

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: Enduring Resources, LLC	Contact: James McDaniel
Address: 332 Road 3100, Aztec, New Mexico 87410	Telephone No.: 505-636-9731
Facility Name: J Q Marshall #1	Facility Type: Well Site (Gas)
Surface Owner: BLM	Mineral Owner: BLM
API No. 30-045-06772	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	I	27N	9W	990	SOUTH	1650	WEST	San Juan

Latitude 36.599680 Longitude -107.743441 NAD83

NATURE OF RELEASE

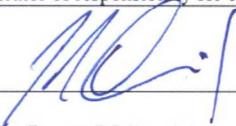
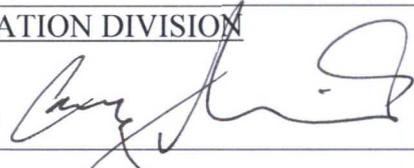
Type of Release: Produced Water	Volume of Release: UNKNOWN	Volume Recovered: NONE
Source of Release: BGT	Date and Hour of Occurrence: UNKNOWN	Date and Hour of Discovery: 4/17/18 - 12 PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
NOT IMPACTED

Describe Cause of Problem and Remedial Action Taken.*
A BGT was removed at the J Q Marshall #1 well location for site upgrades. When the tank was removed, visually impacted soil was seen below the BGT, confirming that a release had occurred. Due to an estimated depth to groundwater of less than 50 feet, the site was ranked a 20, setting the closure standard to 100 ppm TPH, 10 ppm benzene, and 50 ppm total BTEX.

Describe Area Affected and Cleanup Action Taken.*
On April 17, 2018, the impacted area was excavated to extents of approximately 10' x 10' x 5' deep. At this time, a wall composite sample was collected, and a composite of the bottom was collected for laboratory analysis. Both samples returned results below the benzene and BTEX standards determined for this location, but both samples returned results above the TPH standards of 100 mg/kg determined for this location. On May 2, 2018, additional excavation activities were completed. The area was excavated to extents of 12' x 12' x 8' deep. At this time, five (5) individual composite samples were collected. One (1) sample was collected from each wall, and one (1) sample was collected from the bottom of the excavation. All samples returned results below the standards outlined in the NMOCD Guidelines for the Remediation of Leaks, Spills and Releases. Sample results and field notes are attached for your reference. Approximately 50 CY was excavated and transported to Envirotech for disposal.

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: James McDaniel	Approved by Environmental Specialist: 	
Title: HSE Supervisor	Approval Date: 5/23/18	Expiration Date:
E-mail Address: jmcdaniel@enduringresources.com	Conditions of Approval: _____	Attached <input type="checkbox"/>
Date: 5/18/2018	Phone: 505-636-9731	

* Attach Additional Sheets If Necessary

#NCS 181 434 1942

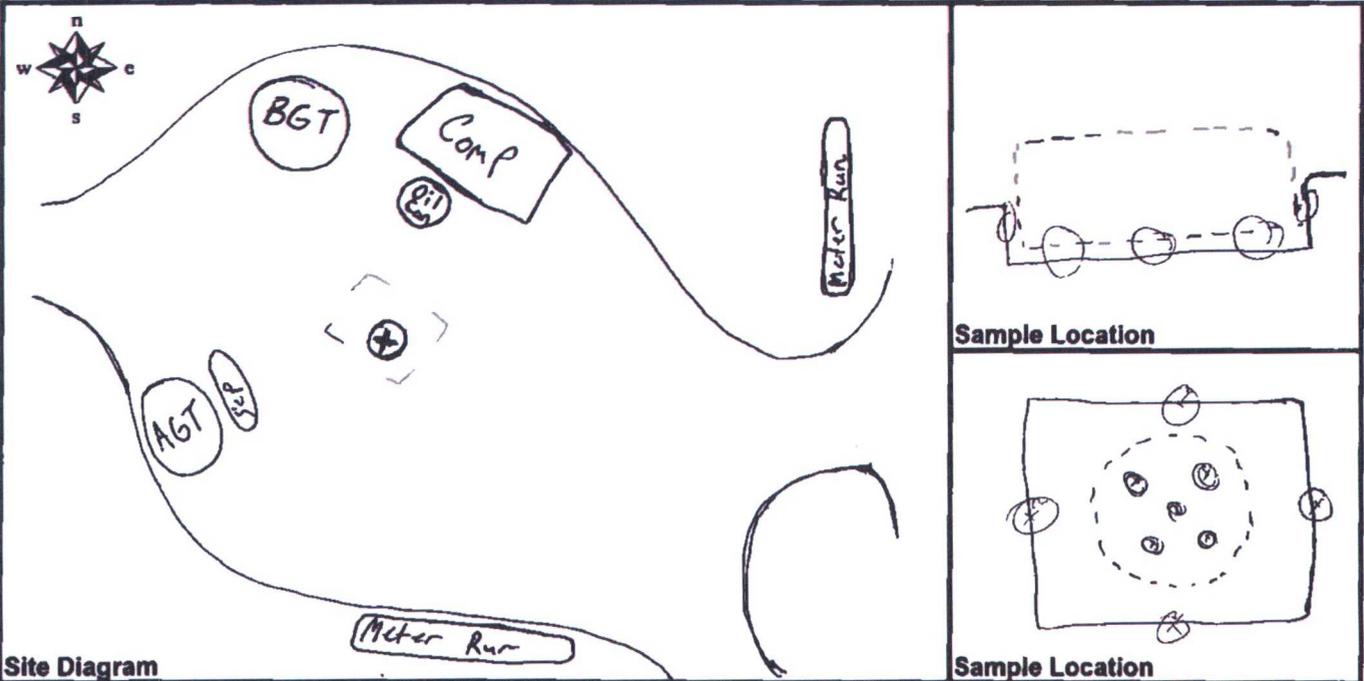
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ENDURING RESOURCES

ON-SITE FORM

Well Name JQ Marshall #1 API # 30-045-06772
 Section 1 Township 27N Range 9W County San Juan State New Mexico
 Contractors On-Site L+L Time On-Site 11:30 AM Time Off-Site 12:35 PM
 Spill Amount 0 bbls Spilled (Oil/Produced Water/Other _____) Recovered _____
 Land Use (Range / Residential / Tribe _____) Spill Area _____ x _____ x _____ deep



Site Diagram
 John Purdon, NMOED on location.
 Dug out 20cy of impacted soil.
 Impacted soil to E-Tech.
Comments

Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
	NA	100 Standard	NA		NA
12:15	1	Wall composite	Sandy, brown, no odor	—	8015, 8021
12:20	2	BGT composite	Sandy, brown, no odor	—	8015, 8021

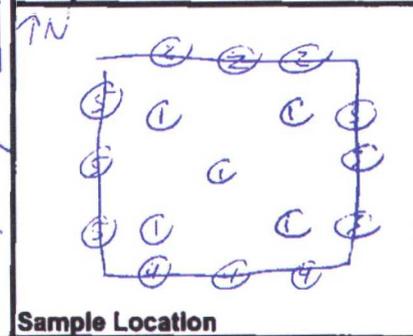
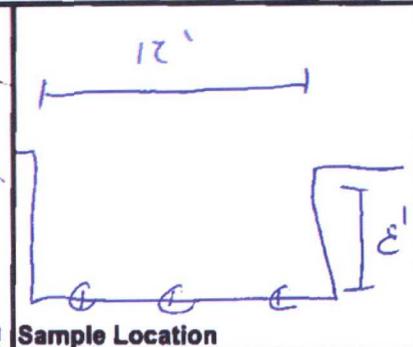
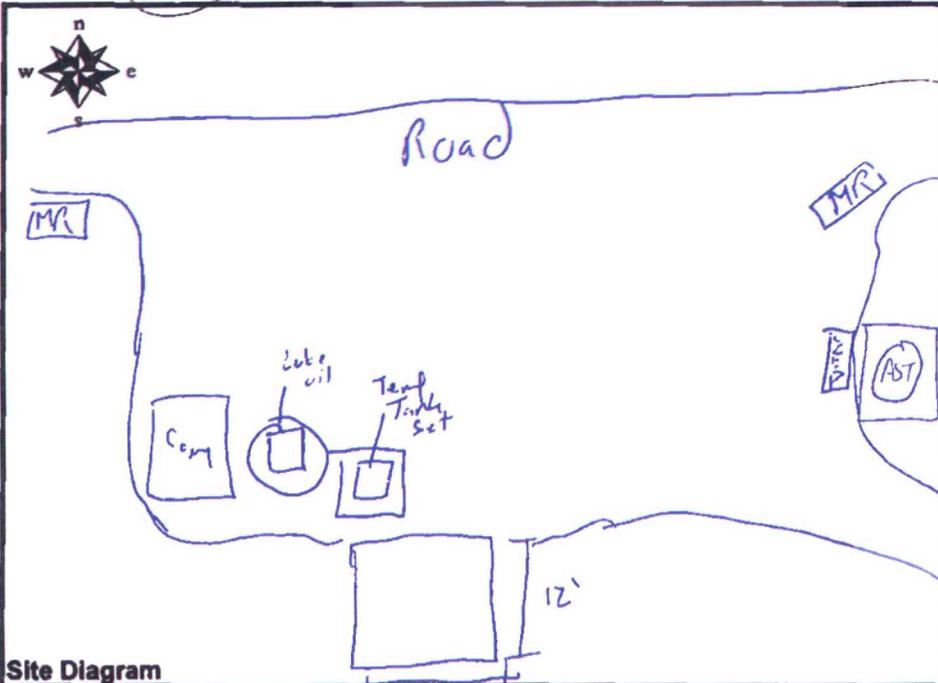
Name (Print) Preston Clemens Date 4/17/18
 Name (Signature) [Signature] Company Enduring



ENDURING RESOURCES

ON-SITE FORM

Well Name J G Marshall #1 API # 30-045-06772
 Section 1 Township 27N Range 9W County San Juan State NM
 Contractors On-Site None Time On-Site 4²⁵ Time Off-Site 5⁰⁰
 Spill Amount unknown bbls Spilled (Oil/Produced Water/Other —) Recovered None
 Land Use (Range / Residential / Tribe —) Spill Area 12 x 12 x 8' deep



Site Diagram

Sample Location

*took 5 samples. one from each wall, one from bottom. No odor or visible staining

Comments

Samples

Time	Sample #	Sample Description	Characteristics	OVM (ppm)	Analysis Requested
	NA	100 Standard	NA	—	NA
4:30	1	Bottom Composite	Dark Brown Spinel-like	—	ECIS, CO21
4:35	2	North wall Composite	Dark Brown Spinel-like	—	"
4:40	3	East wall Composite	Dark Brown Spinel-like	—	"
4:45	4	South wall Composite	"	—	"
4:50	5	West wall Composite	"	—	"

Name (Print) James, McDaniel

Date 5/2/18

Name (Signature) [Signature]

Company Enduring

April 24, 2018

Enduring Resources

Sample Delivery Group: L986846
Samples Received: 04/18/2018
Project Number:
Description: BGT Closure
Site: JQ MARSHALL #1
Report To: James McDaniel
332 County Road 3100
Aztec, NM 87410

Entire Report Reviewed By:



Daphne Richards

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.



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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



Collected by: Preston Clemmons
 Collected date/time: 04/17/18 12:15
 Received date/time: 04/18/18 08:45

WALL COMPOSITE L986846-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1100514	1	04/20/18 13:18	04/20/18 13:48	JD
Volatile Organic Compounds (GC) by Method 8015/8021	WG1100138	1	04/18/18 19:04	04/19/18 04:47	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1100453	1	04/19/18 16:34	04/20/18 16:46	MTJ
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1100453	5	04/19/18 16:34	04/20/18 17:57	MTJ

1
Co

2
Tc

Collected by: Preston Clemmons
 Collected date/time: 04/17/18 12:20
 Received date/time: 04/18/18 08:45

BOTTOM COMPOSITE L986846-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1100514	1	04/20/18 13:18	04/20/18 13:48	JD
Volatile Organic Compounds (GC) by Method 8015/8021	WG1100138	1	04/18/18 19:04	04/19/18 05:09	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1100453	10	04/19/18 16:34	04/20/18 18:11	MTJ
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1100453	2	04/19/18 16:34	04/20/18 17:13	MTJ

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All 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.

Daphne Richards
Technical Service Representative

1 Cd

2 Tc

3 Ss

5 Sr

6 Qc

7 GI

8 Al

9 Sc

WALL COMPOSITE

Collected_date/time: 04/17/18 12:15

SAMPLE RESULTS - 01

L986846

ONE LAB. NATIONWIDE



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	94.1		1	04/20/2018 13:48	WG1100514

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Benzene	ND		0.000532	1	04/19/2018 04:47	WG1100138
Toluene	ND		0.00532	1	04/19/2018 04:47	WG1100138
Ethylbenzene	ND		0.000532	1	04/19/2018 04:47	WG1100138
Total Xylene	ND		0.00159	1	04/19/2018 04:47	WG1100138
TPH (GC/FID) Low Fraction	ND		0.106	1	04/19/2018 04:47	WG1100138
(S) a,a,-Trifluorotoluene(FID)	91.6		77.0-120		04/19/2018 04:47	WG1100138
(S) a,a,-Trifluorotoluene(PID)	92.7		75.0-128		04/19/2018 04:47	WG1100138

3 Ss

4 Cn

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	165		4.25	1	04/20/2018 16:46	WG1100453
C28-C40 Oil Range	983		21.3	5	04/20/2018 17:57	WG1100453
(S) o-Terphenyl	92.3		18.0-148		04/20/2018 16:46	WG1100453
(S) o-Terphenyl	112		18.0-148		04/20/2018 17:57	WG1100453

6 Qc

7 GI

8 AI

9 Sc

BOTTOM COMPOSITE

Collected_date/time: 04/17/18 12:20

SAMPLE RESULTS - 02

L986846

ONE LAB. NATIONWIDE.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	92.0		1	04/20/2018 13:48	WG1100514

1 Cd

2 Tc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Benzene	ND		0.000543	1	04/19/2018 05:09	WG1100138
Toluene	ND		0.00543	1	04/19/2018 05:09	WG1100138
Ethylbenzene	ND		0.000543	1	04/19/2018 05:09	WG1100138
Total Xylene	0.00492		0.00163	1	04/19/2018 05:09	WG1100138
TPH (GC/FID) Low Fraction	0.440		0.109	1	04/19/2018 05:09	WG1100138
(S) a,a,a-Trifluorotoluene(FID)	95.2		77.0-120		04/19/2018 05:09	WG1100138
(S) a,a,a-Trifluorotoluene(PID)	96.1		75.0-128		04/19/2018 05:09	WG1100138

3 Ss

4 Cn

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	521		8.69	2	04/20/2018 17:13	WG1100453
C28-C40 Oil Range	1680		43.5	10	04/20/2018 18:11	WG1100453
(S) o-Terphenyl	63.9		18.0-148		04/20/2018 18:11	WG1100453
(S) o-Terphenyl	78.9		18.0-148		04/20/2018 17:13	WG1100453

6 Qc

7 Gl

8 Al

9 Sc

WG1100514

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

L986846-01.02

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3303817-1 04/20/18 13:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000			

L986846-02 Original Sample (OS) - Duplicate (DUP)

(OS) L986846-02 04/20/18 13:48 - (DUP) R3303817-3 04/20/18 13:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	92.0	91.8	1	0.245		5

Laboratory Control Sample (LCS)

(LCS) R3303817-2 04/20/18 13:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

2 Tc

3 Ss

4 Cn

5 Sr

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3303623-5 04/18/18 23:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	97.3			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	97.7			75.0-128

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

(LCS) R3303623-1 04/18/18 21:50 • (LCSD) R3303623-2 04/18/18 22:12

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Benzene	0.0500	0.0504	0.0494	101	98.8	71.0-121			1.98	20
Toluene	0.0500	0.0507	0.0497	101	99.3	72.0-120			2.04	20
Ethylbenzene	0.0500	0.0509	0.0494	102	98.8	76.0-121			3.02	20
Total Xylene	0.150	0.154	0.149	103	99.6	75.0-124			2.97	20
(S) a,a,a-Trifluorotoluene(FID)					97.4	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					96.2	75.0-128				

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

(LCS) R3303623-3 04/18/18 22:34 • (LCSD) R3303623-4 04/18/18 22:57

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPH (GC/FID) Low Fraction	5.50	5.36	5.32	97.5	96.7	70.0-136			0.816	20
(S) a,a,a-Trifluorotoluene(FID)				101	102	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				106	106	75.0-128				





Volatile Organic Compounds (GC) by Method 8015/8021

L986846-01.02

L986843-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L986843-01 04/19/18 06:38 • (MS) R3303623-6 04/19/18 07:01 • (MSD) R3303623-7 04/19/18 07:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	ND	0.0248	0.0280	49.6	56.0	1	10.0-146			12.1	29
Toluene	0.0500	ND	0.0246	0.0286	49.1	57.1	1	10.0-143			15.1	30
Ethylbenzene	0.0500	ND	0.0225	0.0279	45.0	55.7	1	10.0-147			21.3	31
Total Xylene	0.150	ND	0.0667	0.0822	44.5	54.8	1	10.0-149	J6	J6	20.8	30
(S) a,a,a-Trifluorotoluene(FID)					95.9	95.2		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					95.0	95.5		75.0-128				

1 Cu

2 Tc

3 Ss

4 Cn

5 Sr

L986843-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L986843-01 04/19/18 06:38 • (MS) R3303623-8 04/19/18 07:45 • (MSD) R3303623-9 04/19/18 08:07

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	0.286	1.22	5.21	22.2	1	10.0-147	J6	J3	124	30
(S) a,a,a-Trifluorotoluene(FID)					94.4	94.7		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					94.1	96.2		75.0-128				

7 Gf

8 Al

9 Sc



Method Blank (MB)

(MB) R3303604-1 04/20/18 15:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	116			18.0-148

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

(LCS) R3303604-2 04/20/18 15:14 • (LCSD) R3303604-3 04/20/18 15:26

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-C28 Diesel Range	50.0	34.3	35.9	68.6	71.9	50.0-150			4.76	20
(S) o-Terphenyl				91.0	92.0	18.0-148				

2 Tc

3 Ss

4 Cn

5 Sr

7 Gl

8 Al

9 Sc

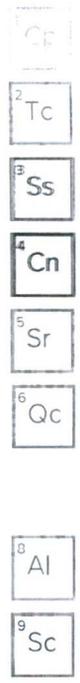


Guide to Reading and Understanding Your Laboratory Report

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

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
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
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.

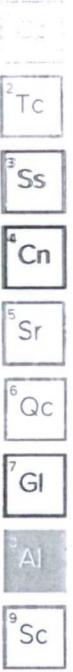
ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



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.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.



State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	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	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

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

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater 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.



ACCOUNT:
Enduring Resources

PROJECT:

SDG:
L986846

DATE/TIME:
04/24/18 08:31

PAGE:
12 of 13

Enduring Resources 332 County Road 3100 Aztec, NM 87410		Billing Information James McDaniel 332 County Road 3100 Aztec, NM 87410		Pres Chk Cool Cool		Analysis / Container / Preservative						Chain of Custody Page <u>1</u> of <u>1</u>  12005 Laboratory Rd Moore, NM 87041 Phone: 505-287-1848 Phone: 800-287-1848 Fax: 505-287-0476  L# L986846 E052 Account: ENDRESANM Template: Prelogin: TSP: 288 - Daphne Richards PB: Shipped Via: Remarks: Sample # Risk #															
Report to: <u>Jmcdaniel@enduringresources.com</u> <u>pclermons@enduringresources.com</u>		Email To:		Project Description: BGT Closure		City/State Collected: NM		Lab Project #:		Phone: 505-636-9731		Client Project #:		Date Results Needed:		No. of Cntrs:											
Project Description: BGT Closure		City/State Collected: NM		Lab Project #:		Phone: 505-636-9731		Client Project #:		Date Results Needed:		No. of Cntrs:		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #:											
Collected by (print): Preston Clemmons		Site/Facility ID #: JQ Marshall #1		P.O. #:		Date Results Needed:		No. of Cntrs:		Packed on Ice: N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Sample ID:		Comp/Grab:		Matrix*:		Depth:		Date:		Time:		No. of Cntrs:			
Collected by (signature): <i>[Signature]</i>		Rush? (Lab MUST Be Notified)		Quote #:		Date Results Needed:		No. of Cntrs:		Packed on Ice: N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Sample ID:		Comp/Grab:		Matrix*:		Depth:		Date:		Time:		No. of Cntrs:			
Sample ID:		Comp/Grab:		Matrix*:		Depth:		Date:		Time:		No. of Cntrs:		Sample ID:		Comp/Grab:		Matrix*:		Depth:		Date:		Time:		No. of Cntrs:	
Wall Composite		Comp		SS		-		4/17/18		12 ¹⁵		1		X		X		-01		Date:		Time:		No. of Cntrs:			
Bottom Composite		Comp		SS		-		4/17/18		12 ²⁰		1		X		X		62		Date:		Time:		No. of Cntrs:			
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Waste Water DW - Drinking Water OT - Other		Remarks:		Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #: 4190 3200 1839		pH: _____ Temp: _____ Flow: _____ Other: _____		Sannia Pacini Checklist COC Seal Present/Intact: <input type="checkbox"/> NP <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> NP <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> NP <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> NP <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> NP <input type="checkbox"/> N IIC Applicable: <input type="checkbox"/> NP <input type="checkbox"/> N VOA Zero Headspace: <input type="checkbox"/> NP <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> NP <input type="checkbox"/> N																	
Relinquished by (Signature): <i>[Signature]</i>		Date: 4/17/18		Time: 1430		Received by (Signature):		Trip Blank Received: Yes / No <input type="checkbox"/> HCL / MeOH <input type="checkbox"/> TBR		Temp: 5.7°C		Bottles Received: 2		if preservation required by Login: Date/Time													
Relinquished by (Signature):		Date:		Time:		Received by (Signature):		Temp:		Bottles Received:		if preservation required by Login: Date/Time															
Relinquished by (Signature):		Date:		Time:		Received for lab by (Signature): <i>[Signature]</i>		Date: 4/18/18		Time: 945		Hold:		Condition: NCF / OK													

Enduring Resources

Sample Delivery Group: L991132
Samples Received: 05/04/2018
Project Number:
Description: BGT Closure
Site: JQ MARSHALL #1
Report To: James McDaniel
332 County Road 3100
Aztec, NM 87410

Entire Report Reviewed By:



Daphne Richards

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.

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



BOTTOM COMPOSITE-8' L991132-01 Solid

Collected by: James McDaniel
 Collected date/time: 05/02/18 16:30
 Received date/time: 05/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1107808	1	05/07/18 09:55	05/07/18 10:05	KS
Volatile Organic Compounds (GC) by Method 8015/8021	WG1107694	1	05/04/18 16:06	05/06/18 23:44	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1107492	1	05/04/18 21:36	05/05/18 22:46	AAT



NORTH WELL COMPOSITE L991132-02 Solid

Collected by: James McDaniel
 Collected date/time: 05/02/18 16:35
 Received date/time: 05/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1107808	1	05/07/18 09:55	05/07/18 10:05	KS
Volatile Organic Compounds (GC) by Method 8015/8021	WG1107694	1	05/04/18 16:06	05/07/18 00:05	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1107492	1	05/04/18 21:36	05/05/18 21:48	AAT



EAST WELL COMPOSITE L991132-03 Solid

Collected by: James McDaniel
 Collected date/time: 05/02/18 16:40
 Received date/time: 05/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1107808	1	05/07/18 09:55	05/07/18 10:05	KS
Volatile Organic Compounds (GC) by Method 8015/8021	WG1107694	1	05/04/18 16:06	05/07/18 00:26	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1107492	1	05/04/18 21:36	05/05/18 22:02	AAT



SOUTH WELL COMPOSITE L991132-04 Solid

Collected by: James McDaniel
 Collected date/time: 05/02/18 16:45
 Received date/time: 05/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1107808	1	05/07/18 09:55	05/07/18 10:05	KS
Volatile Organic Compounds (GC) by Method 8015/8021	WG1107694	1	05/04/18 16:06	05/07/18 00:47	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1107492	1	05/04/18 21:36	05/05/18 22:16	AAT



WEST WELL COMPOSITE L991132-05 Solid

Collected by: James McDaniel
 Collected date/time: 05/02/18 16:50
 Received date/time: 05/04/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1107808	1	05/07/18 09:55	05/07/18 10:05	KS
Volatile Organic Compounds (GC) by Method 8015/8021	WG1107694	1	05/04/18 16:06	05/07/18 01:08	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1107492	1	05/04/18 21:36	05/05/18 22:32	AAT



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.

Daphne Richards
Technical Service Representative



'BOTTOM COMPOSITE-8'

Collected date/time: 05/02/18 16:30

SAMPLE RESULTS - 01

L991132

ONE LAB. NATIONWIDE.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	05/07/2018 10:05	WG1107808

1 Co

2 Tc

3 Ss

4 Cn

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.000534	1	05/06/2018 23:44	WG1107694
Toluene	ND		0.00534	1	05/06/2018 23:44	WG1107694
Ethylbenzene	ND		0.000534	1	05/06/2018 23:44	WG1107694
Total Xylene	ND		0.00160	1	05/06/2018 23:44	WG1107694
TPH (GC/FID) Low Fraction	ND		0.107	1	05/06/2018 23:44	WG1107694
(S) a,a,a-Trifluorotoluene(FID)	99.8		77.0-120		05/06/2018 23:44	WG1107694
(S) a,a,a-Trifluorotoluene(PID)	107		75.0-128		05/06/2018 23:44	WG1107694

6 Qc

7 Gl

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.27	1	05/05/2018 22:46	WG1107492
C28-C40 Oil Range	6.25		4.27	1	05/05/2018 22:46	WG1107492
(S) o-Terphenyl	68.6		18.0-148		05/05/2018 22:46	WG1107492

8 Al

9 Sc



Collected date/time: 05/02/18 16:35

L991132

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	05/07/2018 10:05	WG1107808

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.000527	1	05/07/2018 00:05	WG1107694
Toluene	ND		0.00527	1	05/07/2018 00:05	WG1107694
Ethylbenzene	ND		0.000527	1	05/07/2018 00:05	WG1107694
Total Xylene	ND		0.00158	1	05/07/2018 00:05	WG1107694
TPH (GC/FID) Low Fraction	ND		0.105	1	05/07/2018 00:05	WG1107694
(S) a,a,a-Trifluorotoluene(FID)	99.8		77.0-120		05/07/2018 00:05	WG1107694
(S) a,a,a-Trifluorotoluene(PID)	107		75.0-128		05/07/2018 00:05	WG1107694

3 Ss

4 Cn

6 Qc

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.22	1	05/05/2018 21:48	WG1107492
C28-C40 Oil Range	ND		4.22	1	05/05/2018 21:48	WG1107492
(S) o-Terphenyl	80.2		18.0-148		05/05/2018 21:48	WG1107492

7 GI

8 AI

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	05/07/2018 10:05	WG1107808

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000532	1	05/07/2018 00:26	WG1107694
Toluene	ND		0.00532	1	05/07/2018 00:26	WG1107694
Ethylbenzene	ND		0.000532	1	05/07/2018 00:26	WG1107694
Total Xylene	ND		0.00160	1	05/07/2018 00:26	WG1107694
TPH (GC/FID) Low Fraction	0.115		0.106	1	05/07/2018 00:26	WG1107694
(S) a,a,a-Trifluorotoluene(FID)	101		77.0-120		05/07/2018 00:26	WG1107694
(S) a,a,a-Trifluorotoluene(PID)	105		75.0-128		05/07/2018 00:26	WG1107694

3 Ss

4 Cn

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.25	1	05/05/2018 22:02	WG1107492
C28-C40 Oil Range	ND		4.25	1	05/05/2018 22:02	WG1107492
(S) o-Terphenyl	81.6		18.0-148		05/05/2018 22:02	WG1107492

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/02/18 16:45

L991132

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.4		1	05/07/2018 10:05	WG1107808

Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000547	1	05/07/2018 00:47	WG1107694
Toluene	ND		0.00547	1	05/07/2018 00:47	WG1107694
Ethylbenzene	ND		0.000547	1	05/07/2018 00:47	WG1107694
Total Xylene	ND		0.00164	1	05/07/2018 00:47	WG1107694
TPH (GC/FID) Low Fraction	ND		0.109	1	05/07/2018 00:47	WG1107694
<i>(S) a,a,a-Trifluorotoluene(FID)</i>	99.0		77.0-120		05/07/2018 00:47	WG1107694
<i>(S) a,a,a-Trifluorotoluene(PID)</i>	105		75.0-128		05/07/2018 00:47	WG1107694

3 Ss

4 Cn

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.38	1	05/05/2018 22:16	WG1107492
C28-C40 Oil Range	5.00		4.38	1	05/05/2018 22:16	WG1107492
<i>(S) o-Terphenyl</i>	44.9		18.0-148		05/05/2018 22:16	WG1107492

6 Qc

7 GI

8 AI

9 Sc

WEST WELL COMPOSITE

SAMPLE RESULTS - 05

ONE LAB. NATIONWIDE.



Collected date/time: 05/02/18 16:50

L991132

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
Total Solids	90.9		1	05/07/2018 10:05	WG1107808

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
Benzene	ND		0.000550	1	05/07/2018 01:08	WG1107694
Toluene	ND		0.00550	1	05/07/2018 01:08	WG1107694
Ethylbenzene	ND		0.000550	1	05/07/2018 01:08	WG1107694
Total Xylene	ND		0.00165	1	05/07/2018 01:08	WG1107694
TPH (GC/FID) Low Fraction	ND		0.110	1	05/07/2018 01:08	WG1107694
(S) a,a,a-Trifluorotoluene(FID)	99.6		77.0-120		05/07/2018 01:08	WG1107694
(S) a,a,a-Trifluorotoluene(PID)	105		75.0-128		05/07/2018 01:08	WG1107694

3 Ss

4 Cn

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
C10-C28 Diesel Range	5.01		4.40	1	05/05/2018 22:32	WG1107492
C28-C40 Oil Range	10.2		4.40	1	05/05/2018 22:32	WG1107492
(S) o-Terphenyl	67.4		18.0-148		05/05/2018 22:32	WG1107492

5 Qc

7 GI

8 AI

9 Sc

WG1107808

Total Solids by Method 2540 G-2011

QUALITY CONTROL SUMMARY

[L991132-01.02.03.04.05](#)

ONE LAB. NATIONWIDE.



Method Blank (MB)

(MB) R3307799-1 05/07/18 10:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

L991141-01 Original Sample (OS) • Duplicate (DUP)

(OS) L991141-01 05/07/18 10:05 • (DUP) R3307799-3 05/07/18 10:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	94.1	94.3	1	0.268		5

Laboratory Control Sample (LCS)

(LCS) R3307799-2 05/07/18 10:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method 8015/8021

L991132-01,02,03,04,05

Method Blank (MB)

(MB) R3307480-5 05/06/18 19:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000365	J	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	106			75.0-128



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

(LCS) R3307480-1 05/06/18 18:13 • (LCSD) R3307480-2 05/06/18 18:34

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	0.0515	0.0520	103	104	71.0-121			1.05	20
Toluene	0.0500	0.0504	0.0508	101	102	72.0-120			0.804	20
Ethylbenzene	0.0500	0.0556	0.0561	111	112	76.0-121			0.977	20
Total Xylene	0.150	0.168	0.170	112	113	75.0-124			0.829	20
(S) a,a,a-Trifluorotoluene(FID)				97.9	101	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				103	103	75.0-128				



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

(LCS) R3307480-3 05/06/18 18:56 • (LCSD) R3307480-4 05/06/18 19:17

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	5.30	5.10	96.3	92.7	70.0-136			3.86	20
(S) a,a,a-Trifluorotoluene(FID)				87.6	88.0	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				113	113	75.0-128				



Volatile Organic Compounds (GC) by Method 8015/8021

L991132-01,02,03,04,05

L991150-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L991150-04 05/07/18 03:15 • (MS) R3307480-6 05/07/18 03:36 • (MSD) R3307480-7 05/07/18 03:57

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.000558	0.0189	0.0211	36.7	41.1	1	10.0-146			11.0	29
Toluene	0.0500	ND	0.0127	0.0141	24.6	27.4	1	10.0-143			10.6	30
Ethylbenzene	0.0500	ND	0.0105	0.0115	21.0	23.1	1	10.0-147			9.58	31
Total Xylene	0.150	ND	0.0264	0.0296	17.6	19.8	1	10.0-149	J6	J6	11.5	30
(S) a,a,a-Trifluorotoluene(FID)					98.2	98.4		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					103	103		75.0-128				



L991150-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L991150-04 05/07/18 03:15 • (MS) R3307480-8 05/07/18 04:18 • (MSD) R3307480-9 05/07/18 04:39

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	ND	0.685	0.760	10.9	12.3	1	10.0-147			10.5	30
(S) a,a,a-Trifluorotoluene(FID)					96.6	98.5		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					102	105		75.0-128				





Method Blank (MB)

(MB) R3307364-1 05/05/18 18:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	70.1			18.0-148



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

(LCS) R3307364-2 05/05/18 19:00 • (LCSD) R3307364-3 05/05/18 19:14

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-C28 Diesel Range	50.0	28.6	33.9	57.3	67.8	50.0-150			16.8	20
(S) o-Terphenyl				66.1	80.7	18.0-148				



L991132-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L991132-01 05/05/18 22:46 • (MS) R3307364-4 05/05/18 23:01 • (MSD) R3307364-5 05/05/18 23:17

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-C28 Diesel Range	53.4	ND	37.0	33.0	69.2	61.7	1	50.0-150			11.4	20
(S) o-Terphenyl					64.4	71.3		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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
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, 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.
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

J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



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.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.



State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	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	AI30792	Tennessee ^{1 4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

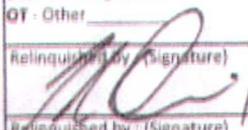
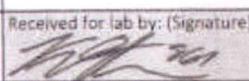
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater 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.



Enduring Resources 332 County Road 3100 Aztec, NM 87410		Billing Information: James McDaniel 332 County Road 3100 Aztec, NM 87410		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page ___ of ___  12065 Lebaron Rd Mount Juliet, TN 37122 Phone 615-758-5858 Phone 800-787-5858 Fax 615-758-5809			
Report to: James McDaniel		Email To: jmcDaniel@enduringresources.com														L# 991132			
Project Description: BGT Closure		City/State Collected: Blanca / NM														Tablet G153			
Phone 505-636-9731 Fax:		Client Project # -		Lab Project # -												Accetnum: ENDRESANM			
Collected by (print): James McDaniel		Site/Facility ID #: JQ Marshall #1		P.O. #												Template:			
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input checked="" type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #												Prelogin:			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Date Results Needed		No. of Entrs												TSR: 288 - Daphne Richards			
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Entrs											Shipped Via:	
Bottom Composite - 8'		Comp	SS	8'	5/2/18	4:30 PM	1	0015 (DRO/GRO/MRO) 0021 (BTEX)										Remarks	
North Wall Composite		Comp	SS	-	5/2/18	4:35 PM	1											Sample # (lab only)	
East Wall Composite		Comp	SS	-	5/2/18	4:40 PM	1											21	
South Wall Composite		Comp	SS	-	5/2/18	4:45 PM	1											22	
West Wall Composite		Comp	SS	-	5/2/18	4:50 PM	1											23	
																		24	
																		25	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Waste Water DW - Drinking Water OT - Other		Remarks:		Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # 4196 3260 1828												Sample Receipt Checklist COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Relinquished by (Signature): 		Date: 5/3/18	Time: 7:45 AM	Received by (Signature):		Trip Blank Received: Yes/No <input type="checkbox"/> HCL/MeOH <input type="checkbox"/> TBR												pH _____ Temp _____ Flow _____ Other _____	
Relinquished by (Signature):		Date:	Time:	Received by (Signature):		Temp: °C 4.9 Bottles Received: 5												If preservation required by Login: Date/Time	
Relinquished by (Signature):		Date:	Time:	Received for lab by (Signature): 		Date: 5/4/18 Time: 8:45												Hold: Condition: NCF / OK	



Enduring Resources, LLC
BGT Closure Report
J Q Marshall #1
30-045-06772

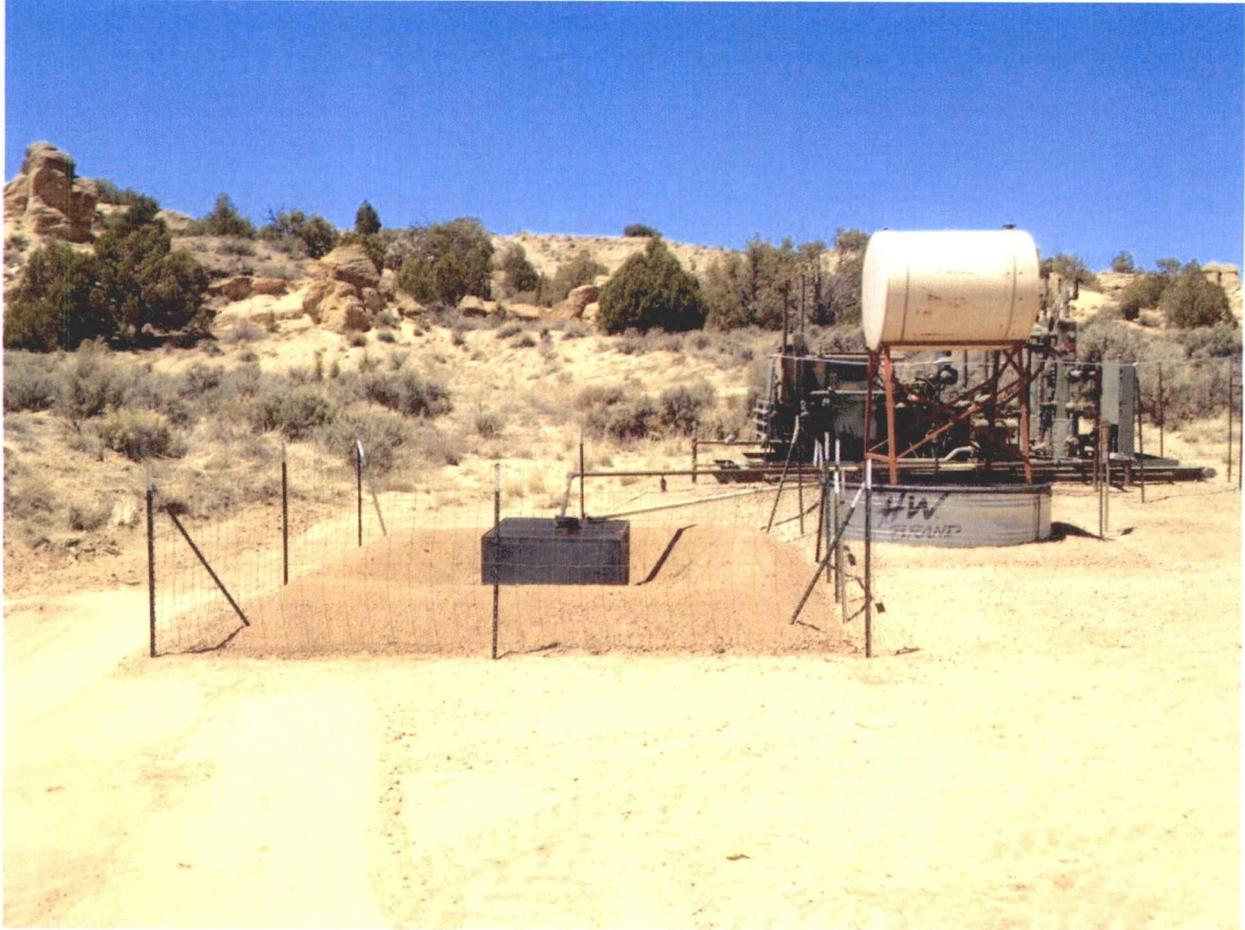


PHOTO 1: BGT Area after set of new Above Grade Tank