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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company OneEnergy Partners Operating, LLC	Contact David Ramsden-Wood
Address 2929 Allen Parkway, Suite 200, Houston, TX 77019	Telephone No. 713-714-6842
Facility Name County Fair BTY State 1H	Facility Type Oil Well

Surface Owner State	Mineral Owner OneEnergy Partners	API No.30-025-43117

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	02	25S	35E	200	FNL	400	FWL	Lea

Latitude__32.166175_ **Longitude**___-103.345556_ NAD83

NATURE OF RELEASE

Type of Release Gas	Volume of Release ~ 133 mcf	Volume Recovered 0 mcf
Source of Release Flowline leak	Date and Hour of Occurrence 12/29/2017 2:15 AM	Date and Hour of Discovery 12/29/2017 6:15 AM
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

APPROVED
By Olivia Yu at 7:21 am, Mar 15, 2018

Describe Cause of Problem and Remedial Action Taken.*
Gas sales flowline leaked and caught fire. The flowline was repaired, purged, tested and brought back online. Initial report was submitted 1/5/2018. NMOCD 1RP4939 was received 1/17/2018. Release Characterization Workplan was reviewed and approved by the NMOCD 1/29/2018. Attached Summary of Characterization was submitted to NMOCD on 2/16/2018. NMOCD, via email, approved of the delineation completed for 1RP-4939 and informed Operator that no further remediation was required.

Describe Area Affected and Cleanup Action Taken.*
Flowline leak was repaired, tested to ensure integrity and brought back on line. All debris from the site has been removed; photos attached.

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

Signature:	OIL CONSERVATION DIVISION
Printed Name: Rachael Overbey	Approved by Environmental Specialist:
Title: Director of Planning and Regulatory	Approval Date: 3/15/2018 Expiration Date: xx/xx/xxxx
E-mail Address: rachaeloverbey@revenergygroup.com	Conditions of Approval: Attached ☐
Date: 3/12/2018 Phone:303-570-4057	

* Attach Additional Sheets If Necessary

1RP-4939

February 16, 2018

APPROVED
By Olivia Yu at 9:38 am, Feb 27, 2018

NMOCD approves of the delineation completed for 1RP-4939. No further remediation is required.

Ms. Olivia Yu
Environmental Specialist
NMOCD, District 1
525 N. French Dr.
Hobbs, NM 88240

Re: Summary Report for Release Characterization Activities
Lea County, NM
Remediation Case Number: 1RP-4939

Ms. Yu,

This summary report has been prepared by SLR International Corporation (SLR) on behalf of OneEnergy Partners Operating, LLC (OneEnergy) for release characterization activities at the County Fair well pad located in Lea County, New Mexico (Oil Conservation Division [OCD] remediation case number 1RP-4939). A site location map is included as Figure 1.

BACKGROUND

As presented in the Release Notification and Corrective Action form submitted to OCD by OneEnergy, a gas sales flowline leaked and caught fire the morning of December 29, 2017. The leak from the flowline was confirmed to be approximately 20 feet from the eastern edge of the County Fair well pad operated by OneEnergy (see Figure 2). The fire was noticed at 6:15 a.m., was immediately extinguished, and the well was shut-in for the remainder of the initial investigation. During the investigation, it appeared that the flowline leak began around 2:15 a.m. The flowline was subsequently repaired, purged, tested for integrity, and returned to operation.

It was determined that the leak discharged approximately 4 barrels (168 gallons) of condensate to the surface adjacent to the well pad. It appeared that a majority of the condensate discharge was ignited during the fire. A subsequent investigation of site conditions on January 24 and 25, 2018 did not indicate apparent hydrocarbon surface staining or noticeable impacts from the release.

On January 26, 2018, SLR prepared a Proposal for Release Characterization Activities in accordance with the requirements of 19.15.29.11 of the New Mexico Administrative Code (NMAC). The proposed

delineation plan was approved by both the OCD and the New Mexico State Land Office (NMSLO) on January 29, 2018.

RELEASE CHARACTERIZATION ACTIVITIES

The following scope of work was completed for the release characterization activities.

Release Characterization Field Activities

To assess for potential soil impacts resulting from the unauthorized release, one day of soil sampling was completed on February 2, 2018. As the source of the unauthorized discharge (flowline leak) and approximate volume that was released (4 barrels) were known, a sampling grid was established emanating from the release point in each of the four cardinal compass directions. The initial starting point for soil sampling activities was based on visual observations and discussions with personnel familiar with the initial release investigation. Soil sample locations were completed within the impacted area and beyond.

Surface soil samples (surface to approximately 1 foot below ground surface [bgs]) were collected with hand tools (i.e. trowel and/or shovel) centered on the initial release point. Soil sampling locations are presented on Figure 3. Soil sampling was completed at approximately five foot horizontal intervals from the initial release point in each cardinal direction, up to a maximum of 15 feet distant from the initial release point. Recovered soil was screened with a photoionization detector (PID) to evaluate for the presence of volatile compounds in the headspace of individually-bagged sample intervals. PID measurements from each soil sample location are included on Table 1. Additional soil samples were collected vertically up to a maximum depth of 3 feet bgs, based on PID measurements, field observations, and sampling conditions. Soil sampling equipment was decontaminated with isopropanol and water before each sample was collected.

Initial sample intervals selected for laboratory analysis included one surface soil sample collected from five foot horizontal intervals in each cardinal direction from the release point (LP 5N-0, LP 5E-0, LP 5S-0, LP 5W-0), and a corresponding sample from one foot further in depth (i.e. 1 foot below ground surface [bgs]) at each sample location (LP 5N-1, LP 5E-1, LP 5S-1, LP 5W-1).

In accordance with OCD requirements and the OCD-approved work plan, soil samples selected for laboratory analysis were submitted for the following:

- Benzene, toluene, ethylbenzene, total xylenes (BTEX) per EPA Method 8021
- Total Petroleum Hydrocarbons (TPH) by EPA Method 8015 (extended range: GRO+DRO+MRO; C6 thru C36)

- Chloride per EPA Method 300

Duplicate samples were collected from the laterally farthest (in each cardinal direction) sample; however, these samples were not submitted for laboratory analysis due to the absence of observed impacts via field observations or PID readings.

FINDINGS

Field observations of the release area and surrounding area indicated charred surface material from the fire. There was a slight hydrocarbon odor observed at some sample locations; however, PID measurements were all below 1 part per million (ppm) (see Table 1).

Laboratory analytical results were compared to the suggested screening levels presented in the OCD guidance document, *Guidelines for Remediation of Leaks, Spills and Releases* (OCD, 1993) and are summarized on Table 2. A copy of the laboratory analytical report is included as Appendix A.

Laboratory analytical results did not measure concentrations of chloride, TPH, or BTEX above the OCD suggested screening levels in any of the eight soil samples submitted for analysis (see Table 2).

As stated in the OCD-approved work plan, available data from United States Geological Survey (USGS) indicates the closest groundwater depth in the area of the site is approximately 76 feet below ground surface. As this is beyond the 50 foot threshold identified by OCD, additional investigation of groundwater impacts related to the release were not completed. Surface water was not present at the site, and no surface water features are located in the surrounding area; therefore investigation of surface water impacts related to the release was not completed.

During the release characterization field activities, the area within and immediately adjacent to the release point was observed for potential impacts to vegetation, wildlife, air quality, or property. The release occurred directly adjacent to the access road of the County Fair well pad (Figure 2). The release did not appear to cause significant impact to vegetation, wildlife, air quality, or property. Due to the limited extent of the fire and the small amount of vegetation in the area, additional assessment of impacts to vegetation, wildlife, air quality, or property are not warranted.

CONCLUSION

This summary report presents the findings from the release characterization activities performed for OCD remediation case number 1RP-4939. Based on the field observations and subsequent soil sampling analytical results, the release did not impact soil at concentrations above OCD screening levels at the locations sampled. Based on the findings of this investigation, no further assessment or remediation is recommended.

If you have any questions regarding this summary report, please contact us at (503) 723-4423.

Sincerely,
SLR International Corporation

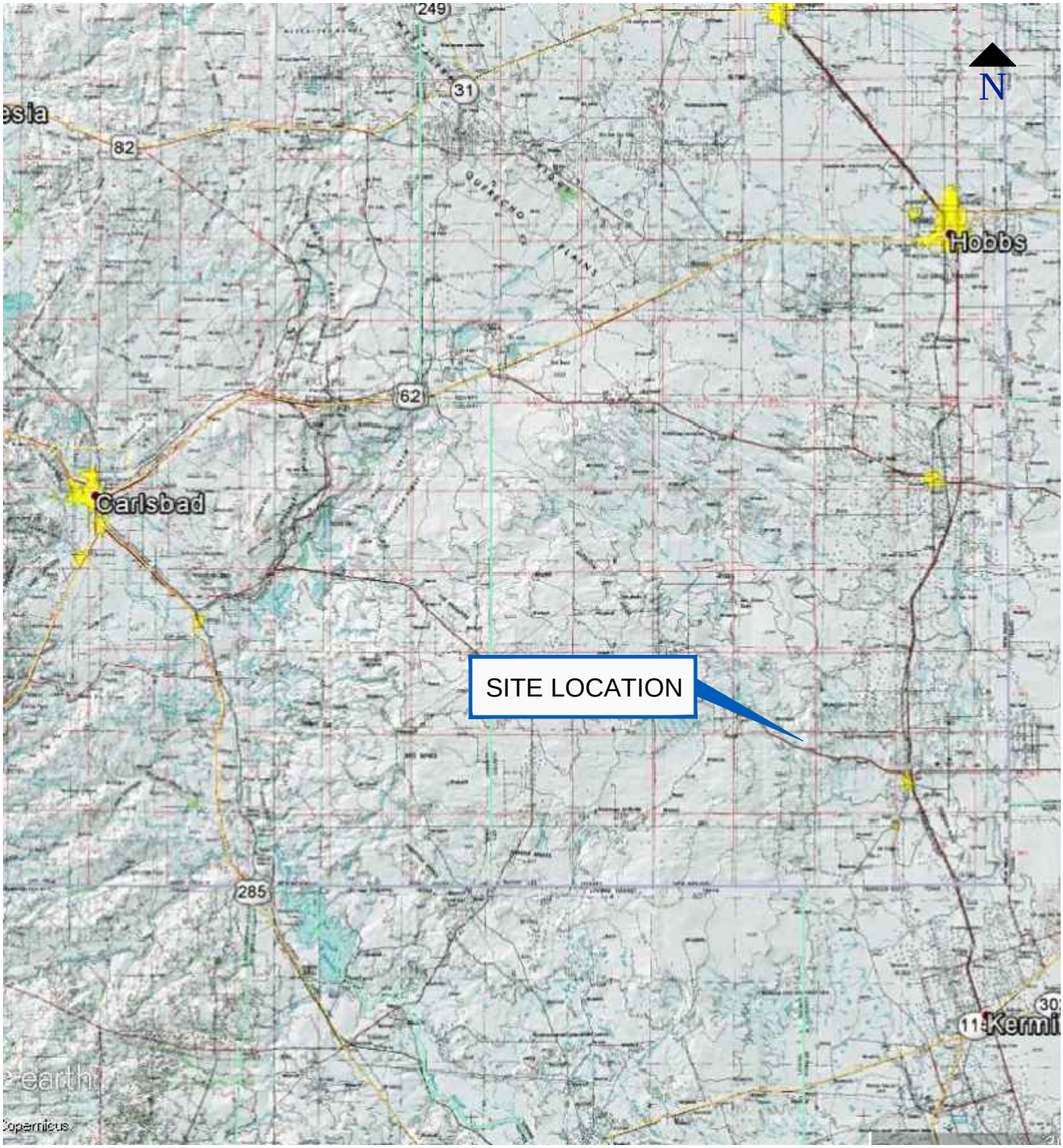
Kade Carlson
Staff Geologist

Megan Coracci
Principal Scientist

cc Mr. David Ramsden-Wood, OneEnergy Partners Operating, LLC

Enc Figures
Tables
Photo Sheet
Appendix A – Laboratory Analytical Report

FIGURES



REFERENCED FROM : GOOGLE EARTH, NATIONAL GEOGRAPHIC TOPOGRAPHIC MAPS

SLR

OneEnergy Partners Operating LLC
2929 Allen Parkway; Suite 200
Houston, TX 77019

Report: SUMMARY REPORT FOR RELEASE CHARACTERIZATION ACTIVITIES

Drawing: SITE LOCATION MAP

Date	FEBRUARY 2018	Scale	AS SHOWN	Fig. No. 1
File Name		Project No.	108.01740.00002	

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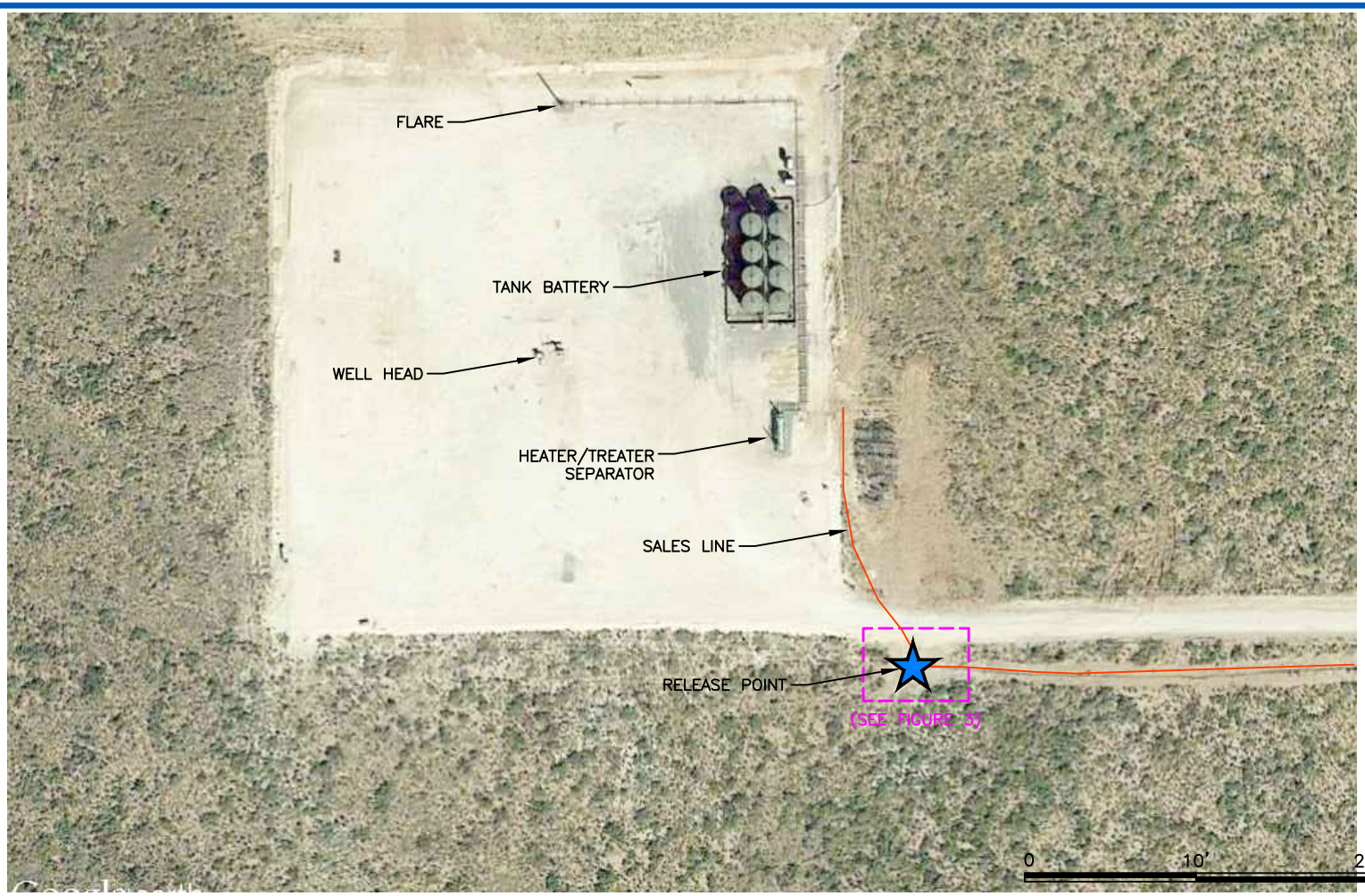

LEGEND

INVESTIGATION AREA

RELEASE POINT

SLR

0 150' 300' 450'

OneEnergy Partners Operating LLC
2929 Allen Parkway; Suite 200
Houston, TX 77019

Report
SUMMARY REPORT FOR RELEASE CHARACTERIZATION ACTIVITIES

Drawing
SITE PLAN AND INVESTIGATION AREA

Date	FEBRUARY 2018	Scale	AS SHOWN
File Name		Project No.	108.01740.00002

Fig. No. 2

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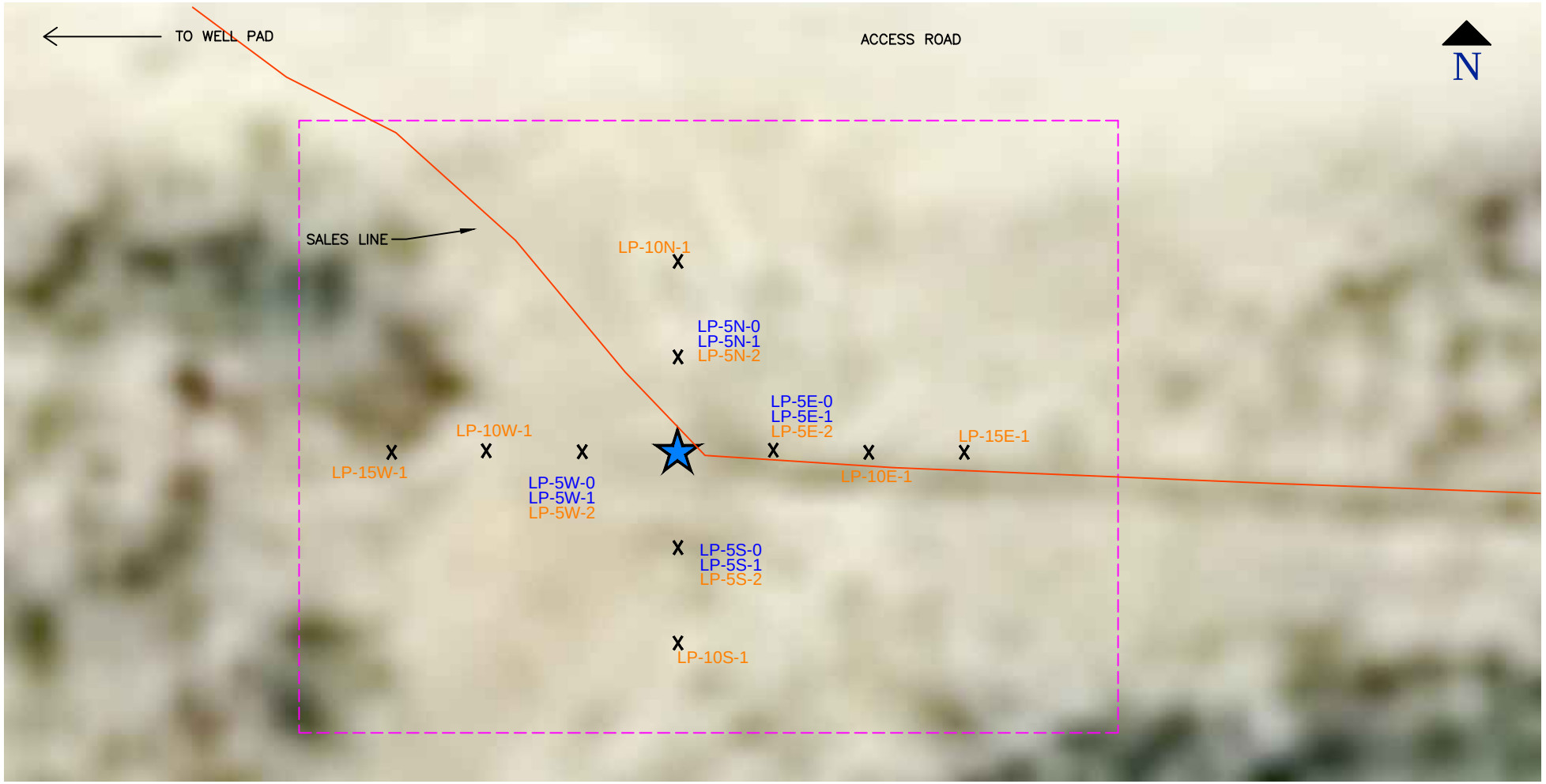

LEGEND

- INVESTIGATION AREA
- RELEASE POINT
- LP-5W-0 SOIL SAMPLE LOCATION (SAMPLE ANALYZED)
- LP-5W-2 SOIL SAMPLE LOCATION (SAMPLE HELD BY LAB)

SLR

0 10' 20' 30'

OneEnergy Partners Operating LLC
2929 Allen Parkway; Suite 200
Houston, TX 77019

Report: SUMMARY REPORT FOR RELEASE CHARACTERIZATION ACTIVITIES

Drawing: SOIL SAMPLING LOCATIONS

Date	FEBRUARY 2018	Scale	AS SHOWN
File Name		Project No.	108.01740.00002

Fig. No. 3

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TABLES

Table 1
PID Measurements
OneEnergy Partners
Lea County, New Mexico

Sample Location	Horizontal Distance from Leak Point (LP)	Vertical Depth of Sample	PID Reading (ppm)
LP 5N – 0	5 ft	0 to 1 ft	0.0
LP 5N – 1	5 ft	1 to 2 ft	0.3
LP 5N – 2	5 ft	2 to 3 ft	0.1
LP 10N – 1	10 ft	1 to 2 ft	0.2
LP 5E – 0	5 ft	0 to 1 ft	0.0
LP 5E – 1	5 ft	1 to 2 ft	0.5
LP 5E – 2	5 ft	2 to 3 ft	0.0
LP 10E – 1	10 ft	1 to 2 ft	0.4
LP 15E – 1	15 ft	1 to 2 ft	0.0
LP 5S – 0	5 ft	0 to 1 ft	0.0
LP 5S – 1	5 ft	1 to 2 ft	0.1
LP 5S – 2	5 ft	2 to 3 ft	0.0
LP 10S – 1	10 ft	1 to 2 ft	0.3
LP 5W – 0	5 ft	0 to 1 ft	0.0
LP 5W – 1	5 ft	1 to 2 ft	0.0
LP 5W – 2	5 ft	2 to 3 ft	0.0
LP 10W – 1	10 ft	1 to 2 ft	0.8
LP 15W – 1	15 ft	1 to 2 ft	0.0

Notes:
PID calibrated to isobutylene
PID readings collected by placing sample inside plastic bag and screening headspace

Table 2
Soil Analytical Summary Table
OneEnergy Partners
Lea County, New Mexico

Sample ID			Screening Levels	LP-5N-0		LP-5N-1		LP-5E-0		LP-5E-1		LP-5S-0		LP-5S-1		LP-5W-0		LP-5W-1	
Sample Depth (ft)				Surface		1 to 2		Surface		1 to 2		Surface		1 to 2		Surface		1 to 2	
Date Collected			OCD Remediation	02/02/2018		02/02/2018		02/02/2018		02/02/2018		02/02/2018		02/02/2018		02/02/2018		02/02/2018	
Method	Analyte	Units	Guidance [A]	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
300	CHLORIDE	mg/kg	600 [B]	**41.4**		**40.6**		**79.6**		**43.7**		**68.4**		**80**		**91.4**		**70.7**	
8015	TPH (GC/FID) LOW FRACTION	mg/kg	--	**0.084**	B J	**0.035**	B J J3	**0.090**	B J	**0.032**	B J	**0.078**	B J	**0.036**	B J	**0.14**	B	**0.065**	B J
8015M	C10 - C20 HYDROCARBONS	mg/kg	--	<4.05		<4.14		<4.67		<4.14		**3.31**	J	<4.9		**7.72**		<4.77	
8015M	C20-C36 HYDROCARBONS	mg/kg	--	**6.24**		**3.01**	J	**3.43**	J	**3.11**	J	**1.66**	J	<4.9		**12.6**		**2.73**	J
Calc.	Total TPH (C6-C36) [C]	mg/kg	1,000																
8021	BENZENE	mg/kg	10	**0.0009**		**0.0005**	J J3	**0.0007**		**0.0005**	J	**0.002**		**0.0004**	J	**0.001**		**0.001**	
8021	TOLUENE	mg/kg	--	**0.0004**	B J	**0.0003**	B J J3	**0.0008**	B J	**0.0004**	B J	**0.001**	B J	<0.00613		**0.002**	B J	**0.0008**	B J
8021	ETHYLBENZENE	mg/kg	--	<0.000531		**0.0002**	B J J3	<0.000584		**0.0003**	B J	**0.0003**	B J	**0.0003**	B J	**0.0007**	B	**0.0004**	B J
8021	XYLENES, TOTAL	mg/kg	--	**0.0008**	B J	<0.00155	J3 J6	**0.001**	B J	**0.0005**	B J	**0.002**	B J	**0.0006**	B J	**0.003**	B	**0.0009**	B J
Calc.	Total BTEX [D]	mg/kg	50	**0.002**		**0.001**		**0.003**		**0.002**		**0.005**		**0.001**		**0.006**		**0.003**	

Notes:
All values in milligrams per kilograms (mg/kg)
<4 indicates not detected above laboratory reporting limit of 4 mg/kg
Bold indicates detected above laboratory reporting limit
Gray shading indicates detected above screening level
A - Screening levels from New Mexico Oil Conservation District (OCD) Guidelines for Remediation of Leaks, Spills and Releases (August 1993)
B - Chloride value provided by OCD
C - Total TPH value is sum of TPH Low Fraction, C10-C20, and C20-C36
D - Total BTEX is sum of benzene, toluene, ethylbenzene, and total xylenes

Laboratory Qualifiers:
B - The same analyte is found in the associated blank
J - The identification of the analyte is acceptable; the reported value is an estimate
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

PHOTO SHEETS

Investigation Area (view looking Southeast)

Investigation Area (view looking North/Northwest)

Site Photographs 02/02/2018	**Photo Sheet 1** **County Fair Well Pad** **Lea County, NM**	SLR

APPENDIX A

Laboratory Analytical Report

ANALYTICAL REPORT

February 12, 2018

SLR International Corp. - West Linn, OR

Sample Delivery Group:	L967738
Samples Received:	02/05/2018
Project Number:	
Description:	SLR-NM

Report To: Chris Kramer
1800 Blankenship Road, Suite 440
West Linn, OR 97068

Entire Report Reviewed By:

Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

LP-5N-0 L967738-01 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 12:30	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 16:57	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1.05	02/02/18 12:30	02/07/18 15:31	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 11:39	ACM

LP-5E-0 L967738-02 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 12:35	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 17:05	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1	02/02/18 12:35	02/07/18 15:54	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 10:58	ACM

LP-5S-0 L967738-03 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 12:40	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 17:14	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1	02/02/18 12:40	02/07/18 16:15	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 10:44	ACM

LP-5W-0 L967738-04 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 12:50	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 17:22	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1.03	02/02/18 12:50	02/07/18 16:37	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 11:53	ACM

LP-5N-1 L967738-05 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 13:00	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 17:31	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1	02/02/18 13:00	02/07/18 16:59	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 10:17	ACM

LP-5E-1 L967738-06 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 13:10	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 18:13	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1	02/02/18 13:10	02/07/18 17:21	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 10:31	ACM

LP-5S-1 L967738-07 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 13:20	02/05/18 09:00

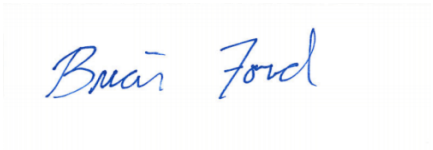
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 18:30	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1	02/02/18 13:20	02/07/18 17:43	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 09:49	ACM

LP-5W-1 L967738-08 Solid

Collected by	Collected date/time	Received date/time
Kane	02/02/18 13:30	02/05/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1071789	1	02/09/18 09:03	02/09/18 09:06	KDW
Wet Chemistry by Method 300.0	WG1070309	1	02/06/18 12:09	02/06/18 18:39	DR
Volatile Organic Compounds (GC) by Method 8015/8021	WG1070659	1	02/02/18 13:30	02/07/18 19:14	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1070228	1	02/06/18 22:39	02/07/18 10:03	ACM

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Brian Ford
Technical Service Representative

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	98.9		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	41.4		0.804	10.1	1	02/06/2018 16:57	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000924		0.000127	0.000531	1.05	02/07/2018 15:31	WG1070659
Toluene	0.000403	B J	0.000160	0.00531	1.05	02/07/2018 15:31	WG1070659
Ethylbenzene	U		0.000117	0.000531	1.05	02/07/2018 15:31	WG1070659
Total Xylene	0.000768	B J	0.000488	0.00159	1.05	02/07/2018 15:31	WG1070659
TPH (GC/FID) Low Fraction	0.0838	B J	0.0231	0.106	1.05	02/07/2018 15:31	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*77.0-120*		*02/07/2018 15:31*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*93.3*			*75.0-128*		*02/07/2018 15:31*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	U		2.27	4.05	1	02/07/2018 11:39	WG1070228
C20-C36 Hydrocarbons	6.24		0.689	4.05	1	02/07/2018 11:39	WG1070228
(S) o-Terphenyl	*82.1*			*18.0-148*		*02/07/2018 11:39*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.6		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	79.6		0.929	11.7	1	02/06/2018 17:05	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000670		0.000140	0.000584	1	02/07/2018 15:54	WG1070659
Toluene	0.000824	B J	0.000175	0.00584	1	02/07/2018 15:54	WG1070659
Ethylbenzene	U		0.000129	0.000584	1	02/07/2018 15:54	WG1070659
Total Xylene	0.00114	B J	0.000537	0.00175	1	02/07/2018 15:54	WG1070659
TPH (GC/FID) Low Fraction	0.0902	B J	0.0254	0.117	1	02/07/2018 15:54	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*98.7*			*77.0-120*		*02/07/2018 15:54*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*91.7*			*75.0-128*		*02/07/2018 15:54*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	U		2.62	4.67	1	02/07/2018 10:58	WG1070228
C20-C36 Hydrocarbons	3.43	J	0.796	4.67	1	02/07/2018 10:58	WG1070228
(S) o-Terphenyl	*71.8*			*18.0-148*		*02/07/2018 10:58*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.0		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	68.4		0.946	11.9	1	02/06/2018 17:14	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.00162		0.000143	0.000595	1	02/07/2018 16:15	WG1070659
Toluene	0.00116	B J	0.000179	0.00595	1	02/07/2018 16:15	WG1070659
Ethylbenzene	0.000343	B J	0.000131	0.000595	1	02/07/2018 16:15	WG1070659
Total Xylene	0.00170	B J	0.000548	0.00179	1	02/07/2018 16:15	WG1070659
TPH (GC/FID) Low Fraction	0.0781	B J	0.0258	0.119	1	02/07/2018 16:15	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*99.4*			*77.0-120*		*02/07/2018 16:15*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*92.4*			*75.0-128*		*02/07/2018 16:15*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	3.31	J	2.67	4.76	1	02/07/2018 10:44	WG1070228
C20-C36 Hydrocarbons	1.66	J	0.811	4.76	1	02/07/2018 10:44	WG1070228
(S) o-Terphenyl	*83.3*			*18.0-148*		*02/07/2018 10:44*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.4		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	91.4		0.953	12.0	1	02/06/2018 17:22	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.00106		0.000149	0.000618	1.03	02/07/2018 16:37	WG1070659
Toluene	0.00168	B J	0.000185	0.00618	1.03	02/07/2018 16:37	WG1070659
Ethylbenzene	0.000733	B	0.000136	0.000618	1.03	02/07/2018 16:37	WG1070659
Total Xylene	0.00251	B	0.000568	0.00185	1.03	02/07/2018 16:37	WG1070659
TPH (GC/FID) Low Fraction	0.140	B	0.0269	0.124	1.03	02/07/2018 16:37	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*98.1*			*77.0-120*		*02/07/2018 16:37*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*92.2*			*75.0-128*		*02/07/2018 16:37*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	7.72		2.69	4.80	1	02/07/2018 11:53	WG1070228
C20-C36 Hydrocarbons	12.6		0.817	4.80	1	02/07/2018 11:53	WG1070228
(S) o-Terphenyl	*65.1*			*18.0-148*		*02/07/2018 11:53*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	40.6		0.823	10.3	1	02/06/2018 17:31	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000470	J J3	0.000124	0.000517	1	02/07/2018 16:59	WG1070659
Toluene	0.000281	B J J3	0.000155	0.00517	1	02/07/2018 16:59	WG1070659
Ethylbenzene	0.000233	B J J3	0.000114	0.000517	1	02/07/2018 16:59	WG1070659
Total Xylene	U	J3 J6	0.000476	0.00155	1	02/07/2018 16:59	WG1070659
TPH (GC/FID) Low Fraction	0.0347	B J J3	0.0225	0.103	1	02/07/2018 16:59	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*02/07/2018 16:59*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*93.2*			*75.0-128*		*02/07/2018 16:59*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	U		2.32	4.14	1	02/07/2018 10:17	WG1070228
C20-C36 Hydrocarbons	3.01	J	0.705	4.14	1	02/07/2018 10:17	WG1070228
(S) o-Terphenyl	*93.0*			*18.0-148*		*02/07/2018 10:17*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	96.6		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	43.7		0.823	10.4	1	02/06/2018 18:13	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000475	J	0.000124	0.000518	1	02/07/2018 17:21	WG1070659
Toluene	0.000392	B J	0.000155	0.00518	1	02/07/2018 17:21	WG1070659
Ethylbenzene	0.000308	B J	0.000114	0.000518	1	02/07/2018 17:21	WG1070659
Total Xylene	0.000506	B J	0.000476	0.00155	1	02/07/2018 17:21	WG1070659
TPH (GC/FID) Low Fraction	0.0323	B J	0.0225	0.104	1	02/07/2018 17:21	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*		*02/07/2018 17:21*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*95.0*			*75.0-128*		*02/07/2018 17:21*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	U		2.32	4.14	1	02/07/2018 10:31	WG1070228
C20-C36 Hydrocarbons	3.11	J	0.705	4.14	1	02/07/2018 10:31	WG1070228
(S) o-Terphenyl	*92.6*			*18.0-148*		*02/07/2018 10:31*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.6		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	80.0		0.975	12.3	1	02/06/2018 18:30	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000401	J	0.000147	0.000613	1	02/07/2018 17:43	WG1070659
Toluene	U		0.000184	0.00613	1	02/07/2018 17:43	WG1070659
Ethylbenzene	0.000296	B J	0.000135	0.000613	1	02/07/2018 17:43	WG1070659
Total Xylene	0.000573	B J	0.000564	0.00184	1	02/07/2018 17:43	WG1070659
TPH (GC/FID) Low Fraction	0.0356	B J	0.0266	0.123	1	02/07/2018 17:43	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-120*		*02/07/2018 17:43*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*92.3*			*75.0-128*		*02/07/2018 17:43*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	U		2.75	4.90	1	02/07/2018 09:49	WG1070228
C20-C36 Hydrocarbons	U		0.835	4.90	1	02/07/2018 09:49	WG1070228
(S) o-Terphenyl	*66.5*			*18.0-148*		*02/07/2018 09:49*	WG1070228

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.8		1	02/09/2018 09:06	WG1071789

Wet Chemistry by Method 300.0

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Chloride	70.7		0.949	11.9	1	02/06/2018 18:39	WG1070309

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Benzene	0.000978		0.000143	0.000597	1	02/07/2018 19:14	WG1070659
Toluene	0.000757	B J	0.000179	0.00597	1	02/07/2018 19:14	WG1070659
Ethylbenzene	0.000399	B J	0.000131	0.000597	1	02/07/2018 19:14	WG1070659
Total Xylene	0.000872	B J	0.000549	0.00179	1	02/07/2018 19:14	WG1070659
TPH (GC/FID) Low Fraction	0.0653	B J	0.0259	0.119	1	02/07/2018 19:14	WG1070659
(S) a,a,a-Trifluorotoluene(FID)	*97.8*			*77.0-120*		*02/07/2018 19:14*	WG1070659
(S) a,a,a-Trifluorotoluene(PID)	*91.4*			*75.0-128*		*02/07/2018 19:14*	WG1070659

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
C10 - C20 Hydrocarbons	U		2.67	4.77	1	02/07/2018 10:03	WG1070228
C20-C36 Hydrocarbons	2.73	J	0.813	4.77	1	02/07/2018 10:03	WG1070228
(S) o-Terphenyl	*89.9*			*18.0-148*		*02/07/2018 10:03*	WG1070228

Method Blank (MB)

(MB) R3285408-1 02/09/18 09:06

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0			

L967681-06 Original Sample (OS) • Duplicate (DUP)

(OS) L967681-06 02/09/18 09:06 • (DUP) R3285408-3 02/09/18 09:06

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.0	85.5	1	2		5

Laboratory Control Sample (LCS)

(LCS) R3285408-2 02/09/18 09:06

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85-115	

Method Blank (MB)

(MB) R3284455-1 02/06/18 15:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	U		0.795	10.0

L967738-06 Original Sample (OS) • Duplicate (DUP)

(OS) L967738-06 02/06/18 18:13 • (DUP) R3284455-6 02/06/18 18:22

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	43.7	43.4	1	0.732		20

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

(LCS) R3284455-2 02/06/18 15:59 • (LCSD) R3284455-3 02/06/18 16:08

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chloride	200	207	210	103	105	90-110			1.28	20

L967738-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L967738-05 02/06/18 17:31 • (MS) R3284455-4 02/06/18 17:39 • (MSD) R3284455-5 02/06/18 18:05

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	517	40.6	594	597	107	108	1	80-120			0.548	20

Method Blank (MB)

(MB) R3285026-5 02/07/18 13:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000309	J	0.000150	0.00500
Ethylbenzene	0.000156	J	0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	0.0248	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*102*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*95.2*			*75.0-128*

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

(LCS) R3285026-1 02/07/18 11:22 • (LCSD) R3285026-2 02/07/18 11:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0538	0.0456	108	91.1	71.0-121			16.6	20
Toluene	0.0500	0.0523	0.0441	105	88.2	72.0-120			17.0	20
Ethylbenzene	0.0500	0.0542	0.0458	108	91.6	76.0-121			16.9	20
Total Xylene	0.150	0.170	0.144	113	96.2	75.0-124			16.5	20
(S) a,a,a-Trifluorotoluene(FID)				*99.1*	*102*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*99.4*	*104*	*75.0-128*				

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

(LCS) R3285026-3 02/07/18 12:06 • (LCSD) R3285026-4 02/07/18 12:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.55	5.24	101	95.3	70.0-136			5.82	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*103*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*105*	*105*	*75.0-128*				

L967738-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L967738-05 02/07/18 16:59 • (MS) R3285026-6 02/07/18 23:51 • (MSD) R3285026-7 02/08/18 00:12

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.0517	0.000470	0.0299	0.0503	56.8	96.4	1	10.0-146		J3	51.1	29
Toluene	0.0517	0.000281	0.0239	0.0480	45.7	92.3	1	10.0-143		J3	67.1	30
Ethylbenzene	0.0517	0.000233	0.0144	0.0428	27.4	82.3	1	10.0-147		J3	99.3	31
Total Xylene	0.155	U	0.0487	0.136	31.4	87.6	1	10.0-149	J6	J3	94.5	30
(S) a,a,a-Trifluorotoluene(FID)					*97.8*	*99.3*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*91.6*	*99.9*		*75.0-128*				

L967738-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L967738-05 02/07/18 16:59 • (MS) R3285026-8 02/08/18 00:34 • (MSD) R3285026-9 02/08/18 00:57

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.69	0.0347	4.61	2.11	80.4	36.4	1	10.0-147		J3	74.5	30
(S) a,a,a-Trifluorotoluene(FID)					*96.7*	*96.0*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*105*	*100*		*75.0-128*				

Method Blank (MB)

(MB) R3284646-1 02/07/18 08:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10 - C20 Hydrocarbons	U		2.24	4.00
C20-C36 Hydrocarbons	U		0.681	4.00
(S) o-Terphenyl	*83.8*			*18.0-148*

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

(LCS) R3284646-2 02/07/18 08:27 • (LCSD) R3284646-3 02/07/18 08:41

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10 - C20 Hydrocarbons	30.0	24.1	25.0	80.4	83.4	50.0-150			3.66	20
C20-C36 Hydrocarbons	30.0	19.7	21.2	65.8	70.6	50.0-150			7.07	20
(S) o-Terphenyl				*75.7*	*78.7*	*18.0-148*				

L967738-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L967738-02 02/07/18 10:58 • (MS) R3284646-4 02/07/18 11:12 • (MSD) R3284646-5 02/07/18 11:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10 - C20 Hydrocarbons	35.1	U	30.7	30.5	87.6	86.9	1	50.0-150			0.797	20
C20-C36 Hydrocarbons	35.1	3.43	27.9	30.8	69.9	78.0	1	50.0-150			9.74	20
(S) o-Terphenyl					*50.5*	*52.2*		*18.0-148*				

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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, 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.
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
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
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.

ESC Lab Sciences 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 conducive 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.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

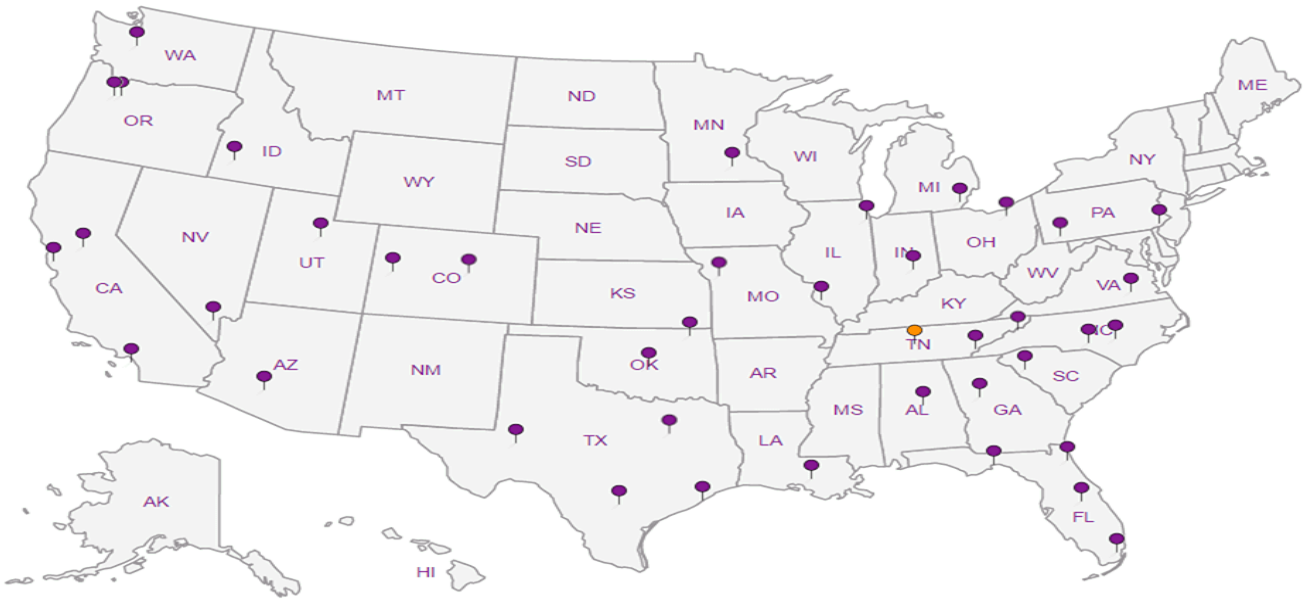
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

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

Our Locations

ESC Lab Sciences 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. ESC Lab Sciences performs all testing at our central laboratory.



SLR International Corp. - West Linn, OR

1800 Blankenship Road, Suite 440

Billing Information:
Accounts Payable
1800 Blankenship Rd, Ste 440
West Linn, OR 97068

Report to: Chris Kramer

Email To: ckramer@slrconsulting.com; kcarlson@slrconsulting.com;

Project Description: SLR - NM

City/State Collected:

Phone: 503-723-4423
Fax:

Client Project #

Lab Project # SLRWLOR-NM

Collected by (print): KANE

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y /

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX (8021) 40ml/NaHS04/Syr/MeOH	CHLORIDE (300) 4ozClr-NoPres	DROMOD (DRO/ORO) 4ozClr-NoPres	Dry Wt, VOC screen 2ozClr-NoPres	GRO 40ml/NaHS04/Syr/MeOH	Remarks	Sample # (lab only)
LP SN-0	GRAB	SS	0	2-2-2019	1230	7	X	X	X	X	X		01
LP SE-0		SS	0		1235	7	X	X	X	X	X		02
LP SS-0		SS	0		1240	7	X	X	X	X	X		04
LP SW-0		SS	0		1250	7	X	X	X	X	X		
~~DP SW-0~~		SS											05
LP SN-1		SS	1		1300	7	X						06
LP SE-1		SS	1		1310	7	X						07
LP SS-1		SS	1		1320	7	X						08
LP SW-1		SS	1		1330	7	X						
LP SN-2		SS	2		1350	7	H						

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: X = RUN
H2 = HOLD

pH ____ Temp ____
Flow ____ Other ____

Samples returned via: __UPS __FedEx __Courier ____

Tracking # 4219 9203 7969; 7970; 3958; 3580

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 4.1 °C Bottles Received: 15

If preservation required by Login: Date/Time

Hold: 2-026

Condition: NCF / OK

Relinquished by : (Signature) — Date: 2-2-19 — Time: 1730

Received by: (Signature)

Relinquished by : (Signature) — Date: — Time:

Received by: (Signature)

Relinquished by : (Signature) — Date: — Time:

Received for lab by: (Signature) — Date: 2-5-19 — Time: 0900

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES
a subsidiary of ALS Environmental

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 967 TR

Table #

Acctnum: SLRWLOR
Template: T132259
Prelogin: P638040
TSR: 110 - Brian Ford
PB: 1-31-19

Shipped Via: FedEx Standard

SLR International Corp. - West Linn, OR

1800 Blankenship Road, Suite 440

Billing Information:
Accounts Payable
1800 Blankenship Rd, Ste 440
West Linn, OR 97068

Report to: Chris Kramer

Email To: ckramer@slrconsulting.com; kcarlson@slrconsulting.com;

Project Description: SLR - NM

City/State Collected:

Phone: 503-723-4423
Fax:

Client Project #

Lab Project # SLRWLOR-NM

Collected by (print): Kade

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y /

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
a subsidiary of Pace Analytical

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 967738

Table #

Acctnum: SLRWLOR

Template: T132259

Prelogin: P638040

TSR: 110 - Brian Ford

PB: 1-31-18

Shipped Via: FedEX Standard

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX (8021) 40ml/NaHS04/Syr/MeOH	CHLORIDE (300) 4ozClr-NoPres	DROMOD (DRO/ORO) 4ozClr-NoPres	Dry Wt, VOC screen 2ozClr-NoPres	GRO 40ml/NaHS04/Syr/MeOH	Remarks	Sample # (lab only)
Dup-1	Grab	SS	NR	2.2.18	NR	7	H						
Dup-2		SS				7	H						
Dup-3		SS				7	H						
Dup-4		SS				7	H						
		SS											
		SS											
		SS											
		SS											
		SS											
		SS											

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: H = Hold

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	2.2.18	1730		4	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.7 °C Bottles Received: 15	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2-5-18 Time: 0800	Hold: 2-026 Condition: NCF / OK

SLR International Corp. - West Linn, OR

1800 Blankenship Road, Suite 440

Billing Information:
Accounts Payable
1800 Blankenship Rd, Ste 440
West Linn, OR 97068

Report to: Chris Kramer

Email To: ckramer@slrconsulting.com; kcarlson@slrconsulting.com;

Project Description: SLR - NM

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Lab Project # SLRWLOR-NM

Collected by (print): KAC

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX (8021) 40ml/NaHS04/Syr/MeOH	CHLORIDE (300) 4ozClr-NoPres	DROMOD (DRO/ORO) 4ozClr-NoPres	Dry Wt, VOC screen 2ozClr-NoPres	GRO 40ml/NaHS04/Syr/MeOH	Remarks	Sample # (lab only)
LP 5E-2	GRAB	SS	2	2.2.18	1400	1	H						
LP 5S-2		SS	2		1410	1	H						
LP 5W-2		SS	2		1420	1	H						
LP 10N-1		SS	1		1430	1	H						
LP 10E-1		SS	1		1435	1	H						
LP 10S-1		SS	1		1440	1	H						
LP 10W-1		SS	1		1445	1	H						
LP 15W-1		SS	1		1450	1	H						
LP 15E-1		SS	1		1500	1	H						
		SS											

Chain of Custody Page ___ of ___

ESC LABORATORIES
a subsidiary of Pace Analytical

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 167772

Table #

Acctnum: SLRWLOR
Template: T132259
Prelogin: P638040
TSR: 110 - Brian Ford
PB: 1-31-18

Shipped Via: FedEX Standard

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: H = Hold

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR
	2.2.18	1730		Y
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.7 °C Bottles Received: 15
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 2/5/18 Time: 0900

If preservation required by Login: Date/Time

Hold: 2-026

Condition: NCF / OK