 0.5000
 0.02383
 108
 75
 125
 8.88
 20

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

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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: 1906755 RcptNo: 1 Received By: **Desiree Dominguez** 6/14/2019 7:55:00 AM Completed By: Leah Baca 6/14/2019 8:26:18 AM Reviewed By: Chain of Custody 1. Is Chain of Custody complete? Yes 🗸 No 🗌 Not Present 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? Yes 🗸 No 🗌 NA 🗌 Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes V NA 🗌 Sample(s) in proper container(s)? Yes V No L 6-14-19 6. Sufficient sample volume for indicated test(s)? No 🗌 sic 7. Are samples (except VOA and ONG) properly preserved? No 🗌 Yes 8. Was preservative added to bottles? Yes V NA [9. VOA vials have zero headspace? Yes V No [No VOA Vials Yes _ 10. Were any sample containers received broken? No V # of preserved bottles checked 11. Does paperwork match bottle labels? No 🗌 for pH: Yes (Note discrepancies on chain of custody) 12 unless noted) Adjusted' 12. Are matrices correctly identified on Chain of Custody? Yes V No 🗌 13. Is it clear what analyses were requested? No [Yes V Checked by: J)C 14. Were all holding times able to be met? Yes V No [(If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes No [NA V Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: 16. Additional remarks: 2 1.0 ml HNO3 war added to 001 C for LZ ph for notals

17. Cooler Information

18. Seal Date | Signed By | 1)C 6-14-19

Page 1 of 1

1

5.0

1.9

Good

Good

Yes

Yes

ABORATORY OCD: 11/8/2023 ABORATORY OCD: 11/8/2023 A 5-4107	42:52 PM	Page 129
ENVIRONMENTA YSIS LABORATOR environmental.com Albuquerque, NM 87109 Fax 505-345-4107	Total Coliform (Present/Absent)	1.57 1.57 1.57
LYSIS L allenvironment - Albuquerqu Fax 505-	(AOV) 0828 × (AOV-ime2) 0728	J II 2 Am Age in St.
	RCRA 8 Metals	240 Fr.
Hawki 505-34	EDB (Method 504.1) FDB (Method 504.1)	82 Lee
4901 Tel.	BTEX / MTBE / TMB's (8021)	Remarks: 82 To the Co
Turn-Around Time: 70kg Nosek Project Name: A Rush 187 Nosek	Project Manager: ALM E WAY WELL Sampler: CW On Ice: E-Yes □ No # of Coolers: 2, 5.2-0.2 = 5.0°c Cooler Temprinctuding cr): 2.1 - 0.7 = 1.9°c Container Preservative HEAL No. Type and # Type UAC DWS UPPLOWS UAC DWS UAC DWS UPPLOWS UAC DWS UAC DWS UPPLOWS UAC DWS UPPLOWS UAC DWS UAC DWS UPPLOWS UAC DWS UPPLOWS UAC DWS UAC DWS UPPLOWS UAC DWS UAC DWS UPPLOWS UAC DWS UPPLOWS UAC DWS UAC DWS UAC DWS UPPLOWS UAC DWS U	Via: Date Time Via: Date Time Oate Time Courter 6/14/19 7:55
Client: SMA Walling Address: 40 (W. Brodssedu Denno #.	Z Compliance Other Tix Sample N No.	Date: Time: Relinquished by: 15.19 50 Received by: M3 1920 M. L.

Received by OCD: 11/8/2023 4:42:52 PM
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

Good till July 26, 2022
Page 130 of 173 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 San Luis Pumping Station	
3. Location of Material (Street Address, City, State or ULSTR): UL F Section 13 Township 17 North Range 3 East; 35.704883, -107.106	298
4. Source and Description of Waste: Source: Water/Oil from the Non Exempt WasteWater Tanks and from the condition. Non Exempt/Non Hazardous Water from the compressor skids. Estimated Volume 80 yd3 bbls Known Volume (to be entered by the option of Waste).	
5. GENERATOR CERTIFICATION STATE	MENT OF WASTE STATUS
I, Thomas Long, representative or authorized agent for Enterprise P. Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA regulatory determination, the above described waste is: (Check the appropriate	a) and the US Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and gas explorat exempt waste. Operator Use Only: Waste Acceptance Frequency	ion and production operations and are not mixed with non- Monthly Weekly Per Load
☑ RCRA Non-Exempt: Oil field waste which is non-hazardous that do characteristics established in RCRA regulations, 40 CFR 261.21-261.24, subpart D, as amended. The following documentation is attached to dem the appropriate items)	or listed hazardous waste as defined in 40 CFR, part 261,
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process	Knowledge ☐ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICAT	TION STATEMENT FOR LANDFARMS
I, Thomas Long , representative for Enterprise Products Operating Generator Signature the required testing/sign the Generator Waste Testing Certification.	authorize to complete
representative samples of the oil field waste have been subjected to the paint have been found to conform to the specific requirements applicable to landfar of the representative samples are attached to demonstrate the above-described 19.15.36 NMAC.	ms pursuant to Section 15 of 19.15.36 NMAC. The results
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 Crouck Method of Treatment and/or Disposal: Evaporation Injection Treating Plant Waste Acceptance Status: APPROVED	a Mesa, NM Landfarm ☐ Landfill ☐ Other ☐ DENIED (Must Be Maintained As Permanent Record)
DDINT NAME.	DATE:
PRINT NAME: TITLE: SIGNATURE: TELE	PHONE NO.:
Surface Waste Management Facility Authorized Agent	

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



July 26, 2019

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

FAX:

RE: San Luis OrderNo.: 1907731

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/16/2019 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 1907731

Date Reported: 7/26/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Client Sample ID: San Luis Non Exempt

 Project:
 San Luis
 Collection Date: 7/15/2019 12:10:00 PM

 Lab ID:
 1907731-001
 Matrix: AQUEOUS
 Received Date: 7/16/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6020: TOTAL METALS						Analyst:	DBK
Arsenic	ND	0.0010		mg/L	1	7/23/2019 2:23:00 PM	46264
Barium	0.073	0.0050		mg/L	5	7/24/2019 12:14:38 PM	46246
Cadmium	0.0070	0.0010		mg/L	1	7/23/2019 2:23:00 PM	46264
Chromium	0.010	0.0010		mg/L	1	7/23/2019 2:23:00 PM	46264
Lead	0.0024	0.0010		mg/L	1	7/23/2019 2:23:00 PM	46264
Selenium	ND	0.0010		mg/L	1	7/23/2019 2:23:00 PM	46264
Silver "	ND	0.0010		mg/L	1	7/23/2019 2:23:00 PM	46264
EPA METHOD 7470: MERCURY						Analyst:	rde
Mercury	ND	0.020		mg/L	1	7/22/2019 3:37:38 PM	46307
EPA METHOD 8270C: PAHS						Analyst:	DAM
Naphthalene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
1-Methylnaphthalene	ND	10	D	µg/L	10	7/23/2019 1:29:55 PM	46261
2-Methylnaphthalene	ND	10	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Acenaphthylene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Acenaphthene	ND	5.0	D	μg/L	10	7/23/2019 1:29:55 PM	46261
Fluorene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Phenanthrene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Anthracene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Fluoranthene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Pyrene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Benz(a)anthracene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Chrysene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Benzo(b)fluoranthene	ND	5.0	D	μg/L	10	7/23/2019 1:29:55 PM	46261
Benzo(k)fluoranthene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Benzo(a)pyrene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Dibenz(a,h)anthracene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Benzo(g,h,i)perylene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Indeno(1,2,3-cd)pyrene	ND	5.0	D	µg/L	10	7/23/2019 1:29:55 PM	46261
Surr: N-hexadecane	0	20.4-126	SD	%Rec	10	7/23/2019 1:29:55 PM	46261
Surr: Benzo(e)pyrene	0	21.4-126	SD	%Rec	10	7/23/2019 1:29:55 PM	46261
EPA METHOD 8260B: VOLATILES						Analyst	CCM
Benzene	ND	0.50		mg/L	200	7/18/2019 11:37:00 PM	R6150
Toluene	ND	0.20		mg/L	200	7/18/2019 11:37:00 PM	R6150
Ethylbenzene	ND	0.20		mg/L	200	7/18/2019 11:37:00 PM	R6150
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/L	200	7/18/2019 11:37:00 PM	R6150
1,2,4-Trimethylbenzene	ND	0.20		mg/L	200	7/18/2019 11:37:00 PM	R6150
1,3,5-Trimethylbenzene	ND	0.20		mg/L	200	7/18/2019 11:37:00 PM	R6150
1,2-Dichloroethane (EDC)	ND	0.20		mg/L	200	7/18/2019 11:37:00 PM	R6150

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

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Project:

Lab ID:

Analytical Report

Lab Order 1907731

Date Reported: 7/26/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

San Luis

1907731-001

Matrix: AQUEOUS

Collection Date: 7/15/2019 12:10:00 PM Received Date: 7/16/2019 8:05:00 AM

Client Sample ID: San Luis Non Exempt

Analyses	Result	RL	Qual L	Jnits	DF Date Analyzed Ba	atch
EPA METHOD 8260B: VOLATILES					Analyst: CC	CM
1,2-Dibromoethane (EDB)	ND	0.20	п	ng/L	200 7/18/2019 11:37:00 PM R6	61503
Naphthalene	ND	0.40	n	ng/L	200 7/18/2019 11:37:00 PM R6	61503
1-Methylnaphthalene	ND	0.80	n	ng/L	200 7/18/2019 11:37:00 PM R6	61503
2-Methylnaphthalene	ND	0.80	n	ng/L	200 7/18/2019 11:37:00 PM R6	61503
Acetone	ND	2.0	n	mg/L	200 7/18/2019 11:37:00 PM R6	61503
Bromobenzene	ND	0.20	n	ng/L	200 7/18/2019 11:37:00 PM R6	6150
Bromodichloromethane	ND	0.20	n	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Bromoform	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Bromomethane	ND	0.60	n	mg/L	200 7/18/2019 11:37:00 PM R6	6150
2-Butanone	ND	2.0	n	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Carbon disulfide	ND	2.0	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Carbon Tetrachloride	ND	0.20	n	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Chlorobenzene	ND	0.20		mg/L	200 7/18/2019 11:37:00 PM R6	6150
Chloroethane	ND	0.40	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Chloroform	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Chloromethane	ND	0.60	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
2-Chlorotoluene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
4-Chlorotoluene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
cis-1,2-DCE	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
cis-1,3-Dichloropropene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,2-Dibromo-3-chloropropane	ND	0.40	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Dibromochloromethane	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Dibromomethane	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,2-Dichlorobenzene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,3-Dichlorobenzene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,4-Dichlorobenzene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	86150
Dichlorodifluoromethane	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,1-Dichloroethane	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,1-Dichloroethene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,2-Dichloropropane	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,3-Dichloropropane	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
2,2-Dichloropropane	ND	0.40	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
1,1-Dichloropropene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
Hexachlorobutadiene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	86150
2-Hexanone	ND	2.0	r	mg/L	200 7/18/2019 11:37:00 PM R6	86150
Isopropylbenzene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
4-Isopropyltoluene	ND	0.20	r	mg/L	200 7/18/2019 11:37:00 PM R6	6150
4-Methyl-2-pentanone	ND	2.0	1	mg/L	200 7/18/2019 11:37:00 PM R6	86150
Methylene Chloride	ND	0.60	1	mg/L	200 7/18/2019 11:37:00 PM R6	R6150

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
- 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 2 of 11

Analytical Report

Lab Order 1907731

Date Reported: 7/26/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: San Luis

Lab ID: 1907731-001

Matrix: AQUEOUS

Collection Date: 7/15/2019 12:10:00 PM **Received Date:** 7/16/2019 8:05:00 AM

Client Sample ID: San Luis Non Exempt

Analyses	Result	RL (Qual Units	DF Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES	130 PM			Analyst	CCM
n-Butylbenzene	ND	0.60	mg/L	200 7/18/2019 11:37:00 PM	R61503
n-Propylbenzene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
sec-Butylbenzene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
Styrene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
tert-Butylbenzene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200 7/18/2019 11:37:00 PM	R61503
Tetrachloroethene (PCE)	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
trans-1,2-DCE	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
trans-1,3-Dichloropropene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,1,1-Trichloroethane	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,1,2-Trichloroethane	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
Trichloroethene (TCE)	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
Trichlorofluoromethane	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
1,2,3-Trichloropropane	ND	0.40	mg/L	200 7/18/2019 11:37:00 PM	R61503
Vinyl chloride	ND	0.20	mg/L	200 7/18/2019 11:37:00 PM	R61503
Xylenes, Total	ND	0.30	mg/L	200 7/18/2019 11:37:00 PM	R61503
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	200 7/18/2019 11:37:00 PM	R61503
Surr: 4-Bromofluorobenzene	97.3	70-130	%Rec	200 7/18/2019 11:37:00 PM	R61503
Surr: Dibromofluoromethane	97.6	70-130	%Rec	200 7/18/2019 11:37:00 PM	R61503
Surr: Toluene-d8	100	70-130	%Rec	200 7/18/2019 11:37:00 PM	R61503

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

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1907731-001D ANGEL PEAK NON EXEMPT

Collected date/time: 07/15/19 12:10

SAMPLE RESULTS - 01 L1119921

Wet Chemistry by Method 4500 CN E-2011

	Result	Qualifier	RDL	Dilution	Analysis	Batch
Analyte	mg/l		mg/I		date / time	
Reactive Cyanide	ND		0.00500	1	07/25/2019 12:13	WG1316455



Wet Chemistry by Method 4500H+ B-2011

	Result	Qualifier	Dilution	Analysis	Batch
Analyte	Su			date / time	
Corrosivity by pH	6.39	<u>T8</u>	1	07/19/2019 18:43	<u>WG1313879</u>



Ss

Sample Narrative:

L1119921-01 WG1313879: 6.39 at 21.8C



Wet Chemistry by Method 9034-9030B

	Result	Qualifier	RDL	Dilution	Analysis	Batch	
Analyte	mg/l		mg/I		date / time		
Reactive Sulfide	ND		0.0500	1	07/19/2019 18:26	WG1313956	



Wet Chemistry by Method D93/1010A

	Result	Qualifier	Dilution	Analysis	Batch		
Analyte	deg F			date / time			
Flashpoint	DNF at 170		1	07/22/2019 16:27	WG1315291		

Reactive Cyanide

Analyte

Method Blank (MB)

WG1316455

ND

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

Reactive Cyanide

Analyte

Hall Environmental Analysis Laboratory ACCOUNT:

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07/26/19 09:03 DATE/TIME:

L1119921 SDG:

PROJECT:

Sample Narrative:

Corrosivity by pH Analyte

Page 138 of 173

07/26/19 09:03 DATE/TIME:

SDG: LIT19921

PROJECT:

Analyte

Analyte

Page 139 of 173

DATE/TIME: 07/26/19 09:03

SDG: L1119921

PROJECT:

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE



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.



Cn

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.



(Radiochemistry)

Result

or report for this analyte. 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.

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

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	Descript
Or Elements	Descript

-	
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ACCOUNT:

Hall Environmental Analysis Laboratory

PROJECT:

SDG:

DATE/TIME: 07/26/19 09:03

Hall Environmental Analysis Laboratory, Inc.

WO#:

1907731

26-Jul-19

Qual

Client:

Souder, Miller and Associates

Result

0.0011

0.0010

Project:

San Luis

Sample ID: MB-46264 Client ID: PBW

SampType: MBLK Batch ID: 46264

POL

TestCode: EPA Method 6020: Total Metals

RunNo: 61597

Prep Date: 7/18/2019 Analysis Date: 7/23/2019 SeqNo: 2087643 Units: mg/L

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** HighLimit Qual

Analyte Arsenic ND 0.0010 Cadmium ND 0.0010 Chromium ND 0.0010 Lead ND 0.0010 Selenium ND 0.0010 Silver ND 0.0010

Sample ID: MSLLLCS-46264 SampType: LCSLL Client ID: BatchQC Batch ID: 46264 Prep Date: 7/18/2019 Analysis Date: 7/23/2019 TestCode: EPA Method 6020: Total Metals

RunNo: 61597 SeqNo: 2087644 Units: mg/L

70

130

Analyte Result PQL SPK value SPK Ref Val %REC **HighLimit** %RPD **RPDLimit** Arsenic ND 0.0010 0.001000 0 96.9 70 130 Cadmium ND 0 0.0010 0.001000 98.2 70 130 Chromium 0.0011 0.0010 0.001000 0 106 70 130 0.0010 Lead 0 0.0010 0.001000 105 70 130 Selenium 0 ND 0.0010 82.5 70 130 0.001000

0.001000

Sample ID: MSLCS-46264 SampType: LCS TestCode: EPA Method 6020: Total Metals Client ID: LCSW Batch ID: 46264 RunNo: 61597 Prep Date: 7/18/2019 Analysis Date: 7/23/2019 SeqNo: 2087645 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit Arsenic 0.049 0.0010 0.05000 120 0 97.7 80 Cadmium 0.051 0.0010 0.05000 0 103 80 120 Chromium 0.052 0.0010 0.05000 0 104 80 120 Lead 0 0.050 0.0010 0.05000 99.2 80 120 Selenium 0.048 0.0010 0.05000 0 95.6 80 120 Silver 0.050 0.0010 0.05000 99.4 80 120

0

106

Sample ID: 1907731-001CMSLL SampType: MS TestCode: EPA Method 6020: Total Metals Client ID: San Luis Non Exem Batch ID: 46264 RunNo: 61597 Prep Date: 7/18/2019 Analysis Date: 7/23/2019 SeqNo: 2087647 Units: mg/L Analyte %RPD Result PQL SPK value SPK Ref Val %REC LowLimit **HighLimit RPDLimit** Qual Arsenic 0.049 0.0010 0.05000 98.4 75 125 Cadmium 75 125 0.057 0.0010 0.05000 0.006959 100 Chromium 0.062 0.0010 0.05000 0.009977 103 75 125 Lead 0.051 0.0010 0.05000 0.002367 97.4 75 125

Qualifiers:

Silver

Value exceeds Maximum Contaminant Level

Holding times for preparation or analysis exceeded

- Sample Diluted Due to Matrix
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1907731 26-Jul-19

Client:

Souder, Miller and Associates

Project:

San Luis

TestCode: EPA Method 6020: Total Metals

LowLimit

75

75

Client ID: San Luis Non Exem

Sample ID: 1907731-001CMSLL

SampType: MS Batch ID: 46264

POL

RunNo: 61597

Prep Date: 7/18/2019

SeqNo: 2087647

Units: mg/L

Analyte

Analysis Date: 7/23/2019

Result

SPK value SPK Ref Val %REC HighLimit

%RPD

3.88

Selenium Silver

0.047 0.0010 0.051 0.0010

0.05000 0.05000 0.0009169 94.1 99.4

125 125 **RPDLimit**

RPDLimit

20

20

20

20

20

20

Qual

Qual

Sample ID: 1907731-001CMSDL SampType: MSD

TestCode: EPA Method 6020: Total Metals

Batch ID: 46264

RunNo: 61597

Prep Date: 7/18/2019

Client ID: San Luis Non Exem

0.049

SeqNo: 2087648

Analyte

Analysis Date: 7/23/2019

Units: mg/L

%REC LowLimit %RPD Result PQL SPK value SPK Ref Val HighLimit Arsenic 0.049 0.0010 0.05000 98.4 75 125 0.0155 Cadmium 0.057 0.0010 0.05000 0.006959 100 75 125 0.0980 Chromium 0.060 99.2 75 0.0010 0.05000 0.009977 125 3.42 Lead 0.052 0.0010 0.05000 0.002367 98.4 75 125 0.939 Selenium 0.048 0.0010 0.05000 96.1 75 125 2.09

Sample ID: 1907731-001CMSLL SampType: MS

TestCode: EPA Method 6020: Total Metals

75

Client ID: San Luis Non Exem

Batch ID: 46246

RunNo: 61619

95 5

Prep Date:

Analysis Date: 7/24/2019

0.0010

SeqNo: 2088647

Units: mg/L

125

Analyte

Silver

PQL SPK value SPK Ref Val 0.0050

%RPD

Barium

0.12

0.05000 0.07287

0.05000 0.0009169

%REC LowLimit 95.8

HighLimit 75 125

RPDLimit

Qual

Sample ID: 1907731-001CMSDL SampType: MSD

TestCode: EPA Method 6020: Total Metals

Client ID: San Luis Non Exem Prep Date:

Batch ID: 46246

RunNo: 61619

Analyte

Analysis Date: 7/24/2019

SeqNo: 2088648

Units: mg/L

%RPD

RPDLimit Qual

Barium

PQL 0.12 0.0050

SPK value SPK Ref Val %REC LowLimit 0.05000

0.07287

97.3

HighLimit

0.600

20

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 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 5 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907731

26-Jul-19

Client:

Souder, Miller and Associates

Project:

San Luis

Sample ID: 100NG LCS2	SampType: LCS Batch ID: R61503 Analysis Date: 7/18/2019			TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW				F	1503						
Prep Date:				SeqNo: 2084771			Units: µg/L				
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	16	1.0	20.00	0	80.0	70	130				
Toluene	18	1.0	20.00	0	87.8	70	130				
Chlorobenzene	19	1.0	20.00	0	93.4	70	130				
1,1-Dichloroethene	15	1.0	20.00	0	76.6	70	130				
Trichloroethene (TCE)	16	1.0	20.00	0	77.8	70	130				
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130				
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130				
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130				
Surr: Toluene-d8	9.9		10.00		98.7	70	130				

Sample ID: rb2	SampType: MBLK Batch ID: R61503			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW				RunNo: 61503						
Prep Date:	Analysis Date: 7/18/2019		SeqNo: 2084772			Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0	THE THE							
oluene	ND	1.0								
thylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
,2,4-Trimethylbenzene	ND	1.0								
,3,5-Trimethylbenzene	ND	1.0								
,2-Dichloroethane (EDC)	ND	1.0								
,2-Dibromoethane (EDB)	ND	1.0								
laphthalene	ND	2.0								
-Methylnaphthalene	ND	4.0								
-Methylnaphthalene	ND	4.0								
cetone	ND	10								
Promobenzene	ND	1.0								
Promodichloromethane	ND	1.0								
romoform	ND	1.0								
Fromomethane	ND	3.0								
-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
hlorobenzene	ND	1.0								
hloroethane	ND	2.0								
chloroform	ND	1.0								
Chloromethane	ND	3.0								
-Chlorotoluene	ND	1.0								

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
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 19

1907731 26-Jul-19

Client:

Souder, Miller and Associates

Project:

San Luis

Sample ID: rb2	SampType: MBLK Batch ID: R61503 Analysis Date: 7/18/2019			TestCode: EPA Method 8260B: VOLATILES						
Client ID: PBW				RunNo: 61503						
Prep Date: Analyte					SeqNo: 20	084772	Units: µg/L			
	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-Chlorotoluene	ND	1.0						7 A A		
is-1,2-DCE	ND	1.0								
is-1,3-Dichloropropene	ND	1.0								
,2-Dibromo-3-chloropropane	ND	2.0								
ibromochloromethane	ND	1.0								
ibromomethane	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								
lethylene Chloride	ND	3.0								
-Butylbenzene	ND	3.0								
-Propylbenzene	ND	1.0								
ec-Butylbenzene	ND	1.0								
tyrene	ND	1.0								
rt-Butylbenzene	ND	1.0								
1,1,2-Tetrachloroethane	ND	1.0								
1,2,2-Tetrachloroethane	ND	2.0								
etrachloroethene (PCE)	ND	1.0								
ans-1,2-DCE	ND	1.0								
ans-1,3-Dichloropropene	ND	1.0								
2,3-Trichlorobenzene	ND									
2,4-Trichlorobenzene		1.0								
1,1-Trichloroethane	ND	1.0								
	ND	1.0								
1,2-Trichloroethane	ND	1.0								
richloroethene (TCE)	ND	1.0								
richlorofluoromethane	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 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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1907731

26-Jul-19

Client:

Souder, Miller and Associates

Project:

San Luis

Sample ID: rb2	Samp	Type: ME	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES		
Client ID: PBW	Batc	h ID: R6	1503	F	RunNo: 6	1503				
Prep Date:	Analysis [Date: 7/	18/2019	5	SeqNo: 2	084772	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0		Marie Ville						
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	10		10.00		99.8	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 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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1907731

26-Jul-19

Client:

Souder, Miller and Associates

Project:

San Luis

Sample ID: Ics-46261	Samp	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSW	Batc	h ID: 46	261	F	RunNo: 6	1603				
Prep Date: 7/18/2019	Analysis [Date: 7/	23/2019		SeqNo: 2	087952	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	18	0.50	20.00	0	90.3	29.6	105			
1-Methylnaphthalene	16	1.0	20.00	0	78.6	33.4	112			
2-Methylnaphthalene	16	1.0	20.00	0	81.2	28.6	108			
Acenaphthylene	18	0.50	20.00	0	89.0	35.7	116			
Acenaphthene	16	0.50	20.00	0	79.5	32.4	118			
Fluorene	17	0.50	20.00	0	85.7	35.6	118			
Phenanthrene	18	0.50	20.00	0	88.2	36.3	130			
Anthracene	17	0.50	20.00	0	86.6	34.8	135			
Fluoranthene	17	0.50	20.00	0	86.2	41	136			
Pyrene	18	0.50	20.00	0	89.5	44.8	136			
Benz(a)anthracene	16	0.50	20.00	0	82.1	41.1	136			
Chrysene	14	0.50	20.00	0	70.3	37.9	132			
Benzo(b)fluoranthene	17	0.50	20.00	0	82.8	39	144			
Benzo(k)fluoranthene	18	0.50	20.00	0	88.6	40	144			
Benzo(a)pyrene	16	0.50	20.00	0	80.7	36.8	137			
Dibenz(a,h)anthracene	16	0.50	20.00	0	78.2	31.5	141			
Benzo(g,h,i)perylene	16	0.50	20.00	0	81.2	32.9	138			
Indeno(1,2,3-cd)pyrene	16	0.50	20.00	0	79.7	40.9	143			
Surr: N-hexadecane	61		87.60		69.4	20.4	126			
Surr: Benzo(e)pyrene	15		20.00		74.5	21.4	126			

SampT	ype: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs			
Batc	n ID: 46	261	F	RunNo: 6	1603				
Analysis E)ate: 7/	23/2019	\$	SeqNo: 2	087953	Units: µg/L			
Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
18	0.50	20.00	0	89.1	29.6	105	1.34	68.7	. 7/1
17	1.0	20.00	0	83.4	33.4	112	5.93	66	
17	1.0	20.00	0	83.3	28.6	108	2.55	68.7	
20	0.50	20.00	0	101	35.7	116	12.1	64.9	
17	0.50	20.00	0	87.0	32.4	118	9.01	53.2	
18	0.50	20.00	0	91.5	35.6	118	6.55	62.4	
17	0.50	20.00	0	83.9	36.3	130	5.00	62.6	
16	0.50	20.00	0	81.2	34.8	135	6.44	62.4	
16	0.50	20.00	0	81.7	41	136	5.36	59.4	
16	0.50	20.00	0	82.4	44.8	136	8.26	55.4	
16	0.50	20.00	0	77.5	41.1	136	5.76	56.6	
13	0.50	20.00	0	65.8	37.9	132	6.61	51.9	
17	0.50	20.00	0	85.3	39	144	2.97	59.1	
	Result 18 17 17 20 17 18 17 16 16 16 16 16 16 13	Batch ID: 463 Analysis Date: 7// Result PQL 18 0.50 17 1.0 17 1.0 20 0.50 17 0.50 18 0.50 17 0.50 16 0.50 16 0.50 16 0.50 16 0.50 16 0.50 17 0.50	Result PQL SPK value 18 0.50 20.00 17 1.0 20.00 17 1.0 20.00 20 0.50 20.00 17 0.50 20.00 18 0.50 20.00 17 0.50 20.00 16 0.50 20.00 16 0.50 20.00 16 0.50 20.00 16 0.50 20.00 16 0.50 20.00 16 0.50 20.00 13 0.50 20.00	Batch ID: 46261 F Analysis Date: 7/23/2019 SPK value SPK Ref Val 18 0.50 20.00 0 17 1.0 20.00 0 17 1.0 20.00 0 20 0.50 20.00 0 17 0.50 20.00 0 18 0.50 20.00 0 17 0.50 20.00 0 16 0.50 20.00 0 16 0.50 20.00 0 16 0.50 20.00 0 16 0.50 20.00 0 16 0.50 20.00 0 16 0.50 20.00 0 16 0.50 20.00 0 13 0.50 20.00 0	Batch ID: 46261 RunNo: 6 Analysis Date: 7/23/2019 SeqNo: 2 Result PQL SPK value SPK Ref Val %REC 18 0.50 20.00 0 89.1 17 1.0 20.00 0 83.4 17 1.0 20.00 0 83.3 20 0.50 20.00 0 101 17 0.50 20.00 0 87.0 18 0.50 20.00 0 91.5 17 0.50 20.00 0 83.9 16 0.50 20.00 0 81.2 16 0.50 20.00 0 81.7 16 0.50 20.00 0 82.4 16 0.50 20.00 0 77.5 13 0.50 20.00 0 65.8	Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Result PQL SPK value SPK Ref Val %REC LowLimit 18 0.50 20.00 0 89.1 29.6 17 1.0 20.00 0 83.4 33.4 17 1.0 20.00 0 83.3 28.6 20 0.50 20.00 0 101 35.7 17 0.50 20.00 0 87.0 32.4 18 0.50 20.00 0 91.5 35.6 17 0.50 20.00 0 83.9 36.3 16 0.50 20.00 0 81.2 34.8 16 0.50 20.00 0 81.7 41 16 0.50 20.00 0 82.4 44.8 16 0.50 20.00 0 77.5 41.1 13 0.50 <td>Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 18 0.50 20.00 0 89.1 29.6 105 17 1.0 20.00 0 83.4 33.4 112 17 1.0 20.00 0 83.3 28.6 108 20 0.50 20.00 0 101 35.7 116 17 0.50 20.00 0 87.0 32.4 118 18 0.50 20.00 0 91.5 35.6 118 17 0.50 20.00 0 83.9 36.3 130 16 0.50 20.00 0 81.2 34.8 135 16 0.50 20.00 0 81.7 41 136 16 0.50 20.00 0</td> <td>Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 18 0.50 20.00 0 89.1 29.6 105 1.34 17 1.0 20.00 0 83.4 33.4 112 5.93 17 1.0 20.00 0 83.3 28.6 108 2.55 20 0.50 20.00 0 101 35.7 116 12.1 17 0.50 20.00 0 87.0 32.4 118 9.01 18 0.50 20.00 0 87.0 32.4 118 9.01 18 0.50 20.00 0 87.0 32.4 118 9.01 18 0.50 20.00 0 83.9 36.3 130 5.00 16 0.50 20</td> <td>Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 18 0.50 20.00 0 89.1 29.6 105 1.34 68.7 17 1.0 20.00 0 83.4 33.4 112 5.93 66 17 1.0 20.00 0 83.3 28.6 108 2.55 68.7 20 0.50 20.00 0 101 35.7 116 12.1 64.9 17 0.50 20.00 0 87.0 32.4 118 9.01 53.2 18 0.50 20.00 0 91.5 35.6 118 6.55 62.4 17 0.50 20.00 0 83.9 36.3 130 5.00 62.6 16 0.50 20.00</td>	Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 18 0.50 20.00 0 89.1 29.6 105 17 1.0 20.00 0 83.4 33.4 112 17 1.0 20.00 0 83.3 28.6 108 20 0.50 20.00 0 101 35.7 116 17 0.50 20.00 0 87.0 32.4 118 18 0.50 20.00 0 91.5 35.6 118 17 0.50 20.00 0 83.9 36.3 130 16 0.50 20.00 0 81.2 34.8 135 16 0.50 20.00 0 81.7 41 136 16 0.50 20.00 0	Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 18 0.50 20.00 0 89.1 29.6 105 1.34 17 1.0 20.00 0 83.4 33.4 112 5.93 17 1.0 20.00 0 83.3 28.6 108 2.55 20 0.50 20.00 0 101 35.7 116 12.1 17 0.50 20.00 0 87.0 32.4 118 9.01 18 0.50 20.00 0 87.0 32.4 118 9.01 18 0.50 20.00 0 87.0 32.4 118 9.01 18 0.50 20.00 0 83.9 36.3 130 5.00 16 0.50 20	Batch ID: 46261 RunNo: 61603 Analysis Date: 7/23/2019 SeqNo: 2087953 Units: µg/L Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 18 0.50 20.00 0 89.1 29.6 105 1.34 68.7 17 1.0 20.00 0 83.4 33.4 112 5.93 66 17 1.0 20.00 0 83.3 28.6 108 2.55 68.7 20 0.50 20.00 0 101 35.7 116 12.1 64.9 17 0.50 20.00 0 87.0 32.4 118 9.01 53.2 18 0.50 20.00 0 91.5 35.6 118 6.55 62.4 17 0.50 20.00 0 83.9 36.3 130 5.00 62.6 16 0.50 20.00

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

- 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.

SampType: MBLK

WO#: 1907731

26-Jul-19

Client: Souder, Miller and Associates

Project: San Luis

Sample ID: mb-46261

Sample ID: Icsd-46261 Client ID: LCSS02	Batc	Type: LC h ID: 46	261	F	RunNo: 6	1603	8270C: PAHs			
Prep Date: 7/18/2019	Analysis E	Date: 7/	23/2019		SeqNo: 2	087953	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	16	0.50	20.00	0	77.8	40	144	13.0	57	
Benzo(a)pyrene	17	0.50	20.00	0	85.1	36.8	137	5.31	60.2	
Dibenz(a,h)anthracene	15	0.50	20.00	0	76.3	31.5	141	2.46	64.7	
Benzo(g,h,i)perylene	16	0.50	20.00	0	79.7	32.9	138	1.86	61.5	
Indeno(1,2,3-cd)pyrene	16	0.50	20.00	0	82.3	40.9	143	3.21	61.1	
Surr: N-hexadecane	65		87.60		73.7	20.4	126	0	0	
Surr: Benzo(e)pyrene	15		20.00		73.4	21.4	126	0	0	

TestCode: EPA Method 8270C: PAHs

Client ID: PBW	Batc	h ID: 46	261	F	RunNo: 6	1603				
Prep Date: 7/18/2019	Analysis E	Date: 7/	23/2019	5	SeqNo: 2	087954	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	61		87.60		69.6	20.4	126			
Surr: Benzo(e)pyrene	14		20.00		72.2	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
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1907731

26-Jul-19

Client: Souder, Miller and Associates

Project: San Luis

Sample ID: MB-46307 SampType: MBLK TestCode: EPA Method 7470: Mercury

Client ID: PBW Batch ID: 46307 RunNo: 61563

Prep Date: 7/22/2019 Analysis Date: 7/22/2019 SeqNo: 2086444 Units: mg/L

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

Mercury ND 0.00020

Sample ID: LCS-46307 SampType: LCS TestCode: EPA Method 7470: Mercury

Client ID: LCSW Batch ID: 46307 RunNo: 61563

Prep Date: 7/22/2019 Analysis Date: 7/22/2019 SeqNo: 2086445 Units: mg/L

0.005000

Analyte SPK value SPK Ref Val PQL %REC LowLimit %RPD **HighLimit RPDLimit** Qual Mercury 0.0050 0.00020

101

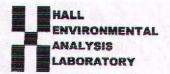
120

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 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
- 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

Albuquerque, NM 87109 Sample Log-In Check List

Client Name: SMA-FARM	Work Order Num	ber: 1907731		RoptNo: 1
Received By: Leah Baca	7/16/2019 8:05:00	AM	Look Bre	4
Completed By: Anne Thorne	7/16/2019 10:12:47	'AM	am In	
Reviewed By: 76 7/14/14			um ju	
Chain of Custody				
1. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present
2. How was the sample delivered?		Courier		
Log In				
Was an attempt made to cool the san	nples?	Yes 🗹	No 🗆	NA 🗆
4. Were all samples received at a tempe	rature of >0° C to 6.0°C	Yes 🗆	No 🗹	NA 🗆
5. Sample(s) in proper container(s)?		Approved by	v client.	
Gampio(s) in proper container(s)?		Tes M	NO L	
6. Sufficient sample volume for indicated	test(s)?	Yes 🗹	No 🗆	
7. Are samples (except VOA and ONG)	properly preserved?	Yes 🗹	No 🗌	
8. Was preservative added to bottles?		Yes 🗆	No 🗹	NA 🗆
9. VOA vials have zero headspace?		Yes 🗹	No 🗆	No VOA Vials
O. Were any sample containers received	broken?	Yes 🗆	No 🗹	***
		2 42 64		# of preserved bottles checked 12
 Does paperwork match bottle labels? (Note discrepancies on chain of custos 	tv)	Yes 🗸	No 📙	for pH: (Oor > Qunless noted)
2. Are matrices correctly identified on Ch		Yes 🗸	No 🗆	Adjusted? NO
3, is it clear what analyses were requeste		Yes 🗹	No 🗆	
 Were all holding times able to be met? (If no, notify customer for authorization 		Yes 🗸	No □	Checked by: DAD 4/16/19
pecial Handling (if applicable)				
5. Was client notified of all discrepancies	with this order?	Yes 🗌	No 🗆	NA 🗹
Person Notified:	Date		STATE	
By Whom:	Via:	eMail P	hone Fax	☐ In Person
Regarding:				
Client Instructions:				
6. Additional remarks:				
7. Cooler Information				
Cooler No Temp C Condition	Seal Intact / Seal No	Seal Date	Signed By	
1 8.5 Good	Yes	Sear Date	oigned by	

HALL ENVIRONMENTAL HALL ENVIRONMENTAL HALL ENVIRONMENTAL HOPICAT Name: SAn Luis SAn Lui		Chai	n-of-C	Chain-of-Custody Record	ecord	Turn-Around Time:	d Time:														ed by
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Received by OCD: 11/8/2023 4:42:52 PM
District 1
1625 N. French Dr., Hobbs, NM 88240 District II 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

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

12/10/

REOUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: San Juan Manzanares Compressor Station
3. Location of Material (Street Address, City, State or ULSTR): UL H Section 17 Township 29 North Range 9 West; 36.726358, -107.794560, San Juan County, NM
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 Th
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, Thomas Long , representative for Enterprise Products Operating authorize to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.
I,, representative for Agua 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 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: Various Apporved Trucking
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 Waste Acceptance Status: APPROVED Landfarm Landfill Other DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: TITLE: DATE: SIGNATURE: TELEPHONE NO.:



Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

August 01, 2019

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

FAX:

RE: Manzanares OrderNo.: 1907972

Dear Ashley Maxwell:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/19/2019 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 1907972

Date Reported: 8/1/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Project: Manzanares

Lab ID: 1907972-001

Matrix: AQUEOUS

Collection Date: 7/18/2019 10:17:00 AM Received Date: 7/19/2019 8:00:00 AM

Client Sample ID: Manzanares Non Exempt

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 6020: TOTAL METALS			1	4 1	Analyst: DBK
Arsenic	0.0037	0.0010	mg/L	1	7/23/2019 2:58:57 PM
Barium	0.055	0.0050	mg/L	5	7/23/2019 3:22:30 PM
Cadmium	ND	0.0010	mg/L	1	7/23/2019 2:58:57 PM
Chromium	ND	0.0010	mg/L	1	7/23/2019 2:58:57 PM
Lead	ND	0.0010	mg/L	-1	7/23/2019 2:58:57 PM
Selenium	ND	0.0010	mg/L	1	7/23/2019 2:58:57 PM
Silver	ND	0.0010	mg/L	1	7/23/2019 2:58:57 PM
EPA METHOD 7470: MERCURY					Analyst: rde
Mercury	ND	0.020	mg/L	1	7/22/2019 3:39:53 PM
EPA METHOD 8270C: PAHS					Analyst: JDC
Naphthalene	ND	0.50	µg/L	. 1	7/30/2019 5:15:40 PM
1-Methylnaphthalene	ND	1.0	μg/L	1	7/30/2019 5:15:40 PM
2-Methylnaphthalene	ND	1.0	μg/L	1	7/30/2019 5:15:40 PM
Acenaphthylene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Acenaphthene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Fluorene	ND	0.50	µg/L	1	7/30/2019 5:15:40 PM
Phenanthrene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Anthracene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Fluoranthene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Pyrene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Benz(a)anthracene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Chrysene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Benzo(b)fluoranthene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Benzo(k)fluoranthene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Benzo(a)pyrene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Dibenz(a,h)anthracene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Benzo(g,h,i)perylene	ND	0.50	µg/L	1	7/30/2019 5:15:40 PM
Indeno(1,2,3-cd)pyrene	ND	0.50	μg/L	1	7/30/2019 5:15:40 PM
Surr: N-hexadecane	53.6	20.4-126	%Rec	1	7/30/2019 5:15:40 PM
Surr: Benzo(e)pyrene	111	21.4-126	%Rec	1	7/30/2019 5:15:40 PM
EPA METHOD 8260B: VOLATILES					Analyst: JMR
Benzene	ND	0.50	mg/L	200	7/24/2019 11:51:22 AM
Toluene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Ethylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Methyl tert-butyl ether (MTBE)	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,2,4-Trimethylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AN
1,3,5-Trimethylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,2-Dichloroethane (EDC)	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM

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 1907972

Date Reported: 8/1/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: Manzanares Non Exempt

Collection Date: 7/18/2019 10:17:00 AM

Project: Manzanares Lab ID: 1907972-001

Matrix: AQUEOUS

Received Date: 7/19/2019 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES		- 1			Analyst: JMR
1,2-Dibromoethane (EDB)	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Naphthalene	ND	0.40	mg/L	200	7/24/2019 11:51:22 AM
1-Methylnaphthalene	ND	0.80	mg/L	200	7/24/2019 11:51:22 AM
2-Methylnaphthalene	ND	0.80	mg/L	200	7/24/2019 11:51:22 AM
Acetone	ND	2.0	mg/L	200	7/24/2019 11:51:22 AM
Bromobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Bromodichloromethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Bromoform	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Bromomethane	ND	0.60	mg/L	200	7/24/2019 11:51:22 AM
2-Butanone	ND	2.0	mg/L	200	7/24/2019 11:51:22 AM
Carbon disulfide	ND .	2.0	mg/L	200	7/24/2019 11:51:22 AM
Carbon Tetrachloride	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Chlorobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Chloroethane	ND	0.40	mg/L	200	7/24/2019 11:51:22 AM
Chloroform	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Chloromethane	ND	0.60	mg/L	200	7/24/2019 11:51:22 AM
2-Chlorotoluene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
4-Chlorotoluene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
cis-1,2-DCE	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
cis-1,3-Dichloropropene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,2-Dibromo-3-chloropropane	ND	0.40	mg/L	200	7/24/2019 11:51:22 AM
Dibromochloromethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Dibromomethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,2-Dichlorobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,3-Dichlorobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,4-Dichlorobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Dichlorodifluoromethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,1-Dichloroethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,1-Dichloroethene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,2-Dichloropropane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,3-Dichloropropane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
2,2-Dichloropropane	ND	0.40	mg/L	200	7/24/2019 11:51:22 AM
1,1-Dichloropropene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Hexachlorobutadiene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
2-Hexanone	ND	2.0	mg/L	200	7/24/2019 11:51:22 AM
Isopropylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
4-Isopropyltoluene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
4-Methyl-2-pentanone	ND	2.0	mg/L	200	7/24/2019 11:51:22 AM
Methylene Chloride	ND	0.60	mg/L	200	7/24/2019 11:51:22 AM

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
- % 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 2 of 11

Analytical Report

Lab Order 1907972

Date Reported: 8/1/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Project:

Manzanares

Lab ID: 1907972-001 Matrix: AQUEOUS

Collection Date: 7/18/2019 10:17:00 AM Received Date: 7/19/2019 8:00:00 AM

Client Sample ID: Manzanares Non Exempt

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES					Analyst: JMR
n-Butylbenzene	ND	0.60	mg/L	200	7/24/2019 11:51:22 AM
n-Propylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
sec-Butylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Styrene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
tert-Butylbenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,1,1,2-Tetrachloroethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,1,2,2-Tetrachloroethane	ND	0.40	mg/L	200	7/24/2019 11:51:22 AM
Tetrachloroethene (PCE)	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
trans-1,2-DCE	ND	0.20	mg/L	200	7/24/2019 11:51:22 AN
trans-1,3-Dichloropropene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AN
1,2,3-Trichlorobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AN
1,2,4-Trichlorobenzene	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,1,1-Trichloroethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,1,2-Trichloroethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Trichloroethene (TCE)	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Trichlorofluoromethane	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
1,2,3-Trichloropropane	ND	0.40	mg/L	200	7/24/2019 11:51:22 AN
Vinyl chloride	ND	0.20	mg/L	200	7/24/2019 11:51:22 AM
Xylenes, Total	ND	0.30	mg/L	200	7/24/2019 11:51:22 AN
Surr: 1,2-Dichloroethane-d4	88.7	70-130	%Rec	200	7/24/2019 11:51:22 AN
Surr: 4-Bromofluorobenzene	96.0	70-130	%Rec	200	7/24/2019 11:51:22 AN
Surr: Dibromofluoromethane	86.7	70-130	%Rec	200	7/24/2019 11:51:22 AN
Surr: Toluene-d8	94.9	70-130	%Rec	200	7/24/2019 11:51:22 AM

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
- % 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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Analyte

Flashpoint

Result

deg F

DNF at 170

Qualifier

Dilution Analysis

date / time

07/24/2019 10:11

1907972-001D MAN Collected date/time: 07		EXEMPT	SAMP	LE RESULTS - 01		ONE LAB. NATIONWIDE	製
Wet Chemistry by	Method 4500	CN E-2011					
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution Analysis date / time	Batch		
Reactive Cyanide	ND	<u>J6</u>	0.00500	1 07/31/2019 11:24	WG1319539		To
Wet Chemistry by	Method 4500l	H+ B-2011					3 Ss
Analyte	Result su	Qualifier		analysis <u>Batch</u> late / time			
Corrosivity by pH	6.64	<u>18</u>	1 0	7/23/2019 19:44 <u>WG1315812</u>			Cn
Sample Narrative: L1121234-01 WG1315812: 6.	64 at 21.3C						Sr
Wet Chemistry by	Method 9034-	9030B					Qc
Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution Analysis date / time	Batch		GI.
Reactive Sulfide	ND		0.0500	1 07/23/2019 15:19	WG1315857		
Wet Chemistry by	Method D93/Id	ΝΟΔ					Al

Batch

WG1316459

DATE/TIME: 07/31/19 12:46

SDG: L1121234

PROJECT:

ACCOUNT: Hall Environmental Analysis Laboratory

MB RDL mg/l 0.00500 UDP Qualifier Limits % 20				QUALI	QUALITY CONTROL SUMMARY	ONE LAB. NATIONWIDE
MB RDL mg/t 0.00500 UDP RPD UDP RPD S S S S S S S S S S S S S S S S S S S	Wet Chemistry by Method 4500 CN E-2011				11121234-01	
MB RDL. mg/l 0.00500 UDP RPD Limits % 20 20						
MB RDL mg/l 0.00500 UDP RPD UDP RPD Limits % 20 20			Andrews of the Parket of the P			
mg/l 0.00500 UDP RPD UDP RPD Umits % %	MB Qualifier		MB MDL	MB RDL		
0.00500 JP) UDP RPD Units S 20			mg/l	mg/l		
JP) UP RPD DUP Qualifier DUP RPD % % 0000 20			0.00180	0.00500		
NP RPD DUP RPD " "S" % "Ono 20 "Ono 20 "Ono 20 "Ono 20						
NUP RPD DUP Qualifier Limits % % 20	L1120371-02 Original Sample (OS) · Duplicate (DUP)	Nical	e (Di			
DUP Qualifier DUP RPD Limits % 20	(OS) L1120371-02 07/31/19 11:02 • (DUP) R3435948-3 07/31/19 11:03	12/31	19 11:03	ensignation of the American committee of the committee of		
20	Original Result DUP Result Dil	ā	ution [
	mg/I		g*	200	96	
	0.000 1	-)	00000	20	

Control Sample # 20		
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DUP RPD Limits

DUP Qualifier

Dilution DUP RPD

Original Result DUP Result

L1120500-01 Original Sample (OS) - Duplicate (DUP)

(OS) L1120500-01 07/31/19 11:16 • (DUP) R3435948-6 07/31/19 11:17

al

200

mg/l 0.00535

ND ON

Analyte Reactive Cyanide

LCS) R3435948-2 07/31/19 10:58	/31/19 10:58				
	Spike Amount LCS Result	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
alyte	I/gm	mg/l	98	98	
Reactive Cyanide	0.100	0.108	108	85.0-115	

L1120371-04 Original Sample (OS) - Matrix Spike (MS) - Matrix Spike Duplicate (MSD)

Spike Amount Original Result M	Spike Amount	Spike Amount Original Result	MS Result	MSD Result MS Rec.	MS Result MSD Result MS Rec.	MSD Rec.	Dilution Rec. Limits	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	l/gm	mg/l	mg/I	mg/l	96	96		96			96	96
Reactive Cyanide	0.100	ח	0.101	0.0877	101	87.7	1	75.0-125			14.1	20

L1121234-01 Original Sample (OS) • Matrix Spike (MS)

	Spike Amount	Spike Amount Original Result MS Result	MS Result	MS Rec.	Dilution	Dilution Rec. Limits	MS Qualifier
Analyte	mg/I	mg/l	mg/l	96		96	
Reactive Cyanide	0.100	QN	0.0736	73.6	1	75.0-125	9

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ONE LAB. NATIONWIDE.

QUALITY CONTROL SUMM

L1121234-01

Hall Environmental Analysis Laboratory ACCOUNT:

WG1315812

Wet Chemistry by Method 4500H+ B-2011

Laboratory Control Sample (LCS)

(LCS) R3433476-1 07/23/19 19:44

LCS Result 96.6 Spike Amount ns 10.01 Corrosivity by pH Analyte

LCS Qualifier

Rec. Limits

LCS Rec.

101-0.66

9.66

LCS: 9.96 at 21.2C Sample Narrative:

Released to Imaging: 11/8/2023 4:50:26 PM

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DATE/TIME: 07/31/19 12:46

SDG: L1121234

PROJECT:

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DATE/TIME: 07/31/19 12:46

SDG: L1121234

PROJECT:

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ONE LAB. NATIONWIDE												
JALITY CONTROL SUMMARY								LCS Qualifier				
Ø		MB RDL	l/gm	0.0500				Rec. Limits	96	85.0-115		
		MB MDL		0.00650				LCS Rec.	88	100		
308		MB Qualifier				(5)		LCS Result	l/bm	0.500		
WG1315857 Wet Chemistry by Method 9034-90308	MB)	723/19 15:15 MB Result	l/gm	n		Laboratory Control Sample (LCS)	7/23/19 15:15	Spike Amount LCS Result	mg/I	0.500		
WG1315857	Method Blank (MB)	(MB) R3433383-1 07/23/19 15:15 MB Re	Analyte	Reactive Sulfide		pratory Con	(LCS) R3433383-2 07/23/19 15:15		Analyte	Reactive Sulfide		

Released to Imaging: 11/8/2023 4:50:26 PM

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07/31/19 12:46 DATE/TIME:

SDG: L1121234

ONE LAB. NATIONWIDE

QUALITY CONTROL SUMMARY

L1121497-01 Original Sample (OS) · Duplicate (DUP) Wet Chemistry by Method D93/1010A

WG1316459

	DUP Qualifier			
	DUP RPD	96	0.000	
07/24/19 10:	Dilution DUP RPD		-	
433625-2	DUP Result	deg F	DNF at 170	
OS) L1121497-01 07/24/19 10:11 • (DUP) R3433625-2 07/24/19 10:11	Original Result DUP Result	deg F	DNF at 170	
(OS) L1121497-01		Analyte	Flashpoint	

DUP RPD Limits

Laboratory Control Sample (LCS)

	LCS Qualifier		
	Rec. Limits	98	96.0-104
	LCS Rec.	86	102
		deg F	83.7
07/24/19 10:11	Spike Amount	deg F deg F	82.0
(LCS) R3433625-1 07/24/19 10:11		Analyte	Flashpoint

PROJECT:

Hall Environmental Analysis Laboratory ACCOUNT:

GLOSSARY OF TERMS

ONE LAB. NATIONWIDE



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.



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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.
	or report for this analyte.

(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 Nariative 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

This is the document created in the field when your samples were initially collected. This is used to verify date of collection, the person collecting the samples, and the analyses that the laboratory is requested to chain of custody also documents all persons (excluding commercial shippers) that have had control or posamples from the time of collection until delivery to the laboratory for analysis.	o perform. This

ample 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
(21)	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
100)	times of preparation and/or analysis.

Qualifier	Description
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

San

Hall Environmental Analysis Laboratory, Inc.

WO#: 1907972

01-Aug-19

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID: MB-46311	SampType: MBLK			Tes							
Client ID: PBW	Bato	th ID: 46	311	F	RunNo: 6	1597					
Prep Date: 7/22/2019	Analysis I	Date: 7/	23/2019	\$	SeqNo: 2	087649	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	ND	0.0010		10.00			1000000				
Barium	ND	0.0010									
Cadmium	ND	0.0010									
Chromium	ND	0.0010									
_ead	ND	0.0010									
Selenium	ND	0.0010									
Silver	ND	0.0010									

Sample ID: MSLLLCS-46311 Client ID: BatchQC		Type: LC			TestCode: EPA Method 6020: Total Metals					
Prep Date: 7/22/2019	Batch ID: 46311 Analysis Date: 7/23/2019				RunNo: 6 SeqNo: 2		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.0010	0.001000	0	92.2	70	130			
Barium	0.0010	0.0010	0.001000	0	102	70	130			
Cadmium	0.0010	0.0010	0.001000	0	102	70	130			
Chromium	0.0011	0.0010	0.001000	0	114	70	130			
_ead	0.0011	0.0010	0.001000	0	113	70	130			
Selenium	ND	0.0010	0.001000	0	83.4	70	130			
Silver	0.0010	0.0010	0.001000	0	101	70	130			

Sample ID: MSLCS-46311	Samp	Type: LC	S	Tes	tCode: E	PA Method	6020: Total N	Metals	3030	
Client ID: LCSW	Batch ID: 46311 Analysis Date: 7/23/2019			F	RunNo: 61597					
Prep Date: 7/22/2019				SeqNo: 2087651			Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.048	0.0010	0.05000	0	95.9	80	120			
Barium	0.047	0.0010	0.05000	0	94.7	80	120			
Cadmium	0.050	0.0010	0.05000	0	100	80	120			
Chromium	0.051	0.0010	0.05000	0	101	80	120			
_ead	0.048	0.0010	0.05000	0	95.7	80	120			
Selenium	0.047	0.0010	0.05000	0	94.5	80	120			
Silver	0.048	0.0010	0.05000	0	96.6	80	120			

Sample ID: 1907972-0	01CMSLL Samp	Type: MS	3	Tes	tCode: El	PA Method	6020: Total N	letals			
Client ID: Manzanare	es Non Ex Bate	ch ID: 46	311	F	RunNo: 6	1597					
Prep Date: 7/22/2019	Analysis	Date: 7/	23/2019	5	SeqNo: 2	087656	Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Arsenic	0.051	0.0010	0.05000	0.003747	93.9	75	125				

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

D Not Detected at the Reporting Limit

PQL 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

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#: 1907972

01-Aug-19

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID: 1907972-001CMSLL SampType: MS TestCode: EPA Method 6020: Total Metals Manzanares Non Ex Batch ID: 46311 RunNo: 61597 Prep Date: 7/22/2019 Analysis Date: 7/23/2019 SeqNo: 2087656 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** LowLimit HighLimit Qual Cadmium 0.050 0.0010 0.05000 101 125 75 Chromium 0.052 0.0010 0.05000 0.0008084 103 75 125 Lead 0.047 0.0010 0.05000 94.6 75 125 Selenium 0.046 0.0010 0.05000 75 125 0 91.7 Silver 0.048 0.0010 0.05000 0 96.3 75 125

Sample ID: 1907972-001CMSDL SampType: MSD TestCode: EPA Method 6020: Total Metals Manzanares Non Ex Batch ID: 46311 RunNo: 61597 Prep Date: 7/22/2019 Analysis Date: 7/23/2019 SeqNo: 2087657 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** LowLimit Qual Arsenic 0.051 0.0010 0.05000 0.003747 94.9 75 125 0.945 20 Cadmium 0.050 0.0010 0.05000 100 75 125 20 0 0.442 Chromium 0.051 0.0010 75 0.05000 0.0008084 101 125 1.48 20 Lead 0.047 0.0010 0.05000 0 94.9 75 125 0.267 20 Selenium 0.046 0.0010 0.05000 125 0 91.8 75 20 0.0791 Silver 0.048 0.0010 0.05000 0 96 4 75 125 0.0996 20

Sample ID: 1907972-001CMSLL SampType: MS TestCode: EPA Method 6020: Total Metals Manzanares Non Ex Batch ID: 46311 RunNo: 61597 Prep Date: 7/22/2019 Analysis Date: 7/23/2019 SeqNo: 2087659 Units: mg/L Analyte Result PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** LowLimit **HighLimit** Qual Barium 0.11 0.0050 0.05000 0.05490 100

Sample ID: 1907972-001CMSDL SampType: MSD TestCode: EPA Method 6020: Total Metals Manzanares Non Ex Batch ID: 46311 RunNo: 61597 Prep Date: 7/22/2019 Analysis Date: 7/23/2019 SegNo: 2087660 Units: mg/L Analyte PQL Result SPK value SPK Ref Val %REC %RPD **RPDLimit** LowLimit HighLimit Qual Barium 0.10 0.0050 0.05000 0.05490 2.20

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 5 of 11

Hall Environmental Analysis Laboratory, Inc.

WO#:

1907972

01-Aug-19

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID: 100ng Ics	Samp1	ype: LC	S	TestCode: EPA Method 8260B: VOLATILES							
Client ID: LCSW	Batch ID: R61636 Analysis Date: 7/24/2019			RunNo: 61636							
Prep Date:				8	SeqNo: 2089113						
Analyte	Result	PQL SPK value		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	18	1.0	20.00	0	88.3	70	130		All the second		
Toluene	19	1.0	20.00	0	94.3	70	130				
Chlorobenzene	19	1.0	20.00	0	95.7	70	130				
1,1-Dichloroethene	18	1.0	20.00	0	88.4	70	130				
Frichloroethene (TCE)	17	1.0	20.00	0	86.3	70	130				
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.5	70	130				
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130				
Surr: Dibromofluoromethane	8.9		10.00		88.5	70	130				
Surr: Toluene-d8	9.5		10.00		95.0	70	130				

Sample ID: rb	Samp	ype: MI	BLK	Tes	tCode: El	PA Method	8260B: VOL	ATILES			
Client ID: PBW	Batc	h ID: Re	31636	F	RunNo: 6	1636					
Prep Date:	Analysis [Date: 7	/24/2019	5	SeqNo: 2	089114	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	1.0	13/27		APPART.						
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
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1907972

01-Aug-19

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID: rb	Samp	Type: ME	BLK	Tes	TestCode: EPA Method 8260B: VOLATILES							
Client ID: PBW	Batc	h ID: R6	1636	F	RunNo: 6	1636						
Prep Date:	Analysis [Date: 7/	24/2019		SeqNo: 2	089114	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
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										
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								7		
n-Butylbenzene	ND	3.0										
n-Propylbenzene	ND	1.0										
sec-Butylbenzene	ND	1.0										
Styrene	ND	1.0										
tert-Butylbenzene												
1,1,1,2-Tetrachloroethane	ND	1.0										
	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.
- 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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1907972 01-Aug-19

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID: rb Client ID: PBW	SampType: MBLK Batch ID: R61636			Tes						
Prep Date:	Analysis [Date: 7/	24/2019		SeqNo: 2	089114	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0	Balt .				VIII I		HINNEY!	
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		88.4	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.6	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.7	70	130			
Surr: Toluene-d8	9.5		10.00		94.6	70	130			

Sample ID: 1907972-001ams	s Samp	Type: MS		TestCode: EPA Method 8260B: VOLATILES								
Client ID: Manzanares No	n Ex Batc	h ID: R6	1636	F	RunNo: 6							
Prep Date:	Analysis [Date: 7/	24/2019		SeqNo: 2	089118	Units: mg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	3.3	0.50	4.000	0	83.5	70	130	100				
Toluene	3.5	0.20	4.000	0	88.4	70	130					
Chlorobenzene	3.7	0.20	4.000	0	93.0	70	130					
1,1-Dichloroethene	3.4	0.20	4.000	0	85.5	67.6	130					
Trichloroethene (TCE)	3.3	0.20	4.000	0	82.3	70	130					
Surr: 1,2-Dichloroethane-d4	1.8		2.000		91.0	70	130					
Surr: 4-Bromofluorobenzene	1.9		2.000		97.3	70	130					
Surr: Dibromofluoromethane	1.8		2.000		88.7	70	130					
Surr: Toluene-d8	1.9		2.000		92.6	70	130					

Sample ID: 1907972-001am	sd Samp1	ype: MS	SD	TestCode: EPA Method 8260B: VOLATILES							
Client ID: Manzanares No	n Ex Batc	h ID: R6	1636	F							
Prep Date:	Analysis Date: 7/24/2019			SeqNo: 2089119			Units: mg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	3.2	0.50	4.000	0	79.8	70	130	4.61	20		
Toluene	3.5	0.20	4.000	0	86.4	70	130	2.27	20		
Chlorobenzene	3.6	0.20	4.000	0	90.2	70	130	3.14	20		
1,1-Dichloroethene	3.3	0.20	4.000	0	82.0	67.6	130	4.18	20		
Trichloroethene (TCE)	3.0	0.20	4.000	0	74.8	70	130	9.45	20		
Surr: 1,2-Dichloroethane-d4	1.8		2.000		87.9	70	130	0	0		
Surr: 4-Bromofluorobenzene	1.9		2.000		94.7	70	130	0	0		
Surr: Dibromofluoromethane	1.8		2.000		89.0	70	130	0	0		
Surr: Toluene-d8	1.9		2.000		93.5	70	130	0	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 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

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Hall Environmental Analysis Laboratory, Inc.

WO#:

1907972

01-Aug-19

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID: mb-46349	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8270C: PAHs			
Client ID: PBW	Batcl	h ID: 46	349	F	RunNo: 6	1804				
Prep Date: 7/24/2019	Analysis D	Date: 7/	31/2019		SeqNo: 2	095206	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	73		87.60		83.9	20.4	126			
Surr: Benzo(e)pyrene	19		20.00		95.8	21.4	126			

Sample ID: Ics-46349	Samp1	ype: LC	S	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSW	Batcl	n ID: 46	349	F	RunNo: 6	1804				
Prep Date: 7/24/2019	Analysis E)ate: 7/	31/2019	5	SeqNo: 2	095207	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	18	0.50	20.00	0	88.6	29.6	105			
1-Methylnaphthalene	18	1.0	20.00	0	87.8	33.4	112			
2-Methylnaphthalene	20	1.0	20.00	0	97.7	28.6	108			
Acenaphthylene	17	0.50	20.00	0	87.1	35.7	116			
Acenaphthene	16	0.50	20.00	0	80.6	32.4	118			
Fluorene	18	0.50	20.00	0	88.7	35.6	118			
Phenanthrene	18	0.50	20.00	0	89.1	36.3	130			
Anthracene	18	0.50	20.00	0	88.0	34.8	135			
Fluoranthene	18	0.50	20.00	0	90.9	41	136			
Pyrene	17	0.50	20.00	0	86.9	44.8	136			
Benz(a)anthracene	17	0.50	20.00	0	84.9	41.1	136			
Chrysene	15	0.50	20.00	0	73.0	37.9	132			
Benzo(b)fluoranthene	22	0.50	20.00	0	109	39	144			

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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1907972

01-Aug-19

Client: Souder, Miller and Associates

Project: Manzanares

Sample ID: Ics-46349		SampType: LCS TestCode: EPA Method Batch ID: 46349 RunNo: 61804					8270C: PAHs			
Client ID: LCSW	Batcl	h ID: 46	349	F	RunNo: 6	1804				
Prep Date: 7/24/2019	Analysis [Date: 7/	31/2019	8	SeqNo: 2	095207	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	22	0.50	20.00	0	108	40	144			
Benzo(a)pyrene	22	0.50	20.00	0	110	36.8	137			
Dibenz(a,h)anthracene	20	0.50	20.00	0	99.2	31.5	141			
Benzo(g,h,i)perylene	23	0.50	20.00	0	115	32.9	138			
ndeno(1,2,3-cd)pyrene	23	0.50	20.00	0	115	40.9	143			
Surr: N-hexadecane	75		87.60		86.1	20.4	126			
Surr: Benzo(e)pyrene	20		20.00		101	21.4	126			

Sample ID: Icsd-46349	Samp	ype: LC	SD	Tes	tCode: El	PA Method	8270C: PAHs			
Client ID: LCSS02	Batc	h ID: 46	349	F	RunNo: 6	1804				
Prep Date: 7/24/2019	Analysis [Date: 7/	31/2019		SeqNo: 2	095208	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	17	0.50	20.00	0	85.7	29.6	105	3.33	68.7	
1-Methylnaphthalene	17	1.0	20.00	0	85.3	33.4	112	2.89	66	
2-Methylnaphthalene	18	1.0	20.00	0	89.8	28.6	108	8.43	68.7	
Acenaphthylene	15	0.50	20.00	0	77.3	35.7	116	11.9	64.9	
Acenaphthene	13	0.50	20.00	0	67.2	32.4	118	18.1	53.2	
Fluorene	15	0.50	20.00	0	77.4	35.6	118	13.6	62.4	
Phenanthrene	16	0.50	20.00	0	82.4	36.3	130	7.81	62.6	
Anthracene	16	0.50	20.00	0	79.9	34.8	135	9.65	62.4	
Fluoranthene	17	0.50	20.00	0	84.3	41	136	7.53	59.4	
Pyrene	16	0.50	20.00	0	80.5	44.8	136	7.65	55.4	
Benz(a)anthracene	16	0.50	20.00	0	77.8	41.1	136	8.73	56.6	
Chrysene	14	0.50	20.00	0	68.6	37.9	132	6.21	51.9	
Benzo(b)fluoranthene	19	0.50	20.00	0	93.8	39	144	15.0	59.1	
Benzo(k)fluoranthene	19	0.50	20.00	0	97.0	40	144	11.1	57	
Benzo(a)pyrene	18	0.50	20.00	0	89.5	36.8	137	20.6	60.2	
Dibenz(a,h)anthracene	18	0.50	20.00	0	88.0	31.5	141	12.0	64.7	
Benzo(g,h,i)perylene	21	0.50	20.00	0	103	32.9	138	11.5	61.5	
ndeno(1,2,3-cd)pyrene	21	0.50	20.00	0	103	40.9	143	11.2	61.1	
Surr: N-hexadecane	66		87.60		75.9	20.4	126	0	0	
Surr: Benzo(e)pyrene	17		20.00		85.0	21.4	126	0	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 Quanitative Limit

8 % 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#:

1907972

01-Aug-19

Client:

Souder, Miller and Associates

Project:

Manzanares

Sample ID: MB-46307

SampType: MBLK

TestCode: EPA Method 7470: Mercury

Client ID: PBW

Batch ID: 46307

PQL

SPK value SPK Ref Val %REC LowLimit

RunNo: 61563

Prep Date: 7/22/2019

Analysis Date: 7/22/2019

SeqNo: 2086444

Units: mg/L HighLimit

RPDLimit

Qual

Mercury

ND 0.00020

Sample ID: LCS-46307

SampType: LCS

TestCode: EPA Method 7470: Mercury

Client ID: LCSW Prep Date: 7/22/2019 Batch ID: 46307

RunNo: 61563

Units: mg/L

Analyte

Analysis Date: 7/22/2019

SeqNo: 2086445

%RPD **HighLimit RPDLimit** Qual

%RPD

SPK value SPK Ref Val %REC LowLimit PQL

Mercury

0.0050 0.00020 0.005000

120

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 PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

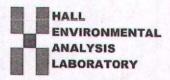
Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

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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: SMA-FARM V	Work Order Numbe	er: 190°	7972			RcptNo: 1
Received By: Desiree Dominguez 7/1	9/2019 8:00:00 Al	и			2	
Completed By: Anne Thorne 7/1	9/2019 11:16:51 A	M		anne	1	
Reviewed By: 16 7/19/16				Um	No	
Chain of Custody						
1. Is Chain of Custody complete?		Yes	V	No		Not Present
2. How was the sample delivered?		Cou	rier			
Log In						
Was an attempt made to cool the samples?		Yes	V	No		NA 🗆
4. Were all samples received at a temperature of >0	0° C to 6.0°C	Yes	~	No		NA 🗆
5. Sample(s) in proper container(s)?		Yes	V	No		
Sufficient sample volume for indicated test(s)?		Yes	~	No		
7. Are samples (except VOA and ONG) properly pres	served?	Yes	~	No		
8. Was preservative added to bottles?		Yes		No	V	NA 🗆
9. VOA vials have zero headspace?		Yes	~	No		No VOA Vials
10. Were any sample containers received broken?		Yes		No	~	
						# of preserved bottles checked
11. Does paperwork match bottle labels?		Yes	V	No		for pH:
(Note discrepancies on chain of custody) 2. Are matrices correctly identified on Chain of Custo	Subs	Yes		No		(වor >t2unless noted) Adjusted? Nට
3. Is it clear what analyses were requested?	ouy r	Yes				
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No		Checked by: DAD 7/19/
Special Handling (if applicable)						
15. Was client notified of all discrepancies with this or	rder?	Yes		No		NA ⊻
Person Notified:	Date		eranous en a		energy (
By Whom:	Via:	□ eMa	ail	Phone	Fax	In Person
Regarding:			-		-	
Client Instructions:					-	
16. Additional remarks:						
17. Cooler Information						
Cooler No Temp °C Condition Seal Int 1 0.6 Good Yes	tact Seal No	Seal Da	ate	Signed B	ly	

Pulles

7118191017

2

Time:

Date:

Time:

Matrix

Time

Date

□ Other

O NELAC

Accreditation:

□ Standard

☐ EDD (Type)

QA/QC Package:

Client: SMD

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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 284146

COMMENTS

Operator:	OGRID:
AGUA MOSS, LLC	247130
P.O. Box 600	Action Number:
Farmington, NM 87499	284146
	Action Type:
	[UF-DP] Discharge Permit (DISCHARGE PERMIT)

COMMENTS

Created By	Comment	Comment Date
cchavez	Quarterly Waste Analyses Information 2019 Submittal	11/8/2023

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CONDITIONS

Action 284146

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CONDITIONS

Created By	Condition	Condition Date
cchavez	Condition of Approval: 1. Follow Discharge Permit Quarterly Report Guidelines, Content, and Deadline Date for submittal of future reports.	11/8/2023