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Page 3 Oil Conservation Division

☑ Topographic/Aerial maps

☐ Laboratory data including chain of custody

	Page 1 of 376
Incident ID	NRM2002160255
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<50 ft (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	✓ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas not on an exploration, development, production, or storage site?	✓ Yes ☐ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ver contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	tical extents of soil
Characterization Report Checklist: Each of the following items must be included in the report.	
 ✓ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wel ✓ Field data ✓ Data table of soil contaminant concentration data ✓ Depth to water determination ✓ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release ✓ Boring or excavation logs 	ls.
✓ Photographs including date and GIS information	

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by 40CD: 1/29/2020 7:27:27 A State of New Mexico
Page 4 Oil Conservation Division

Incident ID	NRM2002160255 ² of 3
District RP	
Facility ID	
Application ID	

regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a threaddition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	OCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Maury Sticker	Title: Environmental Director
Signature: Many Tup	Date: 1/22/2020
email: msticker@keyenergy.com	Telephone: 713-651-2461
OCD Only	
Received by: Cristina Eads	Date: 03/17/2020

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and

RECEIVED by AOCD: 1/29/2020 7:27:27 A State of New Mexico
Page 6 Oil Conservation Division

Incident ID	NRM2002160255 ⁰ 3
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.								
✓ A scaled site and sampling diagram as described in 19.15.29.11 NMAC								
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)								
☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)								
Description of remediation activities								
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in							
Printed Name: Maury Sticker	Title: Environmental Director							
Signature: Many Stuhn	Date: 1/22/2020							
email: msticker@keyenergy.com	Telephone: 713-651-2461							
OCD Only								
Received by: Cristina Eads	Date: _03/17/2020							
Closure approval by the OCD does not relieve the responsible party remediate contamination that poses a threat to groundwater, surface very party of compliance with any other federal, state, or local laws and/o	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.							
Closure Approved by:	Date: 03/17/2020							
Printed Name: Cristina Eads	Title: Environmental Specialist							

Remediation Summary and Soil Closure Request

Key Energy Services White's City Rd. Incident

Eddy County, New Mexico
Unit Letter "C", Section 8, Township 26 South, Range 28 East
Latitude 32.06398 North, Longitude 104.11151 West
NMOCD Reference No. 2RP-pending

Prepared By:

Etech Environmental & Safety Solutions, Inc.

3100 Plains Highway Lovington, New Mexico 88260

Daniel Dominguez

Joel W. Lowry



TABLE OF CONTENTS

	Sectio
PROJECT INFORMATION	1.0
SITE CHARACTERIZATION	2.0
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE	3.0
REMEDIATION ACTIVITIES SUMMARY	4.0
RESTORATION, RECLAMATION AND RE-VEGETATION PLAN	5.0
SOIL CLOSURE REQUEST	6.0
LIMITATIONS	
DISTRIBUTION	8.0

FIGURES

- Figure 1 Topographic Map
- Figure 2 Aerial Proximity Map
- Figure 3 Site & Sample Location Map

TABLES

Table 1 - Concentrations of BTEX, TPH and/or Chloride in Soil

APPENDICES

- Appendix A Depth to Groundwater Information
- Appendix B Field Data and Soil Profile Logs
- Appendix C Laboratory Analytical Reports
- Appendix D Photographic Log

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Key Energy Services, has prepared this Remediation Summary and Soil Closure Request for the Release Site known as the White's City Rd. Incident. Details of the release are summarized below:

Latitude: 32.06398 Longitude: -104.11151								
Provided GPS are in WGS84 format.								
21. 37	THE CONTRACTOR	lat. m	D: 1					
Site Name: Date Release Discove	White's City Rd. Incident red: 11/17/2019	Site Type: API # (if applica	Right-of-Way					
Bate Release Biscove	icu. 11/1//2019	TALL # (II applied	ioloj.					
	ection Township	Range	County					
"C"	8 26S	28E	Eddy					
Surface Owner: XS		and Volume of R						
Crude Oil	Volume Released (bbls)		Volume Recovered (bbls)					
X Produced Water	Volume Released (bbls)	120	Volume Recovered (bbls) 3					
	Is the concentration of tot (TDS) in the produced wa		Yes No N/A					
Condensate	Volume Released (bbls)		Volume Recovered (bbls)					
Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)					
Other (describe)	Volume/Weight Released	l	Volume/Weight Recovered					
Cause of Release: The release was a res	sult of a water transport truc	k being involved in sin	gle vehicle traffic accident.					
		Initial Response						
X The source of the	release has been stopped.							
X The impacted area	has been secured to protect l	human health and the en	vironment.					
X Release materials	have been contained via the	use of berms or dikes, at	osorbent pad, or other containment devices					

Previously submitted portions of the NMOCD Form C-141 are available on the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half mile radius of the Release Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	<5	0 Ft.
Did the release impact groundwater or surface water?	Yes	X No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes	X No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark?	Yes	X No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	Yes	X No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Yes	X No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes	X No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes	X No
Are the lateral extents of the release within 300 feet of a wetland?	Yes	X No
Are the lateral extents of the release overlying a subsurface mine?	Yes	X No
Are the lateral extents of the release overlying an unstable area such as karst geology?	X Yes	No
Are the lateral extents of the release within a 100-year floodplain?	Yes	X No
Did the release impact areas not on an exploration, development, production or storage site?	X Yes	No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1 & 2.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, inferred depth to groundwater and NMOCD Siting Criteria, the NMOCD Closure Criteria for the Site is as follows:

Closure Criteria for Soil Impacted by a Release								
Probable Depth to Groundwater	Constituent	Method	Limit					
<50 Ft.	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg					
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg					
	DRO + GRO	EPA SW-846 Method 8015M	N/A mg/kg					
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg					
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg					

4.0 REMEDIATION ACTIVITIES SUMMARY

On **November 20, 2019,** Etech conducted an initial site assessment. During the initial site assessment, a series of hand-augered soil bores (SP1 through SP3) were advanced within the release margins in an effort to determine the vertical extent of soil impacts. In addition, hand-augered soil bores were advanced at the inferred edges of the affected area in an effort to determine the horizontal extent of soil impacts. During the advancement of the hand-augered soil bores, field soil samples were collected and field-screened for concentrations of chloride utilizing a Hach Quantab ® chloride test kit. A "Site & Sample Location Map" is provided as Figure 3. Field data and soil profile logs, if applicable, are provided as Appendix B.

Based on field observations and field test data, eighteen (18) delineation soil samples (SP1 @ S, SP1 @ 1', SP2 @ S, SP2 @ 3', SP3 @ S, SP3 @ 3', EH1 @ S, EH1 @ 1', NH1 @ S, NH1 @ 1', NH2 @ S, NH2 @ 1', SH1 @ S, SH1 @ 1', SH2 @ S and SH2 @ 1') were submitted to the laboratory for analysis of BTEX, TPH and/or Chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria beyond 1 Ft. to 4 Ft bgs and the horizontal extent of affected soil impacted above the NMOCD Closure Criteria was adequately defined.

On **December 9, 2019,** remediation activities commenced at the Site. In accordance with the NMOCD, impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations and test results suggested BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

On **December 12, 2019**, Etech collected **eighteen (18)** excavation confirmation soil samples (**FL-1 through FL-8, MW-1 through MW-6, SW-1, SW-5, SW-6 and WW)** from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exception of soil samples FL-3, FL-4, FL-7, MW-4, SW-1, SW-5 and WW which exhibited chloride concentrations of 1,850 mg/kg, 1,700 mg/kg, 1,120 mg/kg, 958 mg/kg, 4,070 mg/kg, 1,190 mg/kg and 797 mg/kg, respectively. The floor and sidewalls of the excavation was advanced in the areas characterized by soil samples FL-3, FL-4, FL-7, MW-4, SW-1, SW-5 and WW.

On December 16, 2019, Etech collected fourteen (14) excavation confirmation soil samples (FL-9 through FL-17 and NW-7 through NW-11) from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exception of soil sample FL-9 which exhibited a chloride concentration of 616 mg/kg. The floor of the excavation was advanced in the area characterized by soil sample FL-9.

On December 17, 2019, Etech collected ten (10) excavation confirmation soil samples (FL-18, FL-19, SW-2 through SW-4, SW-7 through SW-10 and EW) from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

On January 3, 2020, Etech collected eight (8) excavation confirmation soil samples (FL-3B, FL-4B, FL-7B, FL-9B, NW-4B, SW-1B, SW-5B, WW-B) from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples.

A "Site & Sample Location Map" is provided as Figure 3. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C. Field data and soil profile logs, if applicable, are provided as Appendix B.

The final dimensions of the excavated area were 290 Ft. in length, 3 to 25 Ft in width and ranged from 2 to 4 Ft. in depth. During the course or remediation activities approximately **618 cubic yards** of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

5.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

Upon receiving laboratory analytical results from confirmation soil samples, excavated areas were backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area was contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with an agency-approved seed mixture free of noxious weeds during the first favorable growing season following closure of the site.

6.0 SOIL CLOSURE REQUEST

Remediation activities were conducted in accordance with applicable NMOCD Regulations. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from excavation confirmation soil samples indicated concentrations of BTEX, TPH and chloride are below the NMOCD Closure Criteria and/or NMOCD Reclamation Standard.

Based on laboratory analytical results and field activities conducted to date, Etech is submitting this Remediation Summary and Soil Closure Request on behalf of Key Energy Services and requesting closure be granted to the White's City Rd. incident Site.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Site Assessment Report and Proposed Remediation Workplan to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents reference in the report and on oral statements made by certain individuals. Basis has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Key Energy Services. Use of the information contained in this report is prohibited within the consent of Etech and/or Key Energy Services.

8.0 DISTRIBUTION

Key Energy Services

1301 McKinney St., Suite 1800 Houston, TX 77010

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 2 811 S. First Street Artesia, NM 88210

Hobbs Field Office

New Mexico State Land Office 2827 North Dal Paso Street Suite 117 Hobbs, NM 88240

(Electronic Submission)

Figure 1 Topographic Map

Figure 2 Aerial Proximity Map

Figure 3 Site and Sample Location Map

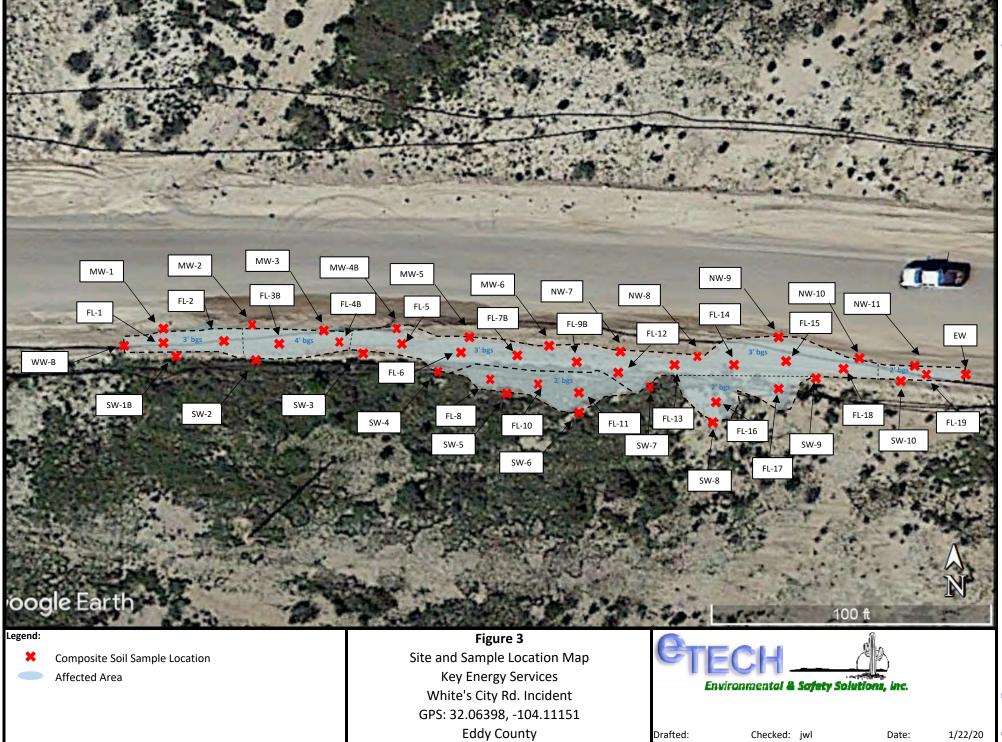


Table 1 Concentrations of BTEX, TPH, and/or Chloride in Soil

TABLE 1 CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL

Key Energy Services White's City Rd. Incident NMOCD Ref. No. 2RP-Pending

				SW 840	6 8021B	SW 846 8015M Ext.					4500 Cl
Sample ID	Date	Depth	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SP1 @ S	11/20/2019	Surf.	Excavated	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	13,400
SP1 @ 1'	11/20/2019	1'	Excavated	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
SP2 @ S	11/20/2019	Surf.	Excavated	< 0.050	0.496	19.60	41.30	60.90	<10.0	60.90	20,800
SP2 @ 3'	11/20/2019	3'	In-situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
SP3 @ S	11/20/2019	Surf.	Excavated	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	18,400
SP3 @ 3'	11/20/2019	3'	Excavated	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	640
EH1 @ S	11/20/2019	Surf.	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
EH1 @ 1'	11/20/2019	1'	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
WH1 @ S	11/20/2019	Surf.	In-Situ	< 0.050	< 0.300	<10.0	14.4	14.4	<10.0	14.4	128
WH1 @ 1'	11/20/2019	1'	In-Situ	< 0.050	< 0.300	<10.0	11.2	11.2	<10.0	11.2	112
NH1 @ S	11/20/2019	Surf.	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
NH1 @ 1'	11/20/2019	1'	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
NH2 @ S	11/20/2019	Surf.	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
NH2 @ 1'	11/20/2019	1'	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
SH1 @ S	11/20/2019	Surf.	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
SH1 @ 1'	11/20/2019	1'	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
SH2 @ S	11/20/2019	Surf.	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
SH2 @ 1'	11/20/2019	1'	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FL-1	12/12/2019	3'	In-Situ	ND	ND	ND	1.68 ^J	1.68 ^J	ND	1.68 ^J	273
FL-2	12/12/2019	3'	In-Situ	ND	ND	ND	2.69 ^J	2.69 ^J	ND	2.69 J	129
FL-3	12/12/2019	3'	Excavated	ND	ND	ND	2.22 ^J	2.22 ^J	1.13 ^J	3.35 ^J	1,850
FL-3B	1/3/2020	4'	In-Situ	-	-	-	-	-	-	-	13.2
FL-4	12/12/2019	3'	Excavated	ND	ND	ND	1.41 ^J	1.41 ^J	ND	1.41 ^J	1,700
FL-4B	1/3/2020	4'	In-Situ	-	-	-	-	-	-	-	11.1
FL-5	12/12/2019	3'	In-Situ	ND	ND	ND	1.61 ^J	1.61 ^J	ND	1.61	145
FL-6	12/12/2019	3'	In-Situ	ND	ND	ND	2.28 ^J	2.28 ^J	ND	2.28 ^J	127
FL-7	12/12/2019	2'	Excavated	ND	ND	ND	4.83 ^J	4.83 ^J	1.80 ^J	6.63 ^J	1,120
FL-7B	1/3/2020	3'	In-Situ	-	-	-	-	-	-	-	16.2
FL-8	12/12/2019	2'	In-Situ	ND	ND	ND	3.62 ^J	3.62 ^J	ND	3.62 J	47.6
FL-9	12/16/2019	2'	Excavated	ND	ND	ND	0.865 ^J	0.865 ^J	ND	0.865 ^J	616
FL-9B	1/3/2020	3'	In-Situ	-	-	-	-	-	-	-	34.2
FL-10	12/16/2019	2'	In-Situ	ND	ND	4.34 ^J	1.66 ^J	6.00 J	ND	6.00 J	165
FL-11	12/16/2019	2'	In-Situ	ND	ND	ND	1.44 ^J	1.44 ^J	ND	1.44 ^J	192
FL-12	12/16/2019	3'	In-Situ	ND	ND	ND	2.49 ^J	2.49 ^J	ND	2.49 ^J	27.7
FL-13	12/16/2019	3'	In-Situ	ND	ND	ND	2.09 ^J	2.09 ^J	ND	2.09 J	26.8
FL-14	12/16/2019	3'	In-Situ	ND	ND	ND	1.50 ^J	1.50 ^J	ND	1.50 ^J	29.2
FL-15	12/16/2019	3'	In-Situ	ND	ND	ND	2.21 ^J	2.21 ^J	1.11 ^J	3.32 ^J	170
FL-16	12/16/2019	2'	In-Situ	ND	ND	ND	0.979 ^J	0.979 ^J	ND	0.979 ^J	299
FL-17	12/16/2019	2'	In-Situ	ND	ND	ND	1.18 ^J	1.18 ^J	ND	1.18 ^J	374
FL-18	12/17/2019	8'	In-Situ	ND	ND	ND	1.21 ^J		ND	1.21 ^J	298
FL-19	12/17/2019	2'	In-Situ	ND	ND	ND	1.40 ^J	1.40 ^J	ND	1.40 J	156
	losure C	riteria		10	50	_	_	_	_	100	600

NOTES:

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

^{- =} Not analyzed for that consituent.

J = estimated value

TABLE 1 CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL

Key Energy Services White's City Rd. Incident NMOCD Ref. No. 2RP-Pending

				SW 840	6 8021B		SV	W 846 8015M E	xt.		4500 Cl
Sample ID	Date	Depth	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
MW-1	12/12/2019	NA	In-Situ	ND	ND	ND	2.55 ^J	2.55 ^J	1.51 ^J	4.06 J	281
MW-2	12/12/2019	NA	In-Situ	ND	ND	ND	2.20 J	2.20 J	ND	2.20 J	169
MW-3	12/12/2019	NA	In-Situ	ND	ND	ND	8.99 ^J	8.99 ^J	2.74 ^J	11.73 ^J	424
MW-4	12/12/2019	NA	Excavated	ND	ND	ND	3.33 ^J	3.33 ^J	2.05 ^J	5.38 ^J	958
NW-4B	1/3/2020	NA	In-Situ	-	-	-	-	-	-	-	11.9
MW-5	12/12/2019	NA	In-Situ	ND	ND	ND	1.82 ^J	1.82 ^J	ND	1.82 ^J	22.3
MW-6	12/12/2019	NA	In-Situ	ND	ND	ND	2.02 J	2.02 J	ND	2.02 J	96.1
NW-7	12/16/2019	NA	In-Situ	ND	ND	7.87 ^J	2.16 ^J	10.03 ^J	1.33 ^J	11.36 ^J	502
NW-8	12/16/2019	NA	In-Situ	ND	ND	5.47 ^J	2.48 J	7.95 ^J	ND	7.95 ^J	38.9
NW-9	12/16/2019	NA	In-Situ	ND	ND	ND	2.60 J	2.60 J	2.31 ^J	4.91 ^J	50.1
NW-10	12/16/2019	NA	In-Situ	ND	ND	ND	2.16 J	2.16 ^J	1.70 ^J	3.86 ^J	55.6
NW-11	12/16/2019	NA	In-Situ	ND	ND	3.33 ^J	1.56 ^J	4.89 ^J	1.46 ^J	6.35 ^J	101
SW-1	12/12/2019	NA	Excavated	ND	ND	ND	3.27 ^J	3.27 ^J	2.13 J	5.40 J	4,070
SW-1B	1/3/2020	NA	In-Situ	-	-	-	-	-	-	-	12.1
SW-2	12/17/2019	NA	In-Situ	ND	ND	ND	1.16 ^J	1.16 ^J	ND	1.16 ^J	18.8
SW-3	12/17/2019	NA	In-Situ	ND	ND	ND	2.61 J	2.61 ^J	9.92 ^J	12.53 ^J	13.6
SW-4	12/17/2019	NA	In-Situ	ND	ND	ND	1.08 ^J	1.08 ^J	ND	1.08 ^J	23.1
SW-5	12/12/2019	NA	Excavated	ND	ND	ND	1.19 ^J	1.19 ^J	ND	1.19 ^J	1,190
SW-5B	1/3/2020	NA	In-Situ	ı	-	-	-	-	-	-	12.0
SW-6	12/12/2019	NA	In-Situ	ND	ND	ND	3.84 ^J	3.84 ^J	ND	3.84 ^J	297
SW-7	12/17/2019	NA	In-Situ	ND	ND	ND	1.78 ^J	1.78 ^J	ND	1.78 ^J	47.3
SW-8	12/17/2019	NA	In-Situ	ND	ND	ND	1.22 ^J	1.22 ^J	ND	1.22 ^J	564
SW-9	12/17/2019	NA	In-Situ	ND	ND	ND	1.66 ^J	1.66 ^J	ND	1.66 ^J	18.6
SW-10	12/17/2019	NA	In-Situ	ND	ND	6.10 ^J	1.11 ^J	7.21 ^J	ND	7.21 ^J	14.7
WW	12/12/2019	NA	Excavated	ND	ND	ND	4.85 ^J	4.85 ^J	1.99 ^J	6.84 ^J	797
WW-B	1/3/2020	NA	In-Situ	-	-	-	-	-	-	-	17.9
EW	12/17/2019	NA	In-Situ	ND	ND	ND	3.58 ^J	3.58 ^J	ND	3.58 ^J	38.8
NOTES:	losure C	riteria		10	50	-	-	-	-	100	600

NOTES:

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

J = estimated value

⁻ = Not analyzed for that consituent.

Appendix A Depth to Groundwater Information



Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

<u>UTMNAD83 Radius Search (in meters):</u>

Easting (X): 583865.78 **Northing (Y):** 3547872.65 **Radius:** 804.67

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/23/20 9:51 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER



Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is

closed)

Code

(quarters are 1=NW 2=NE 3=SW 4=SE)

1 1 03 26S 28E

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

Water

POD Sub-

CUB

QQQ basin County 64 16 4 Sec Tws Rng 2 1 05 26S 28E CUB

ED

583848 3549325*

3549347*

586687

DistanceDepthWellDepthWater Column 1452 100

Average Depth to Water:

3183

Minimum Depth:

150

Maximum Depth:

Record Count: 2

POD Number

C 02478

C 02477

UTMNAD83 Radius Search (in meters):

Easting (X): 583865.78

Northing (Y): 3547872.65

Radius: 3220

*UTM location was derived from PLSS - see Help

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1/23/20 9:53 AM

WATER COLUMN/ AVERAGE DEPTH TO



Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

POD Number C 02477 Q64 Q16 Q4 Sec Tws Rng

X Y

1 1 03 26S 28E

586687 3549347*

Driller License:

Well Tag

Driller Company:

Driller Name:

HEPLER BROS

Drill Start Date:

Drill Finish Date:

12/31/1912

150 feet

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield: 6 GPM

Casing Size:

6.00

Depth Well:

Depth Water:

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/23/20 9:53 AM

POINT OF DIVERSION SUMMARY



Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

Q64 Q16 Q4 Sec Tws Rng

(NAD83 UTM in meters)

POD Number Q64 C 02478

2 1 05 26S 28E

X Y 583848 3549325*

Driller License:

Driller Company:

Driller Name:

Well Tag

HEPLER BROS

Drill Start Date:

Drill Finish Date:

12/31/1916

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield: 5 GPM

Casing Size:

6.00

Depth Well:

100 feet

Depth Water:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/23/20 9:52 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help

0.5 Mi Radius 1000 Ft Radius

GPS: 32.06398, -104.11151 **Eddy County**



Drafted: mag Checked: jwl Date: 1/23/20



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	▼

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Agency code = usgs site_no list =

• 320230104060601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320230104060601 26S.28E.18.33111

Available data for this site Groundwater: Field measurements

GO

Eddy County, New Mexico

Eddy County, New Mexico

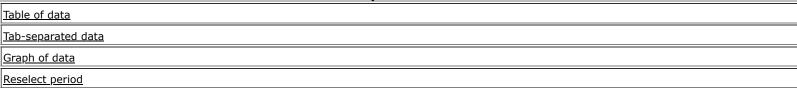
Hydrologic Unit Code 13070002

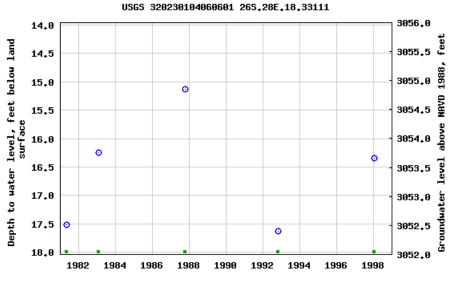
Latitude 32°02'30", Longitude 104°06'06" NAD27

Land-surface elevation 3,070 feet above NAVD88

This well is completed in the Castile Gypsum (312CSTL) local aquifer.

Output formats





- Period of approved data

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0.5 0.42 nadww02



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320309104020401

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USGS 320309104020401 26S.28E.14.11111

Available data for this site | Groundwater: Field measurements GO Eddy County, New Mexico

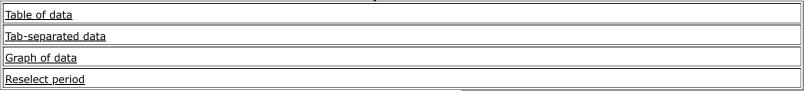
Hydrologic Unit Code 13060011

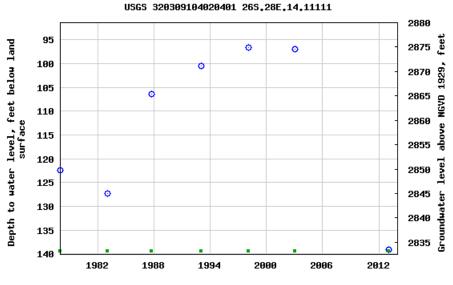
Latitude 32°02'59.0", Longitude 104°03'58.7" NAD83

Land-surface elevation 2,972.00 feet above NGVD29

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats





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0.67 0.47 nadww01



1



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Agency code = usgs site_no list =

320409104102001

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320409104102001 26S.27E.05.44233

Available data for this site Groundwater: Field measurements GO Eddy County, New Mexico

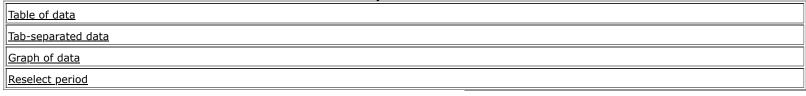
Hydrologic Unit Code 13060011

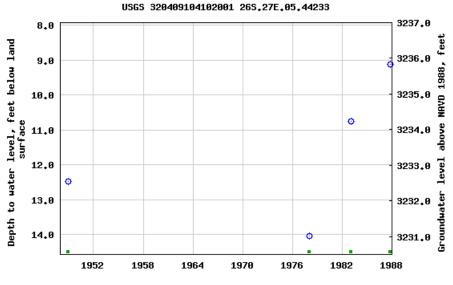
Latitude 32°04'09", Longitude 104°10'20" NAD27

Land-surface elevation 3,245 feet above NAVD88

This well is completed in the Castile Gypsum (312CSTL) local aquifer.

Output formats





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Agency code = usgs site_no list =

• 320518104031401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320518104031401 25S.28E.35.2324

Available data for this site Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Hydrologic Unit Code 13060011

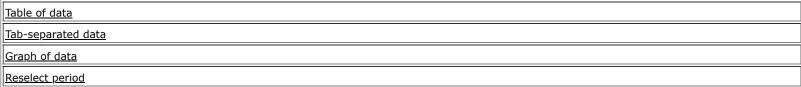
Latitude 32°05'19.0", Longitude 104°03'17.3" NAD83

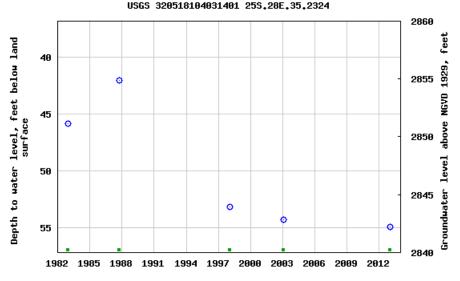
Land-surface elevation 2,897 feet above NGVD29

The depth of the well is 180 feet below land surface.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

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Agency code = usgs site_no list =

• 320557104061501

Minimum number of levels = 1

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USGS 320557104061501 25S.28E.29.41243A

Available data for this site Groundwater: Field measurements

GO

Eddy County, New Mexico

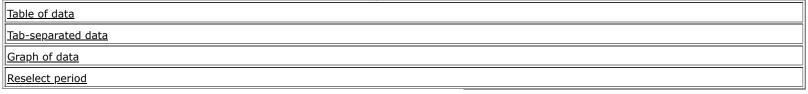
Hydrologic Unit Code 13060011

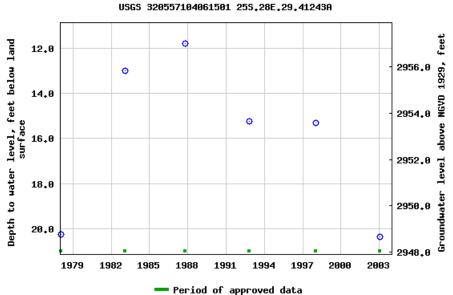
Latitude 32°05'56.0", Longitude 104°06'22.6" NAD83

Land-surface elevation 2,968.90 feet above NGVD29

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats





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	$\overline{}$	Geographic Area: ▼ United States	

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Agency code = usgs site_no list =

320557104061601

Minimum number of levels = 1

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USGS 320557104061601 25S.28E.29.41243

Available data for this site | Groundwater: Field measurements GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

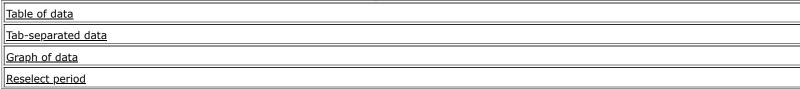
Latitude 32°05'57", Longitude 104°06'16" NAD27

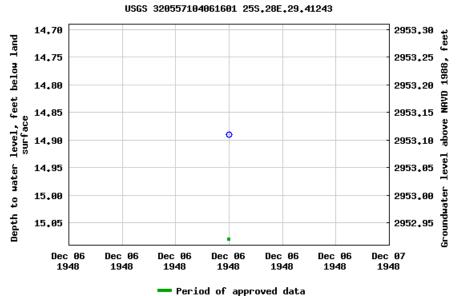
Land-surface elevation 2,968 feet above NAVD88

The depth of the well is 60 feet below land surface.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

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0.53 0.48 nadww01



Appendix B Field Data and Soil Profile Logs



Initial Release Assessment Form

Draigate	White-Lack Bull and				0/19
Project:	White's City Rd. Incident		lean Up Level:	600 mg/kg Cl-, 100	mg/kg TPH
Project Number:	11543	Latitude:	32.06398	Longitude:	-104.11151
Bur Ditch Pasture	Whites 37.06 36	City Roa 189,-104.111057 NH-2 34-2	te Diagram	3013	22.063964 04.1111417
~Length: 290	which initial release P. Sile Vertical initial release Westical ini	~Area: ~3	action w/ c	~Depth: 1-3 Ft	Yes No
	les Field Screened and on I		•		_
	d Screen Data Entered on S				,
					⊡∕, □
Was horizontal a	and vertical delineation ach	ieved?			



Sample Log

Project:	Empty Project while's City Rd		Date:	11-20-19
Project Number:	9 11543 Latitude:	32.06348 0	Longitude:	-1041.11151 0 -

Sample ID	PID/Odor	Chlor	ide Conc.	CDC			
SP1 es	Done	2436	24,7507	GPS 32.063660, -104.11149			
SPLICS	11	2436	15528	32.06396,-104.11114			
3P3e5	4	2436		32.06316,-104.11185			
EHIES'	s ₄	168	17296	32.003.0,-1021.77163			
SPICI	14	230					
Shrel	ч	2436	104910				
SP3el	a,	2436	10496				
EH @ I'	4	236	10114				
WHIES	64	116					
WHICI	ag	11.6		*			
SPLEZ	4 1	2436					
SP3 CZ	89	2436					
NHZES	by	116					
NHZEI	ø.	312					
VHICS.	4.	114					
NHIOL	Ny.	317					
SHIES	11	116					
24101	**	444					
SH2@S	*,	236	· · · · · · · · · · · · · · · · · · ·				
SH2 C1	l,	168					
SPZ@3	4,	23¢					
SP3 03	6,	236		1			
SPZQH	,.						
SP3e4'	11	114					
,		Regula					
		MARIE SECO					
				10			
			X				
Sample Point = SP #1 @ ## etc							

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

Soil Intended to be Deferred = SP #1 @ 4' In-Situ

Resamples= SP #1 @ 5b or SW #1b

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Soil Profile

Projects	Empty Project		Date:	1/7/2020
Project:	Empty Project	32.06348		
Project Number:	Latitude:	0	Longitude:	-104.11151 0
Depth (ft. bgs)			Description	
1	Light Brown	Top Soil		
3	5elt while Ca	154.6		
4	22H	uirve		
5				
6				
7				•••••
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37				••••••
38				••••••
39				
40				

Appendix C Laboratory Analytical Reports



November 26, 2019

JOEL LOWRY

Etech Environmental & Safety Solutions

P.O. Box 301

Lovington, NM 88260

RE: WHITE'S CITY RD. INCIDENT

Enclosed are the results of analyses for samples received by the laboratory on 11/21/19 16:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Haloacetic Acids (HAA-5)
Method EPA 524.2 Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Wite South

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition:

Cool & Intact

Project Number:

11543

Sample Received By:

Jodi Henson

Project Location:

EDDY CO NM

Sample ID: SP 1 @ SURFACE (H903961-01)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/23/2019	ND	1.71	85.4	2.00	1.98	
Toluene*	<0.050	0.050	11/23/2019	ND	1.66	83.2	2.00	1.78	
Ethylbenzene*	<0.050	0.050	11/23/2019	ND	1.70	84.8	2.00	2.11	
Total Xylenes*	<0.150	0.150	11/23/2019	ND	5.11	85.1	6.00	2.45	
Total BTEX	<0.300	0.300	11/23/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.4	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13400	16.0	11/25/2019	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	212	106	200	0.750	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	203	101	200	3.28	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	93.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	97.6	% 37.6-14	7						

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*=Accredited Analyte

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with Sigh



Cool & Intact

Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 11/21/2019 Reported:

Sampling Date: 11/20/2019 Sampling Type: Soil 11/26/2019

Sampling Condition:

Project Name: WHITE'S CITY RD. INCIDENT

Sample Received By: Project Number: 11543 Jodi Henson Project Location: EDDY CO NM

Sample ID: SP 1 @ 1' (H903961-02)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.67	83.4	2.00	2.52	
Toluene*	<0.050	0.050	11/22/2019	ND	1.66	82.9	2.00	4.81	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	84.0	2.00	5.19	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	5.20	86.7	6.00	8.07	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.8	% 73.3-12	9						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	11/25/2019	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	212	106	200	0.750	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	203	101	200	3.28	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	97.9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	101	% 37.6-14	7						

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wite Single



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

Sample ID: SP 2 @ SURFACE (H903961-03)

BTEX 8021B	mg	mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.67	83.4	2.00	2.52	
Toluene*	0.080	0.050	11/22/2019	ND	1.66	82.9	2.00	4.81	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	84.0	2.00	5.19	
Total Xylenes*	0.415	0.150	11/22/2019	ND	5.20	86.7	6.00	8.07	
Total BTEX	0.496	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 73.3-12	9						
Chloride, SM4500CI-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20800	16.0	11/25/2019	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	19.6	10.0	11/22/2019	ND	212	106	200	0.750	
DRO >C10-C28*	41.3	10.0	11/22/2019	ND	203	101	200	3.28	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	94.6	% 41-142	?						
Surrogate: 1-Chlorooctadecane	96.3	% 37.6-14	7						

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MM Sough



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Analyzed By: MC

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

RTFY 8021R

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

ma/ka

Sample ID: SP 2 @ 3' (H903961-04)

9/	<u> </u>	Anaryzo	а ву: мѕ					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<0.050	0.050	11/22/2019	ND	1.67	83.4	2.00	2.52	
<0.050	0.050	11/22/2019	ND	1.66	82.9	2.00	4.81	
<0.050	0.050	11/22/2019	ND	1.68	84.0	2.00	5.19	
<0.150	0.150	11/22/2019	ND	5.20	86.7	6.00	8.07	
<0.300	0.300	11/22/2019	ND					
99.7	% 73.3-12	9						
mg/	'kg	Analyzed By: AC						
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
112	16.0	11/25/2019	ND	432	108	400	0.00	
mg/	'kg	Analyze	d By: MS					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<10.0	10.0	11/22/2019	ND	212	106	200	0.750	
<10.0	10.0	11/22/2019	ND	203	101	200	3.28	
<10.0	10.0	11/22/2019	ND					
98.1	% 41-142	•						
101 9	% 37.6-14	7						
• • • • • • • • • • • • • • • • • • •	Result <0.050 <0.050 <0.050 <0.150 <0.300 99.7 mg/ Result 112 mg/ Result <10.0 <10.0 <10.0	<0.050 <0.050 <0.050 <0.050 <0.050 <0.150 <0.300 99.7 % 73.3-12 mg/kg Result Reporting Limit 112 16.0 mg/kg Result Reporting Limit 10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <10.0 <p< td=""><td>Result Reporting Limit Analyzed <0.050</td> 0.050 11/22/2019 <0.050</p<>	Result Reporting Limit Analyzed <0.050	Result Reporting Limit Analyzed Method Blank <0.050	Result Reporting Limit Analyzed Method Blank BS <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery < 0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC <0.050	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD <0.050

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MMc Songh



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

BTEX 8021B

WHITE'S CITY RD. INCIDENT

Sampling Condition:

Cool & Intact

Project Number:

11543

Project Location:

EDDY CO NM

mg/kg

Sample Received By:

Jodi Henson

Sample ID: SP 3 @ SURFACE (H903961-05)

	9/	9	7	,					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.67	83.4	2.00	2.52	
Toluene*	<0.050	0.050	11/22/2019	ND	1.66	82.9	2.00	4.81	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	84.0	2.00	5.19	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	5.20	86.7	6.00	8.07	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.2	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18400	16.0	11/25/2019	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	212	106	200	0.750	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	203	101	200	3.28	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	92.6	% 41-142							
Surrogate: 1-Chlorooctadecane	94.8	% 37.6-14	7						

Analyzed By: MS

Cardinal Laboratories

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MMc Songh



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Analyzed By: MC

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

RTFY 8021R

EDDY CO NM

ma/ka

Sample ID: SP 3 @ 3' (H903961-06)

B1EX 8021B	mg/	кд	Anaiyze	а ву: мѕ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.7	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	11/25/2019	ND	432	108	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	212	106	200	0.750	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	203	101	200	3.28	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	91.5	% 41-142	ı						
Surrogate: 1-Chlorooctadecane	95.3	% 37.6-14	7						

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Mile Sough



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

Sample ID: EH 1 @ SURFACE (H903961-07)

BTEX 8021B	mg/kg		Analyze	Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.8	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/25/2019	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	212	106	200	0.750	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	203	101	200	3.28	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	81.0	% 41-142	•						
Surrogate: 1-Chlorooctadecane	83.5	% 37.6-14	7						

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with Sigh



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260 Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By:

Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

BTEX 8021B

EDDY CO NM

mg/kg

Sample ID: EH 1 @ 1' (H903961-08)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.7	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: AC					
Chloride, SM4500Cl-B Analyte	mg ,	Reporting Limit	Analyze Analyzed	d By: AC Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
· · · · · · · · · · · · · · · · · · ·			<u> </u>	-	BS 416	% Recovery	True Value QC 400	RPD 3.92	Qualifier
Analyte	Result	Reporting Limit	Analyzed 11/25/2019	Method Blank		•	·		Qualifier
Analyte Chloride	Result 96.0	Reporting Limit	Analyzed 11/25/2019	Method Blank		•	·		Qualifier Qualifier
Analyte Chloride TPH 8015M	Result 96.0	Reporting Limit 16.0	Analyzed 11/25/2019 Analyze	Method Blank ND d By: MS	416	104	400	3.92	

ND

Analyzed By: MS

Surrogate: 1-Chlorooctane

91.3 %

41-142

11/22/2019

10.0

Surrogate: 1-Chlorooctadecane

EXT DRO >C28-C36

94.4 %

<10.0

37.6-147

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Mile Sough

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Page 9 of 22



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition:

Cool & Intact

Project Number:

11543

Project Location:

EDDY CO NM

Sample Received By:

Jodi Henson

Sample ID: WH 1 @ SURFACE (H903961-09)

BTEX 8021B	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150 0.150		11/22/2019 ND		4.92	82.1	6.00	5.59	
Total BTEX	<0.300 0.300		11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4	% 73.3-12	9						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/25/2019	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	14.4	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	75.8	% 41-142							
Surrogate: 1-Chlorooctadecane	76.2	% 37.6-14	7						

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*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Page 10 of 22



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

Sample ID: WH 1 @ 1' (H903961-10)

BTEX 8021B	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.5 % 73.3-12		9						
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/25/2019 ND		416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	11.2	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	76.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	79.5	% 37.6-14	7						

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*=Accredited Analyte

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Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

BTEX 8021B

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

mg/kg

72.6 %

37.6-147

Sample ID: NH 1 @ SURFACE (H903961-11)

	91	9							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.1	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	ng Limit Analyzed Method Blank			% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	11/25/2019	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36			11/22/2010	ND					
EXT DIO >C20-C30	<10.0	10.0	11/22/2019	ND					

Analyzed By: MS

Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

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whe South



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Analyzed By: MC

Lovington NM, 88260 Fax To: (575) 396-1429

ma/ka

Received: 11/21/2019 Reported: 11/26/2019

Project Name: WHITE'S CITY RD. INCIDENT

11543

Project Number:

Project Location: EDDY CO NM

Sampling Date: 11/20/2019

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: NH 1 @ 1' (H903961-12)

RTFY 8021R

B1EX 8021B	mg/	кд	Anaiyze	а ву: мѕ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050 0.050		11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150 0.150		11/22/2019 ND		4.92	82.1	6.00	5.59	
Total BTEX	<0.300 0.300		11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.7 % 73.3-12		9						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/25/2019 ND		416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	81.4	% 41-142							
Surrogate: 1-Chlorooctadecane	83.5	% 37.6-14	7						

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Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

Sample ID: NH 2 @ SURFACE (H903961-13)

BTEX 8021B	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019 ND		4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019 ND						
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyze	ed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/25/2019 ND		416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	80.0	% 41-142	•						
Surrogate: 1-Chlorooctadecane	81.2	% 37.6-14	7						
~									

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Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received: 11/21/2019 Reported:

11/26/2019 WHITE'S CITY RD. INCIDENT

Project Name: Project Number: 11543

Project Location: EDDY CO NM Sampling Date: 11/20/2019

Sampling Type: Soil

Sampling Condition: Cool & Intact Sample Received By: Jodi Henson

Sample ID: NH 2 @ 1' (H903961-14)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150 0.150		11/22/2019 ND		4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.9	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/25/2019 ND		416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	80.0	% 41-142	ı						
Surrogate: 1-Chlorooctadecane	80.6	% 37.6-14	7						

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Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY

P.O. Box 301

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

BTEX 8021B

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

mg/kg

Sample ID: SH 1 @ SURFACE (H903961-15)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.8	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Chloride, SM4500CI-B Analyte	Result	/kg Reporting Limit	Analyze Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
· · · · · · · · · · · · · · · · · · ·			<u> </u>	-	BS 416	% Recovery	True Value QC	RPD 3.92	Qualifier
Analyte	Result	Reporting Limit	Analyzed 11/25/2019	Method Blank		•	-		Qualifier
Analyte Chloride	Result <16.0	Reporting Limit	Analyzed 11/25/2019	Method Blank		•	-		Qualifier Qualifier
Analyte Chloride TPH 8015M	Result <16.0	Reporting Limit 16.0	Analyzed 11/25/2019 Analyze	Method Blank ND d By: MS	416	104	400	3.92	

ND

Analyzed By: MS

Surrogate: 1-Chlorooctane

82.8 %

<10.0

41-142

11/22/2019

10.0

Surrogate: 1-Chlorooctadecane

EXT DRO >C28-C36

84.5 %

37.6-147

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Page 16 of 22



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Analyzed By: MS

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

BTEX 8021B

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition:

Cool & Intact

Project Number:

11543

Project Location:

EDDY CO NM

mg/kg

Sample Received By:

Jodi Henson

Sample ID: SH 1 @ 1' (H903961-16)

	9/	9	7	,					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150 0.150		11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.4 % 73.3-12		9						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/25/2019	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	74.0	% 41-142							
Surrogate: 1-Chlorooctadecane	75.4	% 37.6-14	7						

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MMc Songh



Analytical Results For:

Etech Environmental & Safety Solutions JOEL LOWRY P.O. Box 301

Analyzed By: MC

Lovington NM, 88260

Fax To: (575) 396-1429

Received:

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

RTFY 8021R

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

ma/ka

Sample ID: SH 2 @ SURFACE (H903961-17)

B1EX 8021B	mg/	кд	Anaiyze	а ву: м5					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050 0.050		11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150 0.150		11/22/2019 ND		4.92	82.1	6.00	5.59	
Total BTEX	<0.300 0.300		11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0 % 73.3-12		9						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/25/2019 ND		416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	nalyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/22/2019	ND	216	108	200	0.352	
DRO >C10-C28*	<10.0	10.0	11/22/2019	ND	208	104	200	0.732	
EXT DRO >C28-C36	<10.0	10.0	11/22/2019	ND					
Surrogate: 1-Chlorooctane	58.7	% 41-142							
Surrogate: 1-Chlorooctadecane	58.0	% 37.6-14	7						

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Analytical Results For:

Etech Environmental & Safety Solutions
JOEL LOWRY

P.O. Box 301 Lovington NM, 88260

Fax To: (575) 396-1429

Received:

BTEX 8021B

11/21/2019

Sampling Date:

11/20/2019

Reported:

11/26/2019

Sampling Type:

Soil

Project Name:

WHITE'S CITY RD. INCIDENT

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Number:

11543

Project Location:

EDDY CO NM

mg/kg

Sample ID: SH 2 @ 1' (H903961-18)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/22/2019	ND	1.73	86.6	2.00	6.14	
Toluene*	<0.050	0.050	11/22/2019	ND	1.70	85.2	2.00	7.48	
Ethylbenzene*	<0.050	0.050	11/22/2019	ND	1.68	83.8	2.00	5.89	
Total Xylenes*	<0.150	0.150	11/22/2019	ND	4.92	82.1	6.00	5.59	
Total BTEX	<0.300	0.300	11/22/2019	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.2	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Chloride, SM4500CI-B Analyte	mg, Result	/kg Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
·			<u> </u>		BS 416	% Recovery	True Value QC	RPD 3.92	Qualifier
Analyte	Result	Reporting Limit	Analyzed 11/25/2019	Method Blank		,	·		Qualifier
Analyte Chloride	Result	Reporting Limit	Analyzed 11/25/2019	Method Blank		,	·		Qualifier Qualifier

ND

ND

208

104

200

0.732

Analyzed By: MS

Surrogate: 1-Chlorooctane

DRO >C10-C28*

EXT DRO >C28-C36

75.6 %

<10.0

<10.0

41-142

11/22/2019

11/22/2019

10.0

10.0

Surrogate: 1-Chlorooctadecane

77.1 %

37.6-147

Cardinal Laboratories *=Accredited Analyte

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with South



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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MMc Songh

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Page 20 of 22

Page 21 of 22

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name	: Key Energy	770	(5	20) 01	3-7	001		V (3	23)	-	ILL TO							ANIA	LVCI		OUE	O.T.	 	
Project Manage		Joel Lowry						P.O.	#•	اط	iee iu							ANA	LYSI	S KE	QUE	SI		
Address:	vooi Eomiy						-			v· F	Etech													
City:	State:	Zin):					Attn:		. J. L	_10011							l SU						
Phone #:	Fax #:							Addr]ં						
Project #: 1154	Look'	r.						City:							Σ			Ā						
	White's City Rd. Incident	•						State			Zip:			SS	2	200 540	TPH	NS,						
	n: Rural Eddy County							hor		•	Ζiμ.			iġ	8015		F	tio	S					
	Catalina Baeza				_		_	ax #		8)				Chlorides	8	BTEX	Texas	Sa	TDS					
FOR LAB USE ONLY	Salama Bacza				MAT	TRIX			RES	ERV	SAMPI	LIN	G	용	TPH	ш	ex) e				Š		
Lab I.D. H903961	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ICE / COOL	OTHER:	DATE		TIME)	Ë		T	Complete Cations/Anions						
1	SP1 @ S	G	1		1				1	-	11/20/19	3	09:30	1	1	1								\vdash
2	SP1 @ 1'	G	1		1			T	1		11/20/19		09:40	1	1	1								
3	SP2 @ S	G	1		1				1	-	11/20/19		09:55	1	1	1								
4	SP2 @ 3'	G	1		✓				1	•	11/20/19		10:00	1	1	1								
	SP3 @ S	G	1		1				1		11/20/19	7	10:05	1	1	1								
6	SP3 @ 3'	G	1		✓				1		11/20/19		10:15	1	✓	1								
	EH1 @ S	G	1		1				1		11/20/19		10:20	1	1	1								
8	EH1 @ 1'	G	1		✓				1		11/20/19	9	10:25	1	1	1								
9	WH1 @ S	G	1		1				1		11/20/19	9	10:35	✓	✓	1								
PLEASE NOTE: Liability a	WH1 @ 1'	G	1		✓				V		11/20/19		10:40	1	1	1								
service. In no event shall C	d Damages. Cardinal's liability and client's exclusive remedy for a 19 those for negligence and any other cause whatsoever shall be ardinal be liable for incidental or consequental damages, including 19 out of or related to the performance of services hereunder by C	deemed	t limite	d unless n	ade in	writing	and re	ceived	by Car	rdinal v	within 30 days af	ter co	ompletion of the	e applicab	le									
Relinquished By	Date: 11/21/19			ed By			6				34	Р	hone Res	ult:	☐ Ye				hone #	#:				
-/m	Time	/	MI	101	1		1	1	11	1	PUL		ax Result		☐ Ye	s ⊠	No	Add'l F	-ax #:					
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	(Circle One) Correcti Correcti		1										pm@e			.cor	n							
Delivered By	(Circle One)	4	^-	San	ple	Cond	litio	n	СН	ECK	ED BY:	1												
Sampler - UPS	- Bus - Other: 2.6%-2.2%	4-41	47	Cod	Yes	ntact	105				ials)													

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

sage 22 of 22	1
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ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: Key Energy				BILL TO ANALYSIS RE							QUE	ST										
Project Manager: Joel Lowry				P.O. #:																		
Address:				Company: Etech				1				S										
City:	State:	Zip	:				At	tn:				1				S						
Phone #:	Fax #:						Ac	idress	::							Ξ						
Project #: 1154	3 Project Owner	r:					Ci	ty:				1	Σ		-	\ ₹						
Project Name: \	White's City Rd. Incident							ate:		Zip:		es	5		TPH	SU						
	n: Rural Eddy County						1	one #	•			9	801	M	—	ţ;	S					
Sampler Name: Catalina Baeza					x#:	-			Chlorides		BTEX	Texas	Cations/Anions	TDS								
FOR LAB USE ONLY					MAT	RIX		PRES	ERV	SAMPLI	NG	15	등		e e							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER WASTEWATER	SOIL	OIL	OTHER:	ACID/BASE:	OTHER:	DATE	TIME		TPH		-	Complete						
11	NH1 @ S	G	1		✓			V	_	11/20/19	11:00	1	1	1								
. 00	NH1 @ 1'	G	1		1			V		11/20/19	11:20	✓	✓	1								
	NH2 @ S	G	1		1			✓		11/20/19	11:25	✓	✓	1			- 1					
	NH2 @ 1'	G	1		1			✓		11/20/19	11:30	1	1	1								
15	SH1 @ S	G	1		1			✓		11/20/19	11:35	✓	✓	✓					8			
	SH1 @ 1'	G	1		1		-	✓		11/20/19	11:40	1	✓	✓								
12	SH2 @ S	G	1		1		H	 		11/20/19	12:00	1	✓	✓								
10	SH2 @ 1'	G	1		✓	_		 		11/20/19	12:25	✓	✓	1								
		_	_		-																	
PLEASE NOTE: Liability a	nd Damages, Cardinal's liability and client's exclusive remedy for a	ny clair	n arisi	ng whether	nased in	o contrac	torto	t shall be	limitod	to the emount noise	buth a allest for											

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Relinquished By:	Date:	Received By:	ased upon any or the above stated le	V	□ V	[7] N.	TALLIE DI VI
	19791114	repelved by.		Phone Result:	☐ Yes	✓ No	Add'l Phone #:
1.	11/4/11	1/10cl: 1/10cl	11100	Fax Result:	☐ Yes	✓ No	Add'l Fax #:
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Sampler - UPS - Bus - Other: 4.0	V 1-L.V	Yes Yes	A Thinks				
			UTT				
		□ No □ No	/10				

[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



Houston, TX 01/02/20

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Key Energy

ETECH:New Mexico

Whites City Rd. Incident

SGS Job Number: TD48965

Sampling Date: 12/12/19



Key Energy 1301 McKinney Street Houston, TX 77010 msticker@keyenergy.com; jbest@keyenergy.com

ATTN: Maury Sticker

Total number of pages in report: 120



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

John Watson Technical Director

Il the

Client Service contact: Electa Brown 713-271-4700

Certifications: TX (T104704220-19-34) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2018-129) VA (10171)

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Sections:

Table of Contents

-1-

Section 1: Sample Summary	
Section 2: Summary of Hits	
Section 3: Sample Results	
3.1: TD48965-1: FL-1	-
3.2: TD48965-2: FL-2	
3.3: TD48965-3: FL-3	
3.4: TD48965-4: FL-4	
3.5: TD48965-5: FL-5	
3.6: TD48965-6: FL-6	
3.7: TD48965-7: MW-1	
3.8: TD48965-8: MW-2	
3.9: TD48965-9: MW-3	
3.10: TD48965-10: MW-4	45
3.11: TD48965-11: MW-5	
3.12: TD48965-12: MW-6	53
3.13: TD48965-13: SW-1	-
3.14: TD48965-14: SW-5	61
3.15: TD48965-15: SW-6	65
3.16: TD48965-16: WW	69
3.17: TD48965-17: FL-8	73
3.18: TD48965-18: FL-7	77
Section 4: Misc. Forms	81
4.1: Chain of Custody	82
Section 5: MS Volatiles - QC Data Summaries	89
5.1: Method Blank Summary	90
5.2: Blank Spike Summary	93
5.3: Matrix Spike/Matrix Spike Duplicate Summary	96
Section 6: General Chemistry - QC Data Summaries	99
6.1: Method Blank and Spike Results Summary	100
6.2: Duplicate Results Summary	101
6.3: Matrix Spike Results Summary	102
Section 7: Misc. Forms (SGS Scott, LA)	103
7.1: Chain of Custody	104
Section 8: GC Volatiles - QC Data (SGS Scott, LA)	107
8.1: Method Blank Summary	108
8.2: Blank Spike/Blank Spike Duplicate Summary	110
8.3: Matrix Spike/Matrix Spike Duplicate Summary	112
Section 9: GC/LC Semi-volatiles - QC Data (SGS Scott, LA)	114
9.1: Method Blank Summary	115
9.2. Blank Spike/Blank Spike Duplicate Summary	117











SGS North America Inc.

Sample Summary

Key Energy

Job No:

TD48965

ETECH:New Mexico

Project No: Whites City Rd. Incident

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
This report co		lts reported as Not detecte			cted. The following app	blies:
TD48965-1	12/12/19	14:30	12/17/19	SO	Soil	FL-1
TD48965-2	12/12/19	14:35	12/17/19	SO	Soil	FL-2
TD48965-3	12/12/19	14:40	12/17/19	SO	Soil	FL-3
TD48965-4	12/12/19	14:45	12/17/19	SO	Soil	FL-4
TD48965-5	12/12/19	14:50	12/17/19	SO	Soil	FL-5
TD48965-6	12/12/19	14:55	12/17/19	SO	Soil	FL-6
TD48965-7	12/12/19	15:00	12/17/19	SO	Soil	MW-1
TD48965-8	12/12/19	15:05	12/17/19	SO	Soil	MW-2
TD48965-9	12/12/19	15:10	12/17/19	SO	Soil	MW-3
TD48965-10	12/12/19	15:15	12/17/19	SO	Soil	MW-4
TD48965-11	12/12/19	15:20	12/17/19	SO	Soil	MW-5
TD48965-12	12/12/19	15:25	12/17/19	SO	Soil	MW-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



SGS North America Inc.

$\underset{(continued)}{\textbf{Sample Summary}}$

Key Energy

Job No:

TD48965

ETECH:New Mexico

Project No: Whites City Rd. Incident

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
TD48965-13	12/12/19	15:30	12/17/19	SO	Soil	SW-1
TD48965-14	12/12/19	15:50	12/17/19	SO	Soil	SW-5
TD48965-15	12/12/19	15:55	12/17/19	SO	Soil	SW-6
TD48965-16	12/12/19	16:00	12/17/19	SO	Soil	WW
TD48965-17	12/12/19	16:05	12/17/19	SO	Soil	FL-8
TD48965-18	12/12/19	16:05	12/17/19	SO	Soil	FL-7

Page 1 of 3

Summary of Hits Job Number: TD48965 Account: Key Energy

Project: ETECH: New Mexico

Collected: 12/12/19

Lab Sample ID	Client Sample ID					
Analyte		Qual	RL	MDL	Units	Method
TD48965-1	FL-1					
TPH-DRO (C10- Chloride	-C28) ^a	1.68 J 273	5.7 29	0.49	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-2	FL-2					
TPH-DRO (C10- Chloride	-C28) ^a	2.69 J 129	6.0 12	0.51	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-3	FL-3					
TPH-DRO (C10- TPH-ORO (> C2 Chloride		2.22 J 1.13 J 1850	5.8 5.8 120	0.50 1.1	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD48965-4	FL-4					
TPH-DRO (C10- Chloride	-C28) ^a	1.41 J 1700	6.0 120	0.52	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-5	FL-5					
TPH-DRO (C10- Chloride	-C28) ^a	1.61 J 145	5.6 11	0.48	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-6	FL-6					
TPH-DRO (C10- Chloride	-C28) ^a	2.28 J 127	5.7 11	0.49	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-7	MW-1					
TPH-DRO (C10- TPH-ORO (> C2 Chloride		2.55 J 1.51 J 281	5.6 5.6 28	0.49 1.0	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD48965-8	MW-2					
TPH-DRO (C10- Chloride	-C28) ^a	2.20 J 169	5.4 11	0.47	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-9	MW-3					
TPH-DRO (C10-	-C28) ^a	8.99	5.6	0.49	mg/kg	SW846 8015C

Page 2 of 3

Summary of Hits Job Number: TD48965 Account: Key Energy

Project: ETECH:New Mexico

Collected: 12/12/19

.	au . a	D 11/				
Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TPH-ORO (> C2 Chloride	28-C40) ^a	2.74 J 424	5.6 28	1.0	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-10	MW-4					
TPH-DRO (C10- TPH-ORO (> C2 Chloride		3.33 J 2.05 J 958	5.7 5.7 120	0.49 1.1	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD48965-11	MW-5					
TPH-DRO (C10- Chloride	·C28) ^a	1.82 J 22.3	5.6 5.6	0.48	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-12	MW-6					
TPH-DRO (C10- Chloride	·C28) ^a	2.02 J 96.1	5.7 11	0.49	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-13	SW-1					
TPH-DRO (C10- TPH-ORO (> C2 Chloride		3.27 J 2.13 J 4070	5.9 5.9 580	0.51 1.1	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD48965-14	SW-5					
TPH-DRO (C10- Chloride	·C28) ^a	1.19 J 1190	5.9 120	0.51	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-15	SW-6					
TPH-DRO (C10- Chloride	·C28) ^a	3.84 J 297	5.8 29	0.50	mg/kg mg/kg	SW846 8015C EPA 300.0
TD48965-16	ww					
TPH-DRO (C10- TPH-ORO (> C2 Chloride		4.85 J 1.99 J 767	5.7 5.7 56	0.49 1.0	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD48965-17	FL-8					
TPH-DRO (C10- Chloride	·C28) ^a	3.62 J 47.6	5.7 5.8	0.49	mg/kg mg/kg	SW846 8015C EPA 300.0

Page 3 of 3

Summary of Hits Job Number: TD48965 TD48965 Account: Key Energy

ETECH: New Mexico **Project:**

Collected: 12/12/19

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
TD48965-18 FL-7					
TPH-DRO (C10-C28) ^a TPH-ORO (> C28-C40) ^a Chloride	4.83 J 1.80 J 1120	5.7 5.7 58	0.49 1.1	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0

⁽a) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3

Sample Results	
Report of Analysis	

Report of Analysis

Page 1 of 1

Client Sample ID: FL-1

Lab Sample ID: TD48965-1 **Date Sampled:** 12/12/19 Matrix: SO - Soil **Date Received:** 12/17/19 Method: SW846 8260C SW846 5030A Percent Solids: 85.8

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed By **Prep Date Prep Batch** Run #1 a Y1109900.D 1 12/19/19 12:50 SC 12/18/19 10:20 VY5254 n/a Run #2

	Initial Weight	Final Volume
Run #1	5.08 g	5.0 ml
Run #2	-	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00057 0.0046 0.0046 0.0046	0.00040 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
CAS No. 1868-53-7 2037-26-5 460-00-4 17060-07-0	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1.2-Dichloroethane-D4	Run# 1 99% 101% 97% 104%	Run# 2	59-12 70-13 63-13 54-12	26% 39% 38%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Page 1 of 1

Report of Analysis

Client Sample ID: FL-1

Lab Sample ID: TD48965-1 **Date Sampled:** 12/12/19 **Matrix:** SO - Soil **Date Received:** 12/17/19 Method: SW846 8015C **Percent Solids:** 85.8

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LA356781.D 12/26/19 16:21 ALA L:GLA2844 n/a n/a

Run #2

Final Volume Initial Weight Methanol Aliquot Run #1 4.70 g 5.0 ml 100 ul

Run #2

CAS No. Compound **MDL** Units Result RLQ

> TPH-GRO (C6-C10) 7.0 ND 3.4 mg/kg

CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits

460-00-4 4-Bromofluorobenzene 99% 63-139% 540-36-3 1.4-Difluorobenzene 52-140% 96%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Page 1 of 1

Report of Analysis

Client Sample ID: FL-1

 Lab Sample ID:
 TD48965-1
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 85.8

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002342.D
 1
 12/21/19 16:49
 ALA
 12/20/19 02:00
 L:OP15900
 L:GLG913

Run #2

Run #1 20.4 g 1.0 ml
Run #2

CAS No. Compound Result Units RL**MDL** Q TPH-DRO (C10-C28) 1.68 5.7 J 0.49 mg/kg TPH-ORO (> C28-C40) ND 5.7 1.1 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 54% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-1

 Lab Sample ID:
 TD48965-1
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 85.8

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	273	29	mg/kg	5	12/19/19 23:12	PK	EPA 300.0
Solids, Percent	85.8		%	1	12/19/19	LC	SM 2540 G

3.2

Report of Analysis

Page 1 of 1

Client Sample ID: FL-2

 Lab Sample ID:
 TD48965-2
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 83.4

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a R03487753.D 1
 12/19/19 14:38 SC
 12/18/19 10:20 n/a
 VR2353

Run #2

Run #1 5.07 g Final Volume
Run #2

Purgeable Aromatics

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

Report of Analysis

Page 1 of 1

Client Sample ID: FL-2

 Lab Sample ID:
 TD48965-2
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 83.4

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356783.D 1 12/26/19 16:44 ALA n/a n/a L:GLA2844

Run #2

Run #1 5.20 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.8 3.3 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 97%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: FL-2

 Lab Sample ID:
 TD48965-2
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 83.4

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002343.D
 1
 12/21/19 17:11
 ALA
 12/20/19 02:00
 L:OP15900
 L:GLG913

Run #2

Initial Weight Final Volume
Run #1 20.1 g 1.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	2.69 ND	6.0 6.0	0.51 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	63%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-2

 Lab Sample ID:
 TD48965-2
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 83.4

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL Units DF Analyzed F		By	Method		
Chloride	129	12	mg/kg	2	12/19/19 17:00	PK	EPA 300.0
Solids, Percent	83.4		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-3

 Lab Sample ID:
 TD48965-3
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 84.5

Project: ETECH: New Mexico

| File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch | Run #1 a | Y1109904.D | 1 | 12/19/19 15:33 | SC | 12/18/19 10:20 | n/a | VY5254 | Run #2

Run #1 5.03 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00059 0.0047 0.0047 0.0047	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	96% 103%		59-12 70-13		
460-00-4	4-Bromofluorobenzene	94%		63-13	8%	
17060-07-0	1,2-Dichloroethane-D4	107%		54-12	3%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

Report of Analysis

Page 1 of 1

Client Sample ID: FL-3

 Lab Sample ID:
 TD48965-3
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 84.5

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356785.D 1 12/26/19 17:06 ALA n/a n/a L:GLA2844

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 4.80 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result MDL Units RLQ TPH-GRO (C6-C10) 7.1 ND 3.5 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 460-00-4 4-Bromofluorobenzene 97% 63-139% 540-36-3 1.4-Difluorobenzene 52-140% 96%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-3

 Lab Sample ID:
 TD48965-3
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 84.5

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LG002344.D
 1
 12/21/19 17:34 ALA
 12/20/19 02:00 L:OP15900 L:GLG913

Run #2

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	2.22 1.13	5.8 5.8	0.50 1.1	mg/kg mg/kg	J J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	
84-15-1	o-Terphenyl	55%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-3

 Lab Sample ID:
 TD48965-3
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 84.5

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1850	120	mg/kg	20	12/19/19 17:17	PK	EPA 300.0
Solids, Percent	84.5		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-4

 Lab Sample ID:
 TD48965-4
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 82.5

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109906.D
 1
 12/19/19 15:59
 SC
 12/18/19 10:20
 n/a
 VY5254

 Run #2
 VY5254
 VY5254
 VY5254
 VY5254

Run #1 5.09 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00060 0.0048 0.0048 0.0048	0.00042 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	0 0	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	96% 103%		59-12 70-13		
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	95% 105%		63-13 54-12		

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$



Page 1 of 1

Report of Analysis

Client Sample ID: FL-4

Lab Sample ID: TD48965-4 Date Sampled: 12/12/19 **Matrix:** SO - Soil **Date Received:** 12/17/19 Method: SW846 8015C Percent Solids: 82.5

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LA356787.D 12/26/19 17:29 ALA L:GLA2844 n/a n/a

Run #2

Final Volume Initial Weight Methanol Aliquot Run #1 5.30 g 5.0 ml 100 ul Run #2

CAS No. Compound Result MDL Units RLQ

> TPH-GRO (C6-C10) ND 6.8 3.3 mg/kg

CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits

460-00-4 4-Bromofluorobenzene 97% 63-139% 540-36-3 1.4-Difluorobenzene 52-140% 95%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value





Report of Analysis

Page 1 of 1

Client Sample ID: FL-4

 Lab Sample ID:
 TD48965-4
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 82.5

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LG002345.D
 1
 12/21/19 17:57 ALA
 12/20/19 02:00 L:OP15900 L:GLG913

Run #2

Initial Weight Final Volume
Run #1 20.1 g 1.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	1.41 ND	6.0 6.0	0.52 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	47%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value





Report of Analysis

Page 1 of 1

Client Sample ID: FL-4

Lab Sample ID: TD48965-4 **Matrix:** SO - Soil

Date Sampled: 12/12/19Date Received: 12/17/19Percent Solids: 82.5

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1700	120	mg/kg	20	12/19/19 17:34	PK	EPA 300.0
Solids, Percent	82.5		%	1	12/19/19	LC	SM 2540 G



3.5

Report of Analysis

Page 1 of 1

Client Sample ID: FL-5

 Lab Sample ID:
 TD48965-5
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 87.4

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109907.D
 1
 12/19/19 16:26
 SC
 12/18/19 10:20
 n/a
 VY5254

Run #2

Run #1 5.08 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00056 0.0045 0.0045 0.0045	0.00039 0.0010 0.0011 0.0010	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		ts	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	95% 102%	59-126% 70-139%			
460-00-4	4-Bromofluorobenzene	96%		63-13	88%	
17060-07-0	1,2-Dichloroethane-D4	105%		54-12	23%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

Report of Analysis

Page 1 of 1

Client Sample ID: FL-5

 Lab Sample ID:
 TD48965-5
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 87.4

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356789.D 1 12/26/19 17:52 ALA n/a n/a L:GLA2844

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot 100 ul

Run #2

CAS No. Compound MDL Units Result RLQ TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 460-00-4 4-Bromofluorobenzene 98% 63-139% 540-36-3 1.4-Difluorobenzene 52-140% 95%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Date Sampled:

Date Received:

12/12/19

12/17/19

Client Sample ID: FL-5

Lab Sample ID: TD48965-5 Matrix: SO - Soil

Method: SW846 8015C SW846 3546 **Percent Solids:** 87.4

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002349.D
 1
 12/21/19 19:27
 ALA
 12/20/19 02:00
 L:OP15900
 L:GLG913

Run #2

Run #1 20.5 g Final Volume 1.0 ml

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 5.6 0.48 J 1.61 mg/kg TPH-ORO (> C28-C40) ND 5.6 1.0 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 53% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-5

 Lab Sample ID:
 TD48965-5
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 87.4

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	145	11	mg/kg	2	12/19/19 18:25	PK	EPA 300.0
Solids, Percent	87.4		%	1	12/19/19	LC	SM 2540 G

3.6

Report of Analysis

Page 1 of 1

Client Sample ID: FL-6

 Lab Sample ID:
 TD48965-6
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 87.0

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109908.D
 1
 12/19/19 16:52 SC
 12/18/19 10:20 n/a
 vY5254

Run #2

Run #1 5.04 g Final Volume 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.00057	0.00040	mg/kg	
108-88-3	Toluene	ND	0.0046	0.0010	mg/kg	
100-41-4	Ethylbenzene	ND	0.0046	0.0012	mg/kg	
1330-20-7	Xylene (total)	ND	0.0046	0.0011	mg/kg	
			Run# 2 Limits			
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
CAS No. 1868-53-7	Surrogate Recoveries Dibromofluoromethane	Run# 1	Run# 2	Limi 59-12		
	O		Run# 2		26%	
1868-53-7	Dibromofluoromethane	99%	Run# 2	59-12	26% 39%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

Report of Analysis

Page 1 of 1

Client Sample ID: FL-6

 Lab Sample ID:
 TD48965-6
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 87.0

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356791.D 1 12/26/19 18:15 ALA n/a n/a L:GLA2844

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.5 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 97%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 94%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Date Sampled:

12/12/19

12/17/19

Client Sample ID: FL-6

Lab Sample ID: TD48965-6 **Matrix:** SO - Soil

Date Received: Method: SW846 8015C SW846 3546 Percent Solids: 87.0

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** 12/20/19 02:00 Run #1 a LG002350.D 1 12/21/19 19:51 ALA L:OP15900 L:GLG913

Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.1 g

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 2.28 5.7 J 0.49 mg/kg TPH-ORO (> C28-C40) ND 5.7 1.1 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 31-127% 66%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-6

Lab Sample ID: TD48965-6 Matrix: SO - Soil

Date Sampled: 12/12/19
Date Received: 12/17/19
Percent Solids: 87.0

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	127	11	mg/kg	2	12/19/19 18:41	PK	EPA 300.0
Solids, Percent	87		%	1	12/19/19	LC	SM 2540 G

3.6

Report of Analysis

Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID: TD48965-7 Matrix: SO - Soil SW846 8260C SW846 5030A

Method:

Project: ETECH:New Mexico **Date Sampled:** 12/12/19 **Date Received:** 12/17/19 Percent Solids: 88.5

DF **Analytical Batch** File ID Analyzed By **Prep Date Prep Batch** Run #1 a Y1109909.D 1 12/19/19 17:18 SC 12/18/19 10:20 VY5254 n/a Run #2

Final Volume Initial Weight Run #1 5.0 ml 5.02 g Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00056 0.0045 0.0045 0.0045	0.00039 0.0010 0.0011 0.0010	mg/kg mg/kg mg/kg	
1000 20 ,	Tij Tone (votal)	1,2	0.00.10	0.0010		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
CAS No. 1868-53-7	Surrogate Recoveries Dibromofluoromethane	Run# 1	Run# 2	Limi (59-12		
	8		Run# 2		26%	
1868-53-7	Dibromofluoromethane	100%	Run# 2	59-12	26% 19%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: MW-1

 Lab Sample ID:
 TD48965-7

 Matrix:
 SO - Soil

 Method:
 SW846 8015C

Date Sampled: 12/12/19 **Date Received:** 12/17/19 **Percent Solids:** 88.5

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 a LA356793.D 1 12/26/19 18:37 ALA n/a n/a L:GLA2844

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 4.90 g 5.0 ml 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.4 3.1 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID: TD48965-7 **Matrix:** SO - Soil

File ID

LG002351.D

Method: SW846 8015C SW846 3546

DF

1

Project: ETECH:New Mexico Date Sampled: 12/12/19 **Date Received:** 12/17/19

88.5

L:GLG913

Analytical Batch $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** 12/20/19 02:00

L:OP15900

Percent Solids:

Run #1 a Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.0 g

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 5.6 2.55 0.49mg/kg J TPH-ORO (> C28-C40) 1.51 5.6 1.0 mg/kg J CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 56% 31-127%

Analyzed

12/21/19 20:13 ALA

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID: TD48965-7 **Matrix:** SO - Soil

Date Sampled: 12/12/19 **Date Received:** 12/17/19 **Percent Solids:** 88.5

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	281	28	mg/kg	5	12/19/19 18:58	PK	EPA 300.0
Solids, Percent	88.5		%	1	12/19/19	LC	SM 2540 G

ა. 8

Report of Analysis

Page 1 of 1

Client Sample ID: MW-2

Lab Sample ID: TD48965-8
Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH:New Mexico

 Date Sampled:
 12/12/19

 Date Received:
 12/17/19

 Percent Solids:
 90.6

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109910.D
 1
 12/19/19 17:44 SC
 12/18/19 10:20 n/a
 VY5254

Run #2

Initial Weight Final Volume

Run #1 5.01 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND	0.00055 0.0044 0.0044 0.0044	0.00039 0.0010 0.0011 0.0010	mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	0.0044 0.0010 mg/kg Run# 2 Limits			
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	99% 101%	59-126% 70-139%		9%	
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	97% 109%	63-138% 54-123%			

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

Report of Analysis

Page 1 of 1

Client Sample ID: MW-2

Lab Sample ID: TD48965-8 **Matrix:** SO - Soil Method: SW846 8015C **Date Sampled:** 12/12/19 **Date Received:** 12/17/19 **Percent Solids:** 90.6

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LA356797.D 12/26/19 19:23 ALA L:GLA2844 n/a n/a

Run #2

Final Volume Initial Weight Methanol Aliquot Run #1 4.90 g 5.0 ml 100 ul

Run #2

CAS No. Compound MDL Units Result RLQ

> TPH-GRO (C6-C10) ND 6.2 3.0 mg/kg

CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits

460-00-4 4-Bromofluorobenzene 99% 63-139% 540-36-3 1.4-Difluorobenzene 52-140% 96%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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Page 1 of 1

Report of Analysis

Client Sample ID: MW-2 Lab Sample ID:

TD48965-8 Matrix: SO - Soil Method:

SW846 8015C SW846 3546

Project: ETECH:New Mexico Date Sampled: 12/12/19 **Date Received:** 12/17/19 **Percent Solids:**

90.6

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** 12/20/19 02:00 Run #1 a LG002352.D 1 12/21/19 20:34 ALA L:OP15900 L:GLG913

Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.3 g

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 5.4 J 2.20 0.47 mg/kg TPH-ORO (> C28-C40) ND 5.4 1.0 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 51% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

ა. 8

Report of Analysis

Page 1 of 1

Client Sample ID: MW-2

Lab Sample ID: TD48965-8 **Matrix:** SO - Soil

Date Sampled: 12/12/19 **Date Received:** 12/17/19 **Percent Solids:** 90.6

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	169	11	mg/kg	2	12/19/19 19:15	PK	EPA 300.0
Solids, Percent	90.6		%	1	12/19/19	LC	SM 2540 G

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3.9

Report of Analysis

Page 1 of 1

Client Sample ID: MW-3

File ID

Y1109911.D

Lab Sample ID: TD48965-9 Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

DF

1

Project: ETECH: New Mexico

By Prep Date Prep Batch Analytical Batch

Percent Solids: 88.1

Date Received:

n/a

12/18/19 10:20

Date Sampled: 12/12/19

12/17/19

VY5254

Run #1 ^a Run #2

Run #1 5.03 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00056 0.0045 0.0045 0.0045	0.00039 0.0010 0.0011 0.0010	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	96% 103%	59-126% 70-139%		9%	
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	96% 109%		63-13 54-12		

Analyzed

12/19/19 18:10 SC

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

Report of Analysis

Page 1 of 1

Client Sample ID: MW-3

 Lab Sample ID:
 TD48965-9

 Matrix:
 SO - Soil

 Method:
 SW846 8015C

Date Sampled: 12/12/19 **Date Received:** 12/17/19

88.1

Percent Solids:

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356799.D 1 12/26/19 19:46 ALA n/a n/a L:GLA2844

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 4.80 g 5.0 ml 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: MW-3

Lab Sample ID: TD48965-9 **Matrix:** SO - Soil

Method: SW846 8015C SW846 3546

Project: ETECH: New Mexico

Date Sampled: 12/12/19 **Date Received:** 12/17/19

Percent Solids: 88.1

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002353.D 1 12/21/19 20:56 ALA 12/20/19 02:00 L:OP15900 L:GLG913
Run #2

Run #1 Z0.1 g Final Volume 1.0 ml

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 8.99 5.6 0.49mg/kg TPH-ORO (> C28-C40) 2.74 5.6 1.0 mg/kg J CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 48% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Report of Analysis

Page 1 of 1

Client Sample ID: MW-3

Lab Sample ID: TD48965-9 Matrix: SO - Soil **Date Sampled:** 12/12/19 **Date Received:** 12/17/19 **Percent Solids:** 88.1

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	424	28	mg/kg	5	12/19/19 19:33	2 PK	EPA 300.0
Solids, Percent	88.1		%	1	12/19/19	LC	SM 2540 G

3.9

Report of Analysis

Page 1 of 1

Client Sample ID: MW-4

 Lab Sample ID:
 TD48965-10
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 85.7

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109912.D
 1
 12/19/19 18:36 SC
 12/18/19 10:20 n/a
 VY5254

 Run #2
 Y1109912.D
 1
 12/19/19 18:36 SC
 12/18/19 10:20 n/a
 VY5254

Run #1 5.00 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00058 0.0047 0.0047 0.0047	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	101% 101% 97%		59-12 70-13	39%	
17060-07-0	1,2-Dichloroethane-D4	107%		63-138% 54-123%		

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: MW-4

 Lab Sample ID:
 TD48965-10
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 85.7

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356801.D 1 12/26/19 20:08 ALA n/a n/a L:GLA2844

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 4.80 g 5.0 ml 100 ul

Run #2

540-36-3

CAS No. Compound MDL Units Result RLQ TPH-GRO (C6-C10) ND 6.9 3.4 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 460-00-4 4-Bromofluorobenzene 98% 63-139%

95%

(a) Analysis performed at SGS Scott, LA.

1.4-Difluorobenzene

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

52-140%

3.10

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Report of Analysis

Page 1 of 1

12/12/19

12/17/19

85.7

Date Sampled:

Date Received:

Client Sample ID: MW-4

Lab Sample ID: TD48965-10 Matrix: SO - Soil Method:

Project: ETECH:New Mexico

SW846 8015C SW846 3546 Percent Solids:

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** 12/20/19 02:00 Run #1 a LG002354.D 1 12/21/19 21:17 ALA L:OP15900 L:GLG913

Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.4 g

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 5.7 3.33 0.49 mg/kg J TPH-ORO (> C28-C40) 2.05 5.7 1.1 mg/kg J CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 54% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: MW-4

 Lab Sample ID:
 TD48965-10
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 85.7

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	958	120	mg/kg	20	12/19/19 19:49	PK	EPA 300.0
Solids, Percent	85.7		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: MW-5

 Lab Sample ID:
 TD48965-11
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 88.5

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109913.D
 1
 12/19/19 19:02
 SC
 12/18/19 10:20
 n/a
 VY5254

 Run #2
 Y1109913.D
 Y1109913.D<

Run #1 5.03 g Final Volume 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.00056	0.00039	mg/kg	
108-88-3	Toluene	ND	0.0045	0.0010	mg/kg	
100-41-4	Ethylbenzene	ND	0.0045	0.0011	mg/kg	
1330-20-7	Xylene (total)	ND	0.0045	0.0010	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	99%		59-12	26%	
2037-26-5	Toluene-D8	101%		70-13	39%	
460-00-4	4-Bromofluorobenzene	96%		63-13	38%	
17060-07-0	1,2-Dichloroethane-D4	109%		54-12	23%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Report of Analysis

Page 1 of 1

MW-5 Client Sample ID:

Lab Sample ID: TD48965-11 **Date Sampled:** 12/12/19 Matrix: SO - Soil **Date Received:** 12/17/19 Method: SW846 8015C **Percent Solids:** 88.5

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LA356803.D 12/26/19 20:31 ALA L:GLA2844 n/a n/a

Run #2

Final Volume Initial Weight Methanol Aliquot Run #1 4.90 g 5.0 ml 100 ul Run #2

Run# 2

Limits

CAS No.

CAS No. Compound MDL Units Result RLQ TPH-GRO (C6-C10) ND 6.4 3.1 mg/kg

Run#1

460-00-4 4-Bromofluorobenzene 97% 63-139% 540-36-3 1.4-Difluorobenzene 94% 52-140%

(a) Analysis performed at SGS Scott, LA.

Surrogate Recoveries

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: MW-5

Lab Sample ID: TD48965-11
Matrix: SO - Soil

Method: SW846 8015C SW846 3546

1.0 ml

Project: ETECH: New Mexico

Date Sampled: 12/12/19
Date Received: 12/17/19
Percent Solids: 88.5

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002355.D 1 12/21/19 21:39 ALA 12/20/19 02:00 L:OP15900 L:GLG913
Run #2

Initial Weight Final Volume

20.2 g

Run #1 Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 1.82 5.6 J 0.48 mg/kg TPH-ORO (> C28-C40) ND 5.6 1.0 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

84-15-1 o-Terphenyl 45% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: MW-5

Lab Sample ID: TD48965-11 Matrix: SO - Soil **Date Sampled:** 12/12/19 **Date Received:** 12/17/19 **Percent Solids:** 88.5

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	22.3	5.6	mg/kg	1	12/19/19 20:06	PK	EPA 300.0
Solids, Percent	88.5		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: MW-6

 Lab Sample ID:
 TD48965-12
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 87.6

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 Y1109914.D
 1
 12/19/19 19:28 SC
 12/18/19 10:20 n/a
 VY5254

 Run #2
 Y1109914.D
 1
 12/19/19 19:28 SC
 12/18/19 10:20 n/a
 VY5254

Run #1 5.03 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.00057 0.0045 0.0045	0.00040 0.0010 0.0011	mg/kg mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.0045	0.0011	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	95%		59-12	26%	
2037-26-5	Toluene-D8	102%		70-13	39%	
460-00-4	4-Bromofluorobenzene	96%		63-13	88%	
17060-07-0	1,2-Dichloroethane-D4	107%		54-12	23%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: MW-6

 Lab Sample ID:
 TD48965-12
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 87.6

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356805.D 1 12/26/19 20:54 ALA n/a n/a L:GLA2844

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.4 3.1 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

12/12/19

12/17/19

MW-6 Client Sample ID:

Lab Sample ID: TD48965-12 Date Sampled: Matrix: SO - Soil **Date Received:** Method: Percent Solids: 87.6 SW846 8015C SW846 3546

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** 12/20/19 02:00 Run #1 a LG002356.D 1 12/21/19 22:00 ALA L:OP15900 L:GLG913

Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.1 g Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 5.7 J 2.02 0.49mg/kg TPH-ORO (> C28-C40) ND 5.7 1.0 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 42% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: MW-6

 Lab Sample ID:
 TD48965-12
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 87.6

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	96.1	11	mg/kg	2	12/19/19 20:23	PK	EPA 300.0
Solids, Percent	87.6		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-1

 Lab Sample ID:
 TD48965-13
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 85.3

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a R03487786.D 1
 12/20/19 13:23 SC
 12/18/19 10:20 n/a
 VR2354

Run #2

Run #1 5.00 g 5.0 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00059 0.0047 0.0047 0.0047	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
1868-53-7 2037-26-5 460-00-4 17060-07-0	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1.2-Dichloroethane-D4	106% 91% 97% 108%		59-12 70-13 63-13 54-12	9% 8%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: SW-1

 Lab Sample ID:
 TD48965-13
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 85.3

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LE366773.D 1 12/26/19 18:44 ALA n/a n/a L:GLE1951

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.8 3.3 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 93%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 90%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-1

 Lab Sample ID:
 TD48965-13
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 85.3

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002357.D
 1
 12/21/19 22:22
 ALA
 12/20/19 02:00
 L:OP15900
 L:GLG913

Run #2

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2	-	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	3.27 2.13	5.9 5.9	0.51 1.1	mg/kg mg/kg	J J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	£2 Limits		
84-15-1	o-Terphenyl	53%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-1

 Lab Sample ID:
 TD48965-13
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 85.3

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	Ву	Method
Chloride	4070	580	mg/kg	100	12/19/19 20:40	PK	EPA 300.0
Solids, Percent	85.3		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-5

 Lab Sample ID:
 TD48965-14
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 84.1

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a R03487787.D 1 12/20/19 13:50 SC 12/18/19 10:20 n/a VR2354

Run #2

Run #1 5.03 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND	0.00059 0.0047 0.0047 0.0047	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit		
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	106% 91%		59-12 70-13		
460-00-4	4-Bromofluorobenzene	98%		63-13		
17060-07-0	1,2-Dichloroethane-D4	107%		54-12	3%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: SW-5

 Lab Sample ID:
 TD48965-14
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 84.1

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LE366774.D 1 12/26/19 19:11 ALA n/a n/a L:GLE1951

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.9 3.4 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 92%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 91%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: SW-5

 Lab Sample ID:
 TD48965-14
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 84.1

Project: ETECH:New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002358.D
 1
 12/21/19 22:43 ALA
 12/20/19 02:00 L:OP15900 L:GLG913

Run #2

Run #1 20.1 g 1.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	1.19 ND	5.9 5.9	0.51 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	2 Limits		
84-15-1	o-Terphenyl	37%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-5

 Lab Sample ID:
 TD48965-14
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 84.1

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1190	120	mg/kg	20	12/19/19 20:57	PK	EPA 300.0
Solids, Percent	84.1		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-6

 Lab Sample ID:
 TD48965-15
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 86.0

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a R03487788.D 1
 12/20/19 14:17 SC
 12/18/19 10:20 n/a
 VR2354

Run #2

Run #1 5.02 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00058 0.0046 0.0046 0.0046	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5 460-00-4 17060-07-0	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1.2-Dichloroethane-D4	107% 91% 98% 109%		59-12 70-13 63-13 54-12	39% 38%	

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: SW-6

 Lab Sample ID:
 TD48965-15
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 86.0

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LE366775.D 1 12/26/19 19:39 ALA n/a n/a L:GLE1951

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 92%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 91%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-6

 Lab Sample ID:
 TD48965-15
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 86.0

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002362.D
 1
 12/22/19 00:09
 ALA
 12/20/19 02:00
 L:OP15900
 L:GLG913

Run #2

Initial Weight Final Volume
Run #1 20.1 g 1.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	3.84 ND	5.8 5.8	0.50 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	
84-15-1	o-Terphenyl	54%		31-12	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-6

 Lab Sample ID:
 TD48965-15
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 86.0

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	297	29	mg/kg	5	12/19/19 21:48	PK	EPA 300.0
Solids, Percent	86		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: WW

 Lab Sample ID:
 TD48965-16
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 88.2

Project: ETECH: New Mexico

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 a	R03487789.D	1	12/20/19 14:44	SC	12/18/19 10:20	n/a	VR2354
Run #2							

	Initial Weight	Final Volume
Run #1 Run #2	5.05 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00056 0.0045 0.0045 0.0045	0.00039 0.0010 0.0011 0.0010	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
1868-53-7 2037-26-5 460-00-4 17060-07-0	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1,2-Dichloroethane-D4	108% 90% 98% 109%		59-12 70-13 63-13 54-12	9% 8%	

⁽a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: WW

 Lab Sample ID:
 TD48965-16
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 88.2

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LE366776.D 1 12/26/19 20:07 ALA n/a n/a L:GLE1951

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 4.80 g 5.0 ml 100 ul

Run #2

CAS No. Compound **MDL** Units Result RLQ TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 460-00-4 4-Bromofluorobenzene 92% 63-139% 540-36-3 1.4-Difluorobenzene 52-140% 90%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: WW

 Lab Sample ID:
 TD48965-16
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 88.2

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002363.D
 1
 12/22/19 00:31 ALA
 12/20/19 02:00 L:OP15900 L:GLG913

Run #2

Initial Weight Final Volume
Run #1 20.0 g 1.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	4.85 1.99	5.7 5.7	0.49 1.0	mg/kg mg/kg	J J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	2 Limits		
84-15-1	o-Terphenyl	53%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

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SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: WW

 Lab Sample ID:
 TD48965-16
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 88.2

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	767	56	mg/kg	10	12/19/19 22:04	PK	EPA 300.0
Solids, Percent	88.2		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-8

 Lab Sample ID:
 TD48965-17
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 86.2

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a R03487790.D 1 12/20/19 15:11 SC 12/18/19 10:20 n/a VR2354

Run #2

Run #1 5.02 g Final Volume 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3	Benzene Toluene	ND ND	0.00058 0.0046	0.00040 0.0011	mg/kg mg/kg	
100-41-4	Ethylbenzene	ND	0.0046	0.0012	mg/kg	
1330-20-7	Xylene (total)	ND	0.0046	0.0011	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	110%		59-12	6%	
2037-26-5	Toluene-D8	89%		70-13	9%	
	1 Oluciic-Do	07/0		70 13	770	
460-00-4	4-Bromofluorobenzene	98%		63-13		

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-8

 Lab Sample ID:
 TD48965-17
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 86.2

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LE366777.D 1 12/26/19 20:34 ALA n/a n/a L:GLE1951

Run #2

Run #1 4.90 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.7 3.3 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 94%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 92%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-8

 Lab Sample ID:
 TD48965-17
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 86.2

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002364.D
 1
 12/22/19 00:53
 ALA
 12/20/19 02:00
 L:OP15900
 L:GLG913

Run #2

Run #1 20.5 g 1.0 ml
Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 3.62 5.7 J 0.49mg/kg TPH-ORO (> C28-C40) ND 5.7 1.0 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 49% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-8

 Lab Sample ID:
 TD48965-17
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 86.2

Project: ETECH: New Mexico

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	47.6	5.8	mg/kg	1	12/19/19 22:21	PK	EPA 300.0
Solids, Percent	86.2		%	1	12/19/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-7

 Lab Sample ID:
 TD48965-18
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 85.6

Project: ETECH:New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a R03487791.D
 1
 12/20/19 15:38 SC
 12/18/19 10:20 n/a
 VR2354

Run #2

Run #1 5.00 g 5.0 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.0047 0.0047	0.00041 0.0011 0.0012	mg/kg mg/kg mg/kg	
1330-20-7 CAS No.	Xylene (total) Surrogate Recoveries	ND Run# 1	0.0047 Run# 2	0.0011 mg/kg Limits		
	8		Kum, 2			
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	104% 90%	59-126% 70-139%			
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	96% 107%	63-138% 54-123%			

(a) Sample collected in bulk. All results are considered estimated values.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-7

 Lab Sample ID:
 TD48965-18
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 Percent Solids:
 85.6

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LE366778.D 1 12/26/19 21:02 ALA n/a n/a L:GLE1951

Run #2

Run #1 5.10 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 92%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 90%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-7

 Lab Sample ID:
 TD48965-18
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 85.6

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LG002458.D 1
 12/24/19 19:53 ALA 12/23/19 12:00 L:OP15919 L:GLG917

Run #2

Initial Weight Final Volume
Run #1 20.4 g 1.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	4.83 1.80	5.7 5.7	0.49 1.1	mg/kg mg/kg	J J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 2 Limits		
84-15-1	o-Terphenyl	69%	31-127%			

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: FL-7

 Lab Sample ID:
 TD48965-18
 Date Sampled:
 12/12/19

 Matrix:
 SO - Soil
 Date Received:
 12/17/19

 Percent Solids:
 85.6

Project: ETECH:New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1120	58	mg/kg	10	12/19/19 22:55	PK	EPA 300.0
Solids, Percent	85.6		%	1	12/19/19	LC	SM 2540 G



Houston, TX

Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

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Client / Reporting Information			Project		accutest o	com					600		1000				_			16	tec	46	114	43		
Company Name	Project Name:									1000			200			Т	Re	ques	sted	Ana	lys	es	Т	\rightarrow	Matrix C	Codes
ETECH Street Address	While	s city 1	2d In	cideo	4																					
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Project Contact F-mail		/	NM	Key E	nergy																			1	SO - S	Soil
-50al 1.	Project #			Street A									\neg							1					SL- Stu SED-Sed	diment
Phone # Joel Celebrana	YARD CODE:			-															1	1					OI - C LIQ - Other	r Liquid
432-446-4450				City					itate X			Zip				15	8					1			AIR -	er Solid
Sampler(s) Name(s) Phone #	Project Manage			Attention				-	X				\dashv	ا ۾	10	8	္မ								WP - W FB-Field	
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		Colle	ection		_	-	_	Numbe	of pre	served	Bottles	. 1.00	$\overline{}$	X.	8	8	풀							L		
Accutest Surregion 8 Field ID / Point of Collection	Date	Time	Sampled By	Metrix	# of bottles	를 를	ZANao	HNO3	NONE	DI Wate	TSP D	NathSO4 ENCORE	OTHER	BTEX-8260	GRO-8015	DRO/ORO-8015	Chloride-IC300								LAB UŞE	ONLY
FL-I	12/12/19	2130	34	5	4				П	T			П	χ	X	X	1							_	1	
2 FL-2	1	2:35					T	П	T	T	\sqcap	\top	TT	1	1	1	1			\vdash			\vdash	+	-	
3 FL-3		2:40						П	$\dagger \dagger$	\top	\Box	\top	\forall	\forall	\forall		1			_			-	+	+-	
4 FL-4		2145				H		+	††	+	H	+	H	††	+	+	+	_	-	-	-	-	-	+	+	-
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4 FL-10		2.55		\vdash	-	\vdash	Н	+	$^{+}$	+	Н	+	Н	+	+	+	+						_	\perp	<u> </u>	
7 NW-1				-	-	+	+	+	+	+	Н	+	H	H	+	-H	\perp									
8 NW-7		3100		+	-	+	Н	+	H	+	Н	+	Н	H	+	-H	1						_			
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5 Day RUSH					ommerci	ial "B"	`(Lev	/el 2)			:	 D Fon	nat			KEYE	NTX	13336	S 1							
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Relinquished by Sampler: Date Time:		nple Custody mu Received By:	0 1		ow each	time	sam	ples c Relinqu	hange ished B	e pos	sess	ion, ir	ncludi	ng co	urier c			o. /:	155	Racaire	i Dur		A RIS			
1 Cell July 2: 15 Relinquished by Sampler: Date Time:	12/16/19 1 folex						2 fellox 14/19/19 2 Francis 12																			
3		3					4	4	ished B							ľ	Date Tim	e:		Received 4						
Relinquished by: Date Time:		Received By: 5					C	Custod	/ Seal #				Inte		Р	reserve	where	applical	ole			On Ice	C	oler Ten	ıp.	

TD48965: Chain of Custody Page 1 of 7

quished by Sampler: uished by Sampler: 10654

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	Field ID / Point of Collection		Date	Time	Sampled By	Matrix	bottles	모	S S	3 3	Ÿ	2 2	2	<u> </u>	m N	6 m	၂ ဖ	0	ပ							- 1	LAB USE OF	1LY
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	Turnaround Time (Business days)								Data	Deli	verabl	le Inf	ormati	ion		1000	64050	Name of Street	4000		Comm	ents /	Special	Instruct	tions	Sales and	Maria de la compansión de	OKUS
	Standard	Approve	d By (Accu	test PM); / Date:			Commerc	ia!	'A" (L	.evel	1)			TRRP											ii ono			
	5 Day RUSH						Commen	ial "	B" (L	.evel	2)			EDD	Form	at		KEY	ENTX	H33361	1							
1	4 Day RUSH						FULT1 (levs	13+4	١.			$\overline{\Box}$	Other														
	3 Day RUSH						REDT1 (-			ш	Jule1														
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[1 Day EMERGENCY								Corne	nercia	al "A" :	Res	ults Or	niy														
	Emergency & Rush T/A data available VIA Lablink					1			Comn	nercis	al "B" a	Res	ulte + 6	20.50	ımmar								\neg					

Sample Custody must be documented

feder

215 12/16/19 Date Time:

Date Time:

Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary
me samples change possession, including courier deli

Relinquished By: 4 Feder

Intact
Not intac

TD48965: Chain of Custody Page 2 of 7

Cooler Temp.



SGS Sample Receipt Summary

Job Number: Ti	D48965		Client: [ENTECH		Project:	WHILES CITY RE)			
Date / Time Received:	12/17/201	9 11:55	5:00 AM	Delv Method:	FEDEX	Airbill #'s:	493390069707,49	339006	9660		
# of Coolers: 2	2	Therm	ID: IR-3			Temp Adj	ustment Factor:	0;			
Cooler Temps (Initial/Ad	ljusted):	#1: (0.6	6/0.6); #2:	(2.3/2.3);							
Test Strip Lot #s:	pH 1-12:	·		pH 12+: _		Othe	er: (Specify)				
Cooler Information	<u>_Y</u>	or_	<u>N</u>	N/A	Sample Inf	<u>ormation</u>		<u>Y</u>	or	N	N/A
1. Custody Seals Present:	V	•			1. Sample la	abels present on	bottles:	✓			
2. Custody Seals Intact:	✓	•				preserved prope		\checkmark			
3. Temp criteria achieved:	V	•			3. Sufficient	volume recvd fo	r analysis:	\checkmark			
4. Cooler temp verification:					4. Condition	of sample:			Intact		
3. Cooler media:	Ice (Bag))			5. Sample re	ecvd within HT:		\checkmark			
Trip Blank Information	Υ	or	N	N/A	6. Dates/Tin	nes/IDs on COC	match Sample Labe	l 🗸			
1 Trin Dlank present / seel	-	,			7. Container	labeling comple	ete:	\checkmark			
Trip Blank present / cool	_	J		✓	8. Analysis i	requested is clea	ır:	\checkmark			
Trip Blank listed on COC):]		✓	9. VOCs hea	adspace free:					\checkmark
3. Type Of TB Received	_v	V or	S	_N/A_	10. Bottles r	eceived for unsp	ecified tests			✓	
		1		$\overline{\Box}$	11. COC Pro	esent:		\checkmark			
Misc. Information					12. Special	Instructions (con	npositing/filtering) cle	ear: 🗌			\checkmark
Number of terracores:			lumber of I	ab Filtered Metals:	13. Voa Soil	Kits/Jars receive	ed past 48hrs?				
Number of 5035 Field Kits:			idiliber of E	ab i illered iviciale.	14. % Solids	Jar received?					
Residual Chlorine Test Stri					15. Residua	l Chlorine Prese	nt?				

Comments

TD48965: Chain of Custody

Page 3 of 7



Page 2 of 5

Sample Receipt Log

 Job #:
 TD48965
 Date / Time Received:
 12/17/2019 11:55:00 AM
 Initials:
 BELINDG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD48965-1	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-1	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-1	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-1	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-2	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-2	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-2	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-2	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-3	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-3	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-3	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-3	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-4	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-4	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-4	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-4	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-5	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-5	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-5	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-5	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-6	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-6	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-6	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6

TD48965: Chain of Custody Page 4 of 7



Page 3 of 5

Sample Receipt Log

 Job #:
 TD48965
 Date / Time Received:
 12/17/2019 11:55:00 AM
 Initials:
 BELINDG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD48965-6	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-7	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-7	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-7	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-7	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-8	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-8	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-8	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-8	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-9	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-9	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-9	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-9	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-10	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-10	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-10	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-10	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-11	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-11	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-11	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
1	TD48965-11	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	0.6	0	0.6
2	TD48965-12	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-12	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3

TD48965: Chain of Custody Page 5 of 7



Page 4 of 5

Sample Receipt Log

 Job #:
 TD48965
 Date / Time Received:
 12/17/2019 11:55:00 AM
 Initials:
 BELINDG

Client: ENTECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	TD48965-12	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-12	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-13	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-13	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-13	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-13	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-14	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-14	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-14	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-14	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-15	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-15	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-15	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-15	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-16	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-16	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-16	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-16	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-17	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-17	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-17	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-17	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-18	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3

TD48965: Chain of Custody Page 6 of 7



Page 5 of 5

Sample Receipt Log

 Job #:
 TD48965
 Date / Time Received:
 12/17/2019 11:55:00 AM
 Initials:
 BELINDG

Client: ENTECH

Cooler#	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	TD48965-18	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-18	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3
2	TD48965-18	4oz	4	2-101	N/P	Note #2 - Preservative check not applicable.	IR-3	2.3	0	2.3

TD48965: Chain of Custody Page 7 of 7



Houston, TX

Section 5

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method: SW846 8260C

Method Blank Summary

Job Number: TD48965

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample VY5254-MB	File ID Y1109899.D	DF	Analyzed 12/19/19	By SC	Prep Date	Prep Batch	Analytical Batch VY5254

The QC reported here applies to the following samples:

 $TD48965-1,\ TD48965-3,\ TD48965-4,\ TD48965-5,\ TD48965-6,\ TD48965-7,\ TD48965-8,\ TD48965-9,\ TD48965-10,\ TD48965-11,\ TD48965-12$

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg
100-41-4	Ethylbenzene	ND	4.0	1.0	ug/kg
108-88-3	Toluene	ND	4.0	0.92	ug/kg
1330-20-7	Xylene (total)	ND	4.0	0.93	ug/kg

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	92%	59-126%
2037-26-5	Toluene-D8	102%	70-139%
460-00-4	4-Bromofluorobenzene	96%	63-138%
17060-07-0	1,2-Dichloroethane-D4	96%	54-123%

Method: SW846 8260C

Method Blank Summary Job Number: TD48965

Account: KEYENTXH Key Energy ETECH: New Mexico **Project:**

Sample VR2353-MB	File ID R03487752.D	DF 1	Analyzed 12/19/19	By SC	Prep Date n/a	Prep Batch n/a	Analytical Batch VR2353

The QC reported here applies to the following samples:

TD48965-2

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg
100-41-4	Ethylbenzene	ND	4.0	1.0	ug/kg
108-88-3	Toluene	ND	4.0	0.92	ug/kg
1330-20-7	Xylene (total)	ND	4.0	0.93	ug/kg

CAS No.	Surrogate Recoveries	Surrogate Recoveries			
1060 52 7	Dibromofluoromethane	110%	59-126%		
		,-	-,,		
2037-26-5	Toluene-D8	96%	70-139%		
460-00-4	4-Bromofluorobenzene	97%	63-138%		
17060-07-0	1,2-Dichloroethane-D4	106%	54-123%		

Method: SW846 8260C

Method Blank Summary

Job Number: TD48965

Account: KEYENTXH Key Energy Project: ETECH:New Mexico

Sample VR2354-MB	File ID R03487781.D	DF 1	Analyzed 12/20/19	By SC	Prep Date n/a	Prep Batch n/a	Analytical Batch VR2354

The QC reported here applies to the following samples:

 $TD48965\text{-}13,\ TD48965\text{-}14,\ TD48965\text{-}15,\ TD48965\text{-}16,\ TD48965\text{-}17,\ TD48965\text{-}18$

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg
100-41-4	Ethylbenzene	ND	4.0	1.0	ug/kg
108-88-3	Toluene	ND	4.0	0.92	ug/kg
1330-20-7	Xylene (total)	ND	4.0	0.93	ug/kg

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	59-126%
2037-26-5	Toluene-D8	91%	70-139%
460-00-4	4-Bromofluorobenzene	96%	63-138%
17060-07-0	1,2-Dichloroethane-D4	102%	54-123%

Method: SW846 8260C

Blank Spike Summary

Job Number: TD48965

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample VY5254-BS	File ID Y1109897.D	DF 1	Analyzed 12/19/19	By SC	Prep Date n/a	Prep Batch n/a	Analytical Batch VY5254

The QC reported here applies to the following samples:

 $TD48965-1,\ TD48965-3,\ TD48965-4,\ TD48965-5,\ TD48965-6,\ TD48965-7,\ TD48965-8,\ TD48965-9,\ TD48965-10,\ TD48965-11,\ TD48965-12$

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	33.0	66	58-124
100-41-4	Ethylbenzene	50	35.9	72	57-124
108-88-3	Toluene	50	35.1	70	67-119
1330-20-7	Xylene (total)	150	109	73	62-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	59-126%
2037-26-5	Toluene-D8	98%	70-139%
460-00-4	4-Bromofluorobenzene	101%	63-138%
17060-07-0	1,2-Dichloroethane-D4	100%	54-123%

^{* =} Outside of Control Limits.

Method: SW846 8260C

Blank Spike Summary Job Number: TD48965

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR2353-BS	R03487749.D	1	12/19/19	SC	n/a	n/a	VR2353

The QC reported here applies to the following samples:

TD48965-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	41.7	83	58-124
100-41-4	Ethylbenzene	50	42.5	85	57-124
108-88-3	Toluene	50	42.3	85	67-119
1330-20-7	Xylene (total)	150	128	85	62-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	115%	59-126%
2037-26-5	Toluene-D8	97%	70-139%
460-00-4	4-Bromofluorobenzene	98%	63-138%
17060-07-0	1,2-Dichloroethane-D4	105%	54-123%

^{* =} Outside of Control Limits.

Method: SW846 8260C

Blank Spike Summary

Job Number: TD48965

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample VR2354-BS	File ID R03487779.D	DF 1	Analyzed 12/20/19	By SC	Prep Date n/a	Prep Batch n/a	Analytical Batch VR2354

The QC reported here applies to the following samples:

 $TD48965\text{-}13,\ TD48965\text{-}14,\ TD48965\text{-}15,\ TD48965\text{-}16,\ TD48965\text{-}17,\ TD48965\text{-}18$

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	37.4	75	58-124
100-41-4	Ethylbenzene	50	35.5	71	57-124
108-88-3	Toluene	50	35.6	71	67-119
1330-20-7	Xylene (total)	150	108	72	62-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	59-126%
2037-26-5	Toluene-D8	92%	70-139%
460-00-4	4-Bromofluorobenzene	99%	63-138%
17060-07-0	1,2-Dichloroethane-D4	102%	54-123%

^{* =} Outside of Control Limits.

Method: SW846 8260C

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD48965

Account: KEYENTXH Key Energy Project: ETECH:New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD48965-1MS	Y1109901.D	1	12/19/19	SC	n/a	n/a	VY5254
TD48965-1MSD	Y1109902.D	1	12/19/19	SC	n/a	n/a	VY5254
TD48965-1 ^a	Y1109900.D	1	12/19/19	SC	n/a	n/a	VY5254

The QC reported here applies to the following samples:

 $TD48965-1,\ TD48965-3,\ TD48965-4,\ TD48965-5,\ TD48965-6,\ TD48965-7,\ TD48965-8,\ TD48965-9,\ TD48965-10,\ TD48965-11,\ TD48965-12$

CAS No.	Compound	TD48965-1 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	57.4	33.2	58	57.7	32.8	57*	1	58-124/26
100-41-4	Ethylbenzene	ND	57.4	34.1	59	57.7	32.4	56*	5	57-124/29
108-88-3	Toluene	ND	57.4	36.4	63*	57.7	34.4	60*	6	67-119/28
1330-20-7	Xylene (total)	ND	172	103	60*	173	96.4	56*	7	62-120/27

CAS No.	Surrogate Recoveries	MS	MSD	TD48965-1	Limits
1868-53-7	Dibromofluoromethane	95%	101%	99%	59-126%
2037-26-5	Toluene-D8	101%	99%	101%	70-139%
460-00-4	4-Bromofluorobenzene	98%	99%	97%	63-138%
17060-07-0	1,2-Dichloroethane-D4	100%	107%	104%	54-123%

⁽a) Sample collected in bulk. All results are considered estimated values.

^{* =} Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD48965

Account: KEYENTXH Key Energy **Project:** ETECH: New Mexico

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
TD48974-1MS	R03487755.D	10	12/19/19	SC	n/a	n/a	VR2353
TD48974-1MSD	R03487756.D	10	12/19/19	SC	n/a	n/a	VR2353
TD48974-1 a	R03487754.D	10	12/19/19	SC	n/a	n/a	VR2353

The QC reported here applies to the following samples:

Method: SW846 8260C

TD48965-2

CAS No.	Compound	ug/kg Q	spike ug/kg	ws ug/kg	WIS %	spike ug/kg	wsD ug/kg	MSD %	RPD	Rec/RPD
71-43-2	Benzene	400 U	39900	33700	84	39900	34400	86	2	58-124/26
100-41-4	Ethylbenzene	3200 U	39900	34300	86	39900	35000	88	2	57-124/29
108-88-3	Toluene	3200 U	39900	34100	85	39900	34600	87	1	67-119/28
1330-20-7	Xylene (total)	3200 U	120000	104000	87	120000	106000	89	2	62-120/27
CAS No.	Surrogate Recoveries	MS	MSD	TD4	18974-1	Limits				

CAS No.	Surrogate Recoveries	MS	MSD	TD48974-1	Limits
1868-53-7	Dibromofluoromethane	109%	107%	106%	59-126%
2037-26-5	Toluene-D8	96%	95%	95%	70-139%
460-00-4	4-Bromofluorobenzene	100%	99%	97%	63-138%
17060-07-0	1,2-Dichloroethane-D4	101%	100%	101%	54-123%

⁽a) Sample collected in bulk. All results are considered estimated values.

^{* =} Outside of Control Limits.

460-00-4

17060-07-0

4-Bromofluorobenzene

1,2-Dichloroethane-D4

Page 1 of 1

Method: SW846 8260C

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD48965

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
TD48974-2MS	R03487784.D	200	12/20/19	SC	n/a	n/a	VR2354
TD48974-2MSD	R03487785.D	200	12/20/19	SC	n/a	n/a	VR2354
TD48974-2	R03487782.D	200	12/20/19	SC	n/a	n/a	VR2354

The QC reported here applies to the following samples:

TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18

99%

100%

CAS No.	Compound	TD48974-2 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	8000 U	801000	671000	84	801000	644000	80	4	58-124/26
100-41-4	Ethylbenzene	64000 U	801000	644000	80	801000	621000	78	4	57-124/29
108-88-3	Toluene	64000 U	801000	640000	80	801000	617000	77	4	67-119/28
1330-20-7	Xylene (total)	64000 U	2400000	1950000	81	2400000	1900000	79	3	62-120/27
G L G M		3.50	3.5GD	TUT 4	00=4.6					
CAS No.	Surrogate Recoveries	MS	MSD	TD4	8974-2	Limits				
1868-53-7	Dibromofluoromethane	104%	107%	104%		59-126%				
2037-26-5	Toluene-D8	91%	92%	92%		70-139%				

96%

101%

63-138%

54-123%

98%

99%

^{* =} Outside of Control Limits.



Houston, TX

Section 6

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

6.1

METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD48965 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP56083/GN3291	5.0	0.0	mg/kg	100	93.5	93.5	90-110%

Associated Samples:

Batch GP56083: TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965 10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD48965 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP56083/GN3291	TD48965-1	mg/kg	273	270	1.1	0-20%
Solids, Percent	GN3261	TD48965-1	%	85.8	85.5		0-5%

Associated Samples:

Batch GN3261: TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965-10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18

Batch GP56083: TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965-10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18

(*) Outside of QC limits

Page 1

MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD48965 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP56083/GN3291	TD48965-1	mg/kg	273	116	377	89.8	80-120%

Associated Samples:

Batch GP56083: TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965 10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18 (*) Outside of QC limits

- (N) Matrix Spike Rec. outside of QC limits



Houston, TX

Section 7

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

· Chain of Custody

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Page 1	of 2
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TD48965: Chain of Custody
Page 1 of 3
SGS Scott, LA

CHAIN OF CUSTODY

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17	FL-8		12/12/19	2:30:00 PM		so	2	Ш			2	_	Ш	X	_	_			<u> </u>	_	_	_	<u> </u>		 	<u> </u>	1
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	Turnaround Time (Business days)			<u> </u>	+		Data	Deli	iverabl	e Info	ormat	ion								С	omme	nts /	Speci	ial Instr	uctions		
-	Turialoula Time (basiless adjo)	Approved By (SG	S PM): / Date:				rcial "A" (I						SP Cate			L	۸.			, _				7	0	de	1 -
1	Std. 10 Business Days						rcial "B" (l Level 34		2)				Forms			1	1	21	9-1	19		1	0 /	.00	0	0	
İ	5 Day RUSH 3 Day EMERGENCY					NJ Redi		4)					Forma									0.1		10			1
	2 Day EMERGENCY					Comme	rcial "C"					Othe	CON	IMB		4							1 /	13			
1	1 Day EMERGENCY						Comme					C															
-	X other Due 12/20/2019 ergency & Rush T/A data/available VIA Lablink						NIRed	iced a	Resul	ts + C	C Sur	mmar	+ Parti	al Raw d	lata	_L				-	-17	<u> </u>					
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TD48965: Chain of Custody

Page 2 of 3

7.1

SGS Sample Receipt Summary

Job Number: T	D4896	35		Client:	SGS NOF	RTH AME	RICA		Project: NEW MEXICO)		
Date / Time Received: 12	2/19/2	019	7:00:00	AM_	Delivery	Method:	A	ccutest Courier	Airbill #'s:			
Cooler Temps (Initial/Adjus	sted):	<u>#1</u>	: (1.8/1.8	3); #2:	(2.4/2.4); [0V439						
	<u>Y oı</u>	r N	_	COC Pi	resent:	Y or ✓	<u>N</u>		ity - Documentation	<u>Y</u>	or N	
	✓		4. Sn	npl Date	s/Time OK	✓		Sample label: Container lab	•	✓		
Cooler Temperature		Υ,	or N						niner label / COC agree:	✓		
Temp criteria achieved: Thermometer ID: Cooler media: No. Coolers:			V439; rect conta	ict)				Sample Integral 1. Sample recvo 2. All containers 3. Condition of s	accounted for:	Y	or N	
Quality Control Preservati	ion	Υ	or N	N/A					rity - Instructions		or N	N/A
Trip Blank present / cooler: Trip Blank listed on COC: Samples preserved properl VOCs headspace free:	ly:	□ □ ⊻		y y				Analysis requ Bottles recei Sufficient vol	ved for unspecified tests ume recvd for analysis: instructions clear:			
Comments												

TD48965: Chain of Custody

Page 3 of 3



Houston, TX

Section 8

GC Volatiles

QC Data Summaries

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method: SW846 8015C

Method Blank Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLA2844-MB1	File ID LA356761.D	DF 1	Analyzed 12/26/19	By NN	Prep Date n/a	Prep Batch n/a	Analytical Batch GLA2844

The QC reported here applies to the following samples:

 $TD48965-1,\ TD48965-2,\ TD48965-3,\ TD48965-4,\ TD48965-5,\ TD48965-6,\ TD48965-7,\ TD48965-8,\ TD48965-9,\ TD48965-10,\ TD48965-11,\ TD48965-12$

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	2.75	5.0	2.4	mg/kg J
CAS No.	Surrogate Recoveries		Limits		
	2 g		Limits		

Method: SW846 8015C

Method Blank Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLE1951-MB1	File ID LE366772.D	DF 1	Analyzed 12/26/19	By NN	Prep Date n/a	Prep Batch n/a	Analytical Batch GLE1951

The QC reported here applies to the following samples:

TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	3.78	5.0	2.4	mg/kg J

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	92%	63-139%
540-36-3	1,4-Difluorobenzene	92%	52-140%

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLA2844-BS2 GLA2844-BSD2	File ID LA356807.D LA356809.D	DF 1	Analyzed 12/26/19 12/26/19	By NN NN	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch GLA2844 GLA2844

The QC reported here applies to the following samples:

 $TD48965-1,\ TD48965-2,\ TD48965-3,\ TD48965-4,\ TD48965-5,\ TD48965-6,\ TD48965-7,\ TD48965-8,\ TD48965-9,\ TD48965-10,\ TD48965-11,\ TD48965-12$

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	46.9	94	46.2	92	2	79-121/6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	98%	96%	63-139%
540-36-3	1,4-Difluorobenzene	98%	98%	52-140%

^{* =} Outside of Control Limits.

460-00-4

540-36-3

Page 1 of 1

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLE1951-BS1 GLE1951-BSD1	File ID LE366782.D LE366783.D	DF 1	Analyzed 12/26/19 12/26/19	By NN NN	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch GLE1951 GLE1951

The QC reported here applies to the following samples:

4-Bromofluorobenzene

1,4-Difluorobenzene

TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	44.5	89	44.2	88	1	79-121/6
CAS No.	Surrogate Recoveries	BSP	BSE)	Limits			

101%

99%

99%

97%

63-139%

52-140%

^{* =} Outside of Control Limits.

Method: SW846 8015C

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA60258-19MS	LE366789.D	1	12/27/19	NN	n/a	n/a	GLE1951
LA60258-19MSD	LE366790.D	1	12/27/19	NN	n/a	n/a	GLE1951
LA60258-19	LE366793.D	1	12/27/19	NN	n/a	n/a	GLE1951

The QC reported here applies to the following samples:

TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17, TD48965-18

CAS No.	Compound	LA60258-19 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	96.2	83.0	86	96.2	82.4	86	1	79-121/6
CAS No.	Surrogate Recoveries	MS	MSD	LA	60258-19	Limits				
460-00-4 540-36-3	4-Bromofluorobenzene 1,4-Difluorobenzene	103% 99%	102% 98%	91% 92%		63-139% 52-140%				

^{* =} Outside of Control Limits.

Method: SW846 8015C

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

nple	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
49110-4MS	LA356949.D	1	12/28/19	NN	n/a	n/a	GLA2844
49110-4MSD	LA356951.D	1	12/28/19	NN	n/a	n/a	GLA2844
49110-4	LA356829.D	1	12/27/19	NN	n/a	n/a	GLA2844
2	49110-4MS 49110-4MSD	49110-4MS LA356949.D 49110-4MSD LA356951.D	49110-4MS LA356949.D 1 49110-4MSD LA356951.D 1	49110-4MS LA356949.D 1 12/28/19 49110-4MSD LA356951.D 1 12/28/19	49110-4MS LA356949.D 1 12/28/19 NN 49110-4MSD LA356951.D 1 12/28/19 NN	49110-4MS LA356949.D 1 12/28/19 NN n/a 49110-4MSD LA356951.D 1 12/28/19 NN n/a	49110-4MS LA356949.D 1 12/28/19 NN n/a n/a 49110-4MSD LA356951.D 1 12/28/19 NN n/a n/a

The QC reported here applies to the following samples:

 $TD48965-1,\ TD48965-2,\ TD48965-3,\ TD48965-4,\ TD48965-5,\ TD48965-6,\ TD48965-7,\ TD48965-8,\ TD48965-9,\ TD48965-10,\ TD48965-11,\ TD48965-12$

CAS No.	Compound	TD49110-4 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	693	587	85	693	600	87	2	79-121/6
CAS No.	a	3.50	3.5GD							
CAS No.	Surrogate Recoveries	MS	MSD	TD4	19110-4	Limits				

⁽a) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.

^{* =} Outside of Control Limits.



Houston, TX

Section 9

GC/LC Semi-volatiles

QC Data Summaries

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method: SW846 8015C

Method Blank Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15900-MB	File ID LG002336.D	DF 1	Analyzed 12/21/19	By PC	Prep Date 12/20/19	Prep Batch OP15900	Analytical Batch GLG913

The QC reported here applies to the following samples:

TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965-10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	0.671 ND	5.0 5.0	0.43 0.92	mg/kg J mg/kg
CAS No.	Surrogate Recoveries	Limits			

CAS No. Surrogate Recoveries Limits

84-15-1 o-Terphenyl 69% 31-127%

Method: SW846 8015C

Method Blank Summary Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH: New Mexico

Sample OP15919-MB	File ID LG002453.D	DF 1	Analyzed 12/24/19	By PC	Prep Date 12/23/19	Prep Batch OP15919	Analytical Batch GLG917

The QC reported here applies to the following samples:

TD48965-18

CAS No.	Compound	Result	RL	MDL	Units Q	
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	ND 5.0 ND 5.0		0.43 0.92	mg/kg mg/kg	
CAS No.	Surrogate Recoveries		Limits			
84-15-1	o-Terphenyl	71% 31-127%				

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15900-BS1 OP15900-BSD1	File ID LG002337.D LG002338.D	DF 1	Analyzed 12/21/19 12/21/19	By PC PC	Prep Date 12/20/19 12/20/19	Prep Batch OP15900 OP15900	Analytical Batch GLG913 GLG913

The QC reported here applies to the following samples:

TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965-10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	149	125	84	144	96	14	49-118/19
CAS No.	Surrogate Recoveries	BSP	BSI)	Limits			
84-15-1	o-Terphenyl	74%	84%)	31-127%)		

^{* =} Outside of Control Limits.

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample	File ID	DF 1	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15900-BS2	LG002339.D		12/21/19	PC	12/20/19	OP15900	GLG913
OP15900-BSD2	LG002340.D		12/21/19	PC	12/20/19	OP15900	GLG913

The QC reported here applies to the following samples:

TD48965-1, TD48965-2, TD48965-3, TD48965-4, TD48965-5, TD48965-6, TD48965-7, TD48965-8, TD48965-9, TD48965-10, TD48965-11, TD48965-12, TD48965-13, TD48965-14, TD48965-15, TD48965-16, TD48965-17

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C40)	59.4	57.0	96	63.2	106	10	60-127/10
CAS No.	Surrogate Recoveries	BSP	BSE	•	Limits			
84-15-1	o-Terphenyl	68%	72%		31-127%)		

^{* =} Outside of Control Limits.

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15919-BS1 OP15919-BSD1	File ID LG002454.D LG002455.D	DF 1	Analyzed 12/24/19 12/24/19	By PC PC	Prep Date 12/23/19 12/23/19	Prep Batch OP15919 OP15919	Analytical Batch GLG917 GLG917

The QC reported here applies to the following samples:

TD48965-18

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	150	125	83	121	81	3	49-118/19
CAS No.	Surrogate Recoveries	BSP	BSD)	Limits			
84-15-1	o-Terphenyl	74%	72%		31-127%			

^{* =} Outside of Control Limits.

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD48965

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15919-BS2 OP15919-BSD2	File ID LG002456.D LG002457.D	DF 1	Analyzed 12/24/19 12/24/19	By PC PC	Prep Date 12/23/19 12/23/19	Prep Batch OP15919 OP15919	Analytical Batch GLG917 GLG917

The QC reported here applies to the following samples:

TD48965-18

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C40)	59.1	58.9	100	57.9	97	2	60-127/10
CAS No.	Surrogate Recoveries	BSP	BSI)	Limits			
84-15-1	o-Terphenyl	72%	71%	Ò	31-127%			

^{* =} Outside of Control Limits.



Houston, TX 01/02/20

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report



Key Energy

ETECH:New Mexico

Whites City Rd. Incident

SGS Job Number: TD49110

Sampling Date: 12/16/19



Key Energy 1301 McKinney Street Houston, TX 77010 msticker@keyenergy.com; jbest@keyenergy.com

ATTN: Maury Sticker

Total number of pages in report: 77



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

John Watson Technical Director

Il MA

Client Service contact: Electa Brown 713-271-4700

Certifications: TX (T104704220-19-34) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2018-129) VA (10171)

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Sections:

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	6
3.1: TD49110-1: NW-7	7
3.2: TD49110-2: NW-8	11
3.3: TD49110-3: NW-9	15
3.4: TD49110-4: NW-10	19
3.5: TD49110-5: NW-11	23
3.6: TD49110-6: FL-9	27
3.7: TD49110-7: FL-10	31
3.8: TD49110-8: FL-11	35
3.9: TD49110-9: FL-12	39
3.10: TD49110-10: FL-13	43
3.11: TD49110-11: FL-14	47
Section 4: Misc. Forms	51
4.1: Chain of Custody	52
Section 5: MS Volatiles - QC Data Summaries	56
5.1: Method Blank Summary	57
5.2: Blank Spike Summary	58
5.3: Matrix Spike/Matrix Spike Duplicate Summary	59
Section 6: General Chemistry - QC Data Summaries	60
6.1: Method Blank and Spike Results Summary	61
6.2: Duplicate Results Summary	62
6.3: Matrix Spike Results Summary	63
Section 7: Misc. Forms (SGS Scott, LA)	64
7.1: Chain of Custody	65
Section 8: GC Volatiles - QC Data (SGS Scott, LA)	67
8.1: Method Blank Summary	68
8.2: Blank Spike/Blank Spike Duplicate Summary	70
8.3: Matrix Spike/Matrix Spike Duplicate Summary	72
Section 9: GC/LC Semi-volatiles - QC Data (SGS Scott, LA)	74
9.1: Method Blank Summary	75

Sample Summary

Key Energy

Job No:

TD49110

ETECH:New Mexico

Project No: Whites City Rd. Incident

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
This report co		lts reported as Not detected			cted. The following app	blies:
TD49110-1	12/16/19	10:00	12/19/19	SO	Soil	NW-7
TD49110-2	12/16/19	10:20	12/19/19	SO	Soil	NW-8
TD49110-3	12/16/19	10:40	12/19/19	SO	Soil	NW-9
TD49110-4	12/16/19	11:00	12/19/19	SO	Soil	NW-10
TD49110-5	12/16/19	11:20	12/19/19	SO	Soil	NW-11
TD49110-6	12/16/19	11:40	12/19/19	SO	Soil	FL-9
TD49110-7	12/16/19	12:00	12/19/19	SO	Soil	FL-10
TD49110-8	12/16/19	12:20	12/19/19	SO	Soil	FL-11
TD49110-9	12/16/19	12:40	12/19/19	SO	Soil	FL-12
TD49110-10	12/16/19	13:00	12/19/19	SO	Soil	FL-13
TD49110-11	12/16/19	13:20	12/19/19	SO	Soil	FL-14

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Summary of Hits Job Number: TD49110 **Account:** Key Energy

Project: ETECH: New Mexico

Collected: 12/16/19

Lab Sample ID	Client Sample ID	Result/				
Analyte		Qual	RL	MDL	Units	Method
TD49110-1	NW-7					
TPH-GRO (C6-C TPH-DRO (C10 TPH-ORO (> C Chloride	-C28) a	7.87 2.16 J 1.33 J 502	6.6 5.7 5.7 57	3.2 0.49 1.1	mg/kg mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C SW846 8015C EPA 300.0
TD49110-2	NW-8					
TPH-GRO (C6-C TPH-DRO (C10 Chloride		5.47 J 2.48 J 38.9	6.2 5.4 11	3.0 0.47	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD49110-3	NW-9					
TPH-DRO (C10 TPH-ORO (> C Chloride		2.60 J 2.31 J 50.1	5.3 5.3 11	0.46 0.98	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD49110-4	NW-10					
TPH-DRO (C10 TPH-ORO (> C Chloride		2.16 J 1.70 J 55.6	5.8 5.8 12	0.50 1.1	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0
TD49110-5	NW-11					
TPH-GRO (C6-C TPH-DRO (C10 TPH-ORO (> C Chloride	-C28) a	3.33 J 1.56 J 1.46 J 101	6.8 5.9 5.9 12	3.3 0.51 1.1	mg/kg mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C SW846 8015C EPA 300.0
TD49110-6	FL-9					
TPH-DRO (C10 Chloride	-C28) ^a	0.865 J 616	5.3 52	0.45	mg/kg mg/kg	SW846 8015C EPA 300.0
TD49110-7	FL-10					
TPH-GRO (C6-CTPH-DRO (C10) Chloride		4.34 J 1.66 J 165	6.6 5.7 29	3.2 0.49	mg/kg mg/kg mg/kg	SW846 8015C SW846 8015C EPA 300.0

Page 2 of 2

Summary of Hits Job Number: TD49110 TD49110 Account: Key Energy

ETECH: New Mexico **Project:**

Collected: 12/16/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD49110-8	FL-11					
TPH-DRO (C10- Chloride	C28) ^a	1.44 J 192	5.7 29	0.49	mg/kg mg/kg	SW846 8015C EPA 300.0
TD49110-9	FL-12					
TPH-DRO (C10- Chloride	C28) ^a	2.49 J 27.7	5.9 12	0.51	mg/kg mg/kg	SW846 8015C EPA 300.0
TD49110-10	FL-13					
TPH-DRO (C10- Chloride	C28) ^a	2.09 J 26.8	6.4 6.3	0.55	mg/kg mg/kg	SW846 8015C EPA 300.0
TD49110-11	FL-14					
TPH-DRO (C10- Chloride	C28) ^a	1.50 J 29.2	5.6 5.6	0.48	mg/kg mg/kg	SW846 8015C EPA 300.0

⁽a) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3

Sample	Results	

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID: NW-7

Lab Sample ID: TD49110-1
Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH:New Mexico

Date Sampled: 12/16/19
Date Received: 12/19/19
Percent Solids: 87.4

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487792.D
 1
 12/20/19 16:05
 SC
 12/19/19 14:49
 n/a
 VR2354

Run #2

Initial Weight Final Volume

Run #1 5.01 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00057 0.0046 0.0046 0.0046	0.00040 0.0010 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	111% 90% 98%	59-126% 70-139%		9%	
17060-07-0	1,2-Dichloroethane-D4	110%		63-13 54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: NW-7

Lab Sample ID: TD49110-1 **Matrix:** SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH: New Mexico

Date Sampled: 12/16/19
Date Received: 12/19/19
Percent Solids: 87.4

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LA356823.D
 1
 12/27/19 00:20
 ALA
 12/20/19 16:50
 n/a
 L:GLA2844

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) 7.87 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 97%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 97%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

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Report of Analysis

Page 1 of 1

Client Sample ID: NW-7

Lab Sample ID: TD49110-1 **Matrix:** SO - Soil

Method: SW846 8015C SW846 3546

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 87.4

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LG002384.D
 1
 12/22/19 15:36 ALA
 12/21/19 10:00 L:OP15909
 L:GLG914

Run #2

Run #1 20.1 g 1.0 ml

Run #2

CAS No. Compound Result Units RL**MDL** Q TPH-DRO (C10-C28) 2.16 5.7 J 0.49 mg/kg TPH-ORO (> C28-C40) 1.33 5.7 1.1 mg/kg J CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 31-127% 66%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Report of Analysis

Page 1 of 1

Client Sample ID: NW-7

Lab Sample ID: TD49110-1 Matrix: SO - Soil

Date Sampled: 12/16/19 **Date Received:** 12/19/19 **Percent Solids:** 87.4

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	Ву	Method
Chloride	502	57	mg/kg	10	12/20/19 22:01	PK	EPA 300.0
Solids, Percent	87.4		%	1	12/20/19	LC	SM 2540 G

3.2

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: NW-8

Lab Sample ID: TD49110-2 Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH:New Mexico **Date Sampled:** 12/16/19 **Date Received:** 12/19/19 **Percent Solids:**

90.4

DF **Analytical Batch** File ID Analyzed By **Prep Date Prep Batch** Run #1 R03487793.D 1 12/20/19 16:33 SC 12/19/19 14:49 VR2354 n/aRun #2

Final Volume Initial Weight Run #1 5.05 g 5.0 ml Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.0044 0.0044	0.00038 0.0010 0.0011	mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.0044	0.0010	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		ts	
1868-53-7	Dibromofluoromethane	109%		59-12	26%	
2037-26-5	TT 1 D 0	000/	70-139%			
2031 20 3	Toluene-D8	90%		/0-13	9%	
460-00-4	4-Bromofluorobenzene	90%		63-13		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: NW-8

Lab Sample ID: TD49110-2 **Matrix:** SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 90.4

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LA356825.D
 1
 12/27/19 00:44 ALA
 12/20/19 16:50 n/a
 L:GLA2844

Run# 2

Limits

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot

Run #2

CAS No.

 CAS No.
 Compound
 Result
 RL
 MDL
 Units
 Q

 TPH-GRO (C6-C10)
 5.47
 6.2
 3.0
 mg/kg
 J

Run#1

460-00-4 4-Bromofluorobenzene 97% 63-139% 540-36-3 1,4-Difluorobenzene 96% 52-140%

(a) Analysis performed at SGS Scott, LA.

Surrogate Recoveries

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

3.2

SGS North America Inc.

Report of Analysis

 $\mathbf{B}\mathbf{y}$

12/21/19 10:00

Page 1 of 1

Client Sample ID: NW-8

Lab Sample ID: TD49110-2 Matrix: SO - Soil

File ID

LG002385.D

Method: SW846 8015C SW846 3546

DF

1

Project: ETECH: New Mexico

 Date Sampled:
 12/16/19

 Date Received:
 12/19/19

 Percent Solids:
 90.4

L:OP15909

Prep Date Prep Batch Analytical Batch

L:GLG914

Run #1 ^a Run #2

Run #1 20.3 g Final Volume

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 2.48 5.4 J 0.47 mg/kg TPH-ORO (> C28-C40) ND 5.4 1.0 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 69% 31-127%

Analyzed

12/22/19 15:58 ALA

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: NW-8

Lab Sample ID: TD49110-2 Matrix: SO - Soil Date Sampled: 12/16/19Date Received: 12/19/19Percent Solids: 90.4

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	38.9	11	mg/kg	2	12/20/19 22:52	PK	EPA 300.0
Solids, Percent	90.4		%	1	12/20/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: NW-9

Lab Sample ID: TD49110-3
Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH: New Mexico

 Date Sampled:
 12/16/19

 Date Received:
 12/19/19

 Percent Solids:
 92.1

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487794.D
 1
 12/20/19 17:00 SC
 12/19/19 14:49 n/a
 VR2354

Run #2

Run #1 5.02 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.00054	0.00038	mg/kg	
108-88-3	Toluene	ND	0.0043	0.00099	mg/kg	
100-41-4	Ethylbenzene	ND	0.0043	0.0011	mg/kg	
1330-20-7	Xylene (total)	ND	0.0043	0.0010	mg/kg	
			Run# 2 Limits			
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
CAS No. 1868-53-7	Surrogate Recoveries Dibromofluoromethane	Run# 1	Run# 2	Limit 59-12		
	J		Run# 2		26%	
1868-53-7	Dibromofluoromethane	109%	Run# 2	59-12	26% 39%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

12/16/19

Date Sampled:

Client Sample ID: NW-9

Lab Sample ID: TD49110-3
Matrix: SO - Soil

 Matrix:
 SO - Soil
 Date Received:
 12/19/19

 Method:
 SW846 8015C
 SW846 5035
 Percent Solids:
 92.1

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LA356827.D
 1
 12/27/19 01:06 ALA
 12/20/19 16:50 n/a
 L:GLA2844

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.0 2.9 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

L:GLG914

Client Sample ID: NW-9

Lab Sample ID: TD49110-3 Matrix: SO - Soil

File ID

LG002386.D

Method: SW846 8015C SW846 3546

DF

1

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 92.1

L:OP15909

By Prep Date Prep Batch Analytical Batch

12/21/19 10:00

Run #1 ^a Run #2

Run #1 20.5 g Final Volume 1.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	2.60 2.31	5.3 5.3	0.46 0.98	mg/kg mg/kg	J J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	58%		31-1	27%	

Analyzed

12/22/19 16:21 ALA

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: NW-9

Lab Sample ID: TD49110-3 Matrix: SO - Soil Date Sampled: 12/16/19Date Received: 12/19/19Percent Solids: 92.1

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	50.1	11	mg/kg	2	12/20/19 23:09	PK	EPA 300.0
Solids, Percent	92.1		%	1	12/20/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

12/19/19

Client Sample ID: NW-10

Lab Sample ID: TD49110-4 **Date Sampled:** 12/16/19 Matrix: SO - Soil Date Received: Method: SW846 8260C SW846 5030A Percent Solids: 85.6

Project: ETECH:New Mexico

DF **Analytical Batch** File ID Analyzed By **Prep Date Prep Batch** Run #1 R03487795.D 1 12/20/19 17:27 SC 12/19/19 14:49 VR2354 n/a

Run #2

Final Volume Initial Weight Run #1 5.00 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00058 0.0047 0.0047 0.0047	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		ts	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	105% 89%	59-126% 70-139%			
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	97% 110%		63-13 54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Report of Analysis

Page 1 of 1

Client Sample ID: NW-10

Lab Sample ID: TD49110-4
Matrix: SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 85.6

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LA356829.D
 1
 12/27/19 01:29
 ALA
 12/20/19 16:50
 n/a
 L:GLA2844

Run #2

Run #1 4.80 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.9 3.4 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 97%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: NW-10

Lab Sample ID: TD49110-4 Matrix: SO - Soil

SW846 8015C SW846 3546 Method:

Project: ETECH:New Mexico Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 85.6

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LG002387.D 1 12/22/19 16:43 ALA 12/21/19 10:00 L:OP15909 L:GLG914 Run #2

Initial Weight

20.3 g

Final Volume 1.0 ml

Run #1 Run #2

CAS No.	Compound	Result	KL	MIDL	Units	Ų
	TPH-DRO (C10-C28)	2.16	5.8	0.50	mg/kg	J
	TPH-ORO (> C28-C40)	1.70	5.8	1.1	mg/kg	J

CAS No. **Surrogate Recoveries** Run# 1 Run# 2 Limits 84-15-1 o-Terphenyl 59% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Report of Analysis

Page 1 of 1

Client Sample ID: NW-10

Lab Sample ID: TD49110-4
Matrix: SO - Soil

Date Sampled: 12/16/19 **Date Received:** 12/19/19 **Percent Solids:** 85.6

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	55.6	12	mg/kg	2	12/20/19 23:25	PK	EPA 300.0
Solids, Percent	85.6		%	1	12/20/19	LC	SM 2540 G



3.5

SGS North America Inc.

Report of Analysis

Client Sample ID: NW-11

Lab Sample ID: TD49110-5 **Matrix:** SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH:New Mexico

 Date Sampled:
 12/16/19

 Date Received:
 12/19/19

 Percent Solids:
 84.8

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487796.D
 1
 12/20/19 17:54
 SC
 12/19/19 14:49
 n/a
 VR2354

Run #2

Run #1 5.04 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00058 0.0047 0.0047 0.0047	0.00041 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	109% 91% 97%		59-12 70-13 63-13	39%	
17060-07-0	1.2-Dichloroethane-D4	110%		54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ \, \text{Indicates analyte found in associated method blank}$

 $N = \ Indicates \ presumptive \ evidence \ of \ a \ compound$

Report of Analysis

Page 1 of 1

Client Sample ID: NW-11

Lab Sample ID: TD49110-5
Matrix: SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH:New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 84.8

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356831.D 1 12/27/19 01:52 ALA 12/20/19 16:50 n/a L:GLA2844
Run #2

Initial Weight Final Volume Methanol Aliquot

Run #1 5.00 g 5.0 ml 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) 3.33 6.8 3.3 mg/kg J

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 96%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: NW-11 Lab Sample ID: TD49110-5

Matrix: SO - Soil

Method: SW846 8015C SW846 3546

Project: ETECH:New Mexico Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 84.8

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LG002388.D 1 12/22/19 17:06 ALA 12/21/19 10:00 L:OP15909 L:GLG914 Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.1 g Run #2

CAS No. Compound Result Units RL**MDL** Q TPH-DRO (C10-C28) 5.9 1.56 0.51 mg/kg J TPH-ORO (> C28-C40) 1.46 5.9 1.1 mg/kg J CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 59% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: NW-11

Lab Sample ID: TD49110-5 Matrix: SO - Soil

Date Sampled: 12/16/19 **Date Received:** 12/19/19 **Percent Solids:** 84.8

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	101	12	mg/kg	2	12/20/19 23:42	2 PK	EPA 300.0
Solids, Percent	84.8		%	1	12/20/19	LC	SM 2540 G

3.5

3.6

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: FL-9

 Lab Sample ID:
 TD49110-6
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/19/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 95.1

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487797.D
 1
 12/20/19 18:21
 SC
 12/19/19 14:49
 n/a
 VR2354

Run #2

Run #1 5.10 g Final Volume 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	\mathbf{RL}	MDL	Units	Q
71-43-2 108-88-3	Benzene Toluene	ND ND	0.00052 0.0041	0.00036 0.00095	~ ~	
100-41-4	Ethylbenzene	ND	0.0041	0.0010	mg/kg	
1330-20-7	Xylene (total)	ND	0.0041	0.00096	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
1868-53-7	Dibromofluoromethane	110%		59-12	6%	
2037-26-5	Toluene-D8	90%		70-13	9%	
460-00-4	4-Bromofluorobenzene	97%		63-13	8%	
	. Bromonadoune	2 , , , 0				

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: FL-9

Lab Sample ID: TD49110-6 **Matrix:** SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH:New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 95.1

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LA356833.D
 1
 12/27/19 02:14 ALA
 12/20/19 16:50 n/a
 L:GLA2844

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 4.90 g 5.0 ml 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 5.6 2.7 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 96%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

N = Indicates presumptive evidence of a compound

3.6

Report of Analysis

Client Sample ID: FL-9

SGS North America Inc.

Lab Sample ID: TD49110-6 Matrix: SO - Soil

Method: SW846 8015C SW846 3546

Project: ETECH:New Mexico Date Sampled: 12/16/19 **Date Received:** 12/19/19 Percent Solids:

95.1

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LG002392.D 1 12/22/19 18:34 ALA 12/21/19 10:00 L:OP15909 L:GLG914

Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.0 g

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 0.865 5.3 J 0.45 mg/kg TPH-ORO (> C28-C40) ND 5.3 0.97mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 53% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-9

Lab Sample ID: TD49110-6 **Date Sampled:** 12/16/19 Matrix: SO - Soil

Date Received: 12/19/19 Percent Solids: 95.1

Project: ETECH:New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	Ву	Method
Chloride	616	52	mg/kg	10	12/20/19 23:59	PK	EPA 300.0
Solids, Percent	95.1		%	1	12/20/19	LC	SM 2540 G

3.6

Report of Analysis

Page 1 of 1

Date Sampled: 12/16/19

Client Sample ID: FL-10

Lab Sample ID: TD49110-7 Matrix: SO - Soil Method:

Project: ETECH:New Mexico

Date Received: 12/19/19 SW846 8260C SW846 5030A Percent Solids: 85.6

DF **Analytical Batch** File ID Analyzed By **Prep Date Prep Batch** Run #1 R03487798.D 1 12/20/19 18:48 SC 12/19/19 14:49 VR2354 n/aRun #2

Final Volume Initial Weight Run #1 5.05 g 5.0 ml Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00058 0.0046 0.0046 0.0046	0.00040 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	110% 89% 97%	59-126% 70-139% 63-138%		9%	
17060-07-0	1,2-Dichloroethane-D4	110%		54-12	3%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-10

Lab Sample ID: TD49110-7 **Matrix:** SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH:New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 85.6

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LA356849.D
 1
 12/27/19 05:17 ALA
 12/20/19 16:50 n/a
 L:GLA2844

Run #2

Initial Weight Final Volume Methanol Aliquot
Run #1 5.10 g 5.0 ml 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) 4.34 6.6 3.2 mg/kg J

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 99%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 94%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

12/16/19

12/19/19

85.6

Date Sampled:

Date Received:

Percent Solids:

Client Sample ID: FL-10 Lab Sample ID: TD491

Lab Sample ID: TD49110-7 **Matrix:** SO - Soil

Method: SW846 8015C SW846 3546

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002393.D
 1
 12/22/19 18:56
 ALA
 12/21/19 10:00
 L:OP15909
 L:GLG914

Run #2

Run #1 20.5 g Final Volume

Run #2

CAS No. Compound Result Units RL**MDL** Q TPH-DRO (C10-C28) 1.66 5.7 J 0.49 mg/kg TPH-ORO (> C28-C40) ND 5.7 1.1 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 62% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-10

Lab Sample ID: TD49110-7 Matrix: SO - Soil **Date Sampled:** 12/16/19 **Date Received:** 12/19/19 **Percent Solids:** 85.6

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	165	29	mg/kg	5	12/21/19 00:50	PK	EPA 300.0
Solids, Percent	85.6		%	1	12/20/19	LC	SM 2540 G

Report of Analysis

Client Sample ID: FL-11

SGS North America Inc.

Lab Sample ID: TD49110-8 **Matrix:** SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH: New Mexico

 Date Sampled:
 12/16/19

 Date Received:
 12/19/19

 Percent Solids:
 86.7

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 R03487799.D 1 12/20/19 19:15 SC 12/19/19 14:49 n/a VR2354

Run #2

Initial Weight Final Volume
Run #1 5.01 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.00058 0.0046 0.0046 0.0046	0.00040 0.0011 0.0012 0.0011	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	106% 90%		59-12 70-13	39%	
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	98% 108%		63-13 54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



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SGS North America Inc.

Report of Analysis

Client Sample ID: FL-11

Lab Sample ID: TD49110-8 **Matrix:** SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 86.7

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LE366785.D
 1
 12/27/19 00:16 ALA
 12/20/19 16:50 n/a
 L:GLE1951

 Run #2
 LEGLE1951

Run #1 5.00 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.5 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 91%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 91%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FL-11 Lab Sample ID:

TD49110-8 Matrix: SO - Soil

Method: SW846 8015C SW846 3546

Project: ETECH:New Mexico Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 86.7

DF **Analytical Batch** File ID Analyzed $\mathbf{B}\mathbf{y}$ **Prep Date Prep Batch** Run #1 a LG002394.D 1 12/22/19 19:18 ALA 12/21/19 10:00 L:OP15909 L:GLG914 Run #2

Final Volume Initial Weight Run #1 1.0 ml 20.4 g

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 1.44 5.7 J 0.49mg/kg TPH-ORO (> C28-C40) ND 5.7 1.0 mg/kg

CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 60% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 1 of 1

Client Sample ID: FL-11

Lab Sample ID: TD49110-8 Matrix: SO - Soil **Date Sampled:** 12/16/19 **Date Received:** 12/19/19 **Percent Solids:** 86.7

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	192	29	mg/kg	5	12/21/19 01:07	PK	EPA 300.0
Solids, Percent	86.7		%	1	12/20/19	LC	SM 2540 G

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3.9

SGS North America Inc.

Report of Analysis

Page 1 of 1

12/19/19

Client Sample ID: FL-12

Lab Sample ID: TD49110-9 **Date Sampled:** 12/16/19 Matrix: SO - Soil Date Received: Method: SW846 8260C SW846 5030A Percent Solids: 83.5

Project: ETECH:New Mexico

File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 R03487800.D 1 12/20/19 19:42 SC 12/19/19 14:49 VR2354 n/a

Run #2

Final Volume Initial Weight Run #1 5.05 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.00059 0.0047 0.0047	0.00042 0.0011 0.0012	mg/kg mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.0047	0.0011	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	107%		59-12	26%	
2037-26-5	Toluene-D8	90%		70-13	39%	
460-00-4	4-Bromofluorobenzene	98%		63-13	88%	
17060-07-0		108%		54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-12

Lab Sample ID: TD49110-9 **Matrix:** SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 83.5

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LE366786.D
 1
 12/27/19 00:43 ALA
 12/20/19 16:50 n/a
 L:GLE1951

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 7.1 3.5 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 91%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 92%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

TD49110

Report of Analysis

Page 1 of 1

Client Sample ID: FL-12 Lab Sample ID: TD49110-9

 Matrix:
 SO - Soil

 Method:
 SW846 8015C
 SW846 3546

Project: ETECH: New Mexico

Date Sampled: 12/16/19
Date Received: 12/19/19
Percent Solids: 83.5

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 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002395.D
 1
 12/22/19 19:39
 ALA
 12/21/19 10:00
 L:OP15909
 L:GLG914

Run #2

Initial Weight Final Volume
Run #1 20.2 g 1.0 ml

Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 2.49 5.9 J 0.51 mg/kg TPH-ORO (> C28-C40) ND 5.9 1.1 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 64% 31-127%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-12

Lab Sample ID: TD49110-9 **Matrix:** SO - Soil

Date Sampled: 12/16/19 **Date Received:** 12/19/19 **Percent Solids:** 83.5

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	27.7	12	mg/kg	2	12/21/19 01:24	- PK	EPA 300.0
Solids, Percent	83.5		%	1	12/20/19	LC	SM 2540 G

3.9

Report of Analysis

Page 1 of 1

Client Sample ID: FL-13

 Lab Sample ID:
 TD49110-10
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/19/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 77.8

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487801.D
 1
 12/20/19 20:10
 SC
 12/19/19 14:49
 n/a
 VR2354

Run #2

Run #1 5.03 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND		0.00045	c	
108-88-3	Toluene	ND	0.0051	0.0012	mg/kg	
100-41-4	Ethylbenzene	ND	0.0051	0.0013	mg/kg	
1330-20-7	Xylene (total)	ND	0.0051	0.0012	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	108%		59-12	26%	
2037-26-5	Toluene-D8	89%		70-13	39%	
460-00-4	4-Bromofluorobenzene	97%		63-13	88%	
17060-07-0	1,2-Dichloroethane-D4	112%		54-12	23%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



3.10

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: FL-13

Lab Sample ID: TD49110-10
Matrix: SO - Soil

Method: SW846 8015C SW846 5035

Project: ETECH: New Mexico

Date Sampled: 12/16/19 **Date Received:** 12/19/19

Percent Solids: 77.8

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LE366787.D
 1
 12/27/19 01:11
 ALA
 12/20/19 16:50
 n/a
 L:GLE1951

Run #2

Run #1 5.20 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 7.6 3.7 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 92%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 93%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-13

 Lab Sample ID:
 TD49110-10
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/19/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 77.8

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002396.D
 1
 12/22/19 20:01
 ALA
 12/21/19 10:00
 L:OP15909
 L:GLG914

Run #2

Run #1 20.2 g 1.0 ml Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	2.09 ND	6.4 6.4	0.55 1.2	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
84-15-1	o-Terphenyl	63%		31-12	27%	

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-13

Lab Sample ID: TD49110-10 **Date Sampled:** 12/16/19 Matrix: SO - Soil **Date Received:** 12/19/19 **Percent Solids:** 77.8

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	Ву	Method
Chloride	26.8	6.3	mg/kg	1	12/21/19 01:41	PK	EPA 300.0
Solids, Percent	77.8		%	1	12/20/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-14

 Lab Sample ID:
 TD49110-11
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/19/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 87.8

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487802.D
 1
 12/20/19 20:37
 SC
 12/19/19 14:49
 n/a
 VR2354

Run #2

Run #1 5.05 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.0045 0.0045	0.00039 0.0010 0.0011	mg/kg mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.0045	0.0010	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	111%		59-12	26%	
2037-26-5	Toluene-D8	89%		70-13	39%	
460-00-4	4-Bromofluorobenzene	96%		63-13	88%	
17060-07-0	1,2-Dichloroethane-D4	109%		54-12	23%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Date Sampled:

Date Received:

12/16/19

12/19/19

Client Sample ID: FL-14

Lab Sample ID: TD49110-11
Matrix: SO - Soil

Method: SW846 8015C SW846 5035 **Percent Solids:** 87.8

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LE366788.D
 1
 12/27/19 01:39
 ALA
 12/20/19 16:50
 n/a
 L:GLE1951

Run #2

Run #1 4.80 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 92%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 92%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: FL-14

 Lab Sample ID:
 TD49110-11
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/19/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 87.8

Project: ETECH:New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002397.D
 1
 12/22/19 20:22
 ALA
 12/21/19 10:00
 L:OP15909
 L:GLG914

Run #2

Run #1 20.5 g 1.0 ml
Run #2

CAS No. Compound Units Result RL**MDL** Q TPH-DRO (C10-C28) 5.6 J 1.50 0.48 mg/kg TPH-ORO (> C28-C40) ND 5.6 1.0 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 31-127% 66%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-14

Lab Sample ID: TD49110-11 **Matrix:** SO - Soil

Date Sampled: 12/16/19Date Received: 12/19/19Percent Solids: 87.8

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	29.2	5.6	mg/kg	1	12/21/19 01:58	PK	EPA 300.0
Solids, Percent	87.8		%	1	12/20/19	LC	SM 2540 G



Houston, TX

Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

PAGE \ OF 1

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Client / Reporting Information	3u3														FED-EX	Trackir	e 0 0	64	092	_	61	3-1-	trol# 2419	-34	
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Company Name Comp	Client / Reporting Information			Project In	formatio	on	- 5											Red	ues	ted	Ana	lyse	s		Matrix Codes
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The content of the	ETECH	Whiles	City Rd	Luc	illent																				DW - Drinking Water
State		Street	Eddia																						GW - Ground Water
No. No.	City State / 2	Zip City	eany				on (if	differ	ent fro	m Re	port t	0)		_											SW - Surface Water
Secondaria Name Priori P	Lavinston Nm 882	40		NM K	Cey Ener	gy																			SL- Sludge
1	Project Contact E-mail	Project #		S	treet Addr	ess																			OI - Oil
1	Phone # Sellected	YARD CODE:			A-1								-				40								AIR - Air
NW-7		1		1					_				Zip				ĕ	ĕ							SOL - Other Solid WP - Wipe
NW-7			1 .												99	2	6	우							FB-Field Blank
NW-7	Toel Lowry	Soel			APInvoid	ePro	cess								8	ĕ	18	9							
NW-7	/		Çonection	T			Т							<u> </u>	꼾	ģ	ō	흐							
10	Sample # Field ID / Point of Collection	n Date	Time Sa	mpled By		# of oottles	Ē	ZANa	HOSO	NON	DI Wat	TSP TSP	NeHSO	OTHE	Б	5	P.	ပ်							LAB USE ONLY
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5 Day RUSH Commercial "B" (Level 2) EDD Format KEYENTXH33361 4 Day RUSH FULT1 (Level 3+4) Other 3 Day RUSH REDT1 (Level 3+4) Commercial "C" Results Only 1 Day EMERGENCY Commercial "A" = Results Only 2 Day RUSH Commercial "A" = Results Only Commercial "A" = Results Only 3 Day RUSH Commercial "A" = Results Only 4 Day RUSH Commercial "A" = Results Only 5 Day RUSH Commercial "C" = Results Only 6 Date Time: Date Time: Received By: Commercial "C" = Results Only 7 Date Time: Received By: Commercial "C" = Results Only 8 Results Only Commercial "C" = Results Only 6 Received By: Commercial "C" = Results Only 7 Date Time: Received By: Commercial "C" = Results Only 8 Results Only Commercial "C" = Results Only 9 Date Time: Received By: Commercial "C" = Results Only 9 Date Time: Received By: Commercial "C" = Results Only 9 Date Time: Received By: Commercial "C" = Results Only 9 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 1 Date Time: Received By: Commercial "C" = Results Only 2 Date Time: Received By: Commercial "C" = Results Only 3 Date Time: Commercial "C" = Results Only 4 Date Time: Commercial "C" = Results Only 5 Date Time: Commercial "C" = Results Only 6 Date Time: Commercial "C" = Results Only 7 Date Time:			3.70	151235	V	•		Data I	Delive	rable I	Inform	nation	1			1000	SELE	4	ESCHIES	Com	ments /	Specia	al Instruc	tions	
4 Day RUSH FULT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other REDT1 (Level 3+4) Other RedT1 (Level 3+	, —	Approved By (Acce	rtest PM): / Date:		co	mmerc	lal "A	" (Le	vel 1)			TF	RP												
Sample Custody must be documented below each time samples change possession, including courier delivery. Commercial "A" = Results Only Commercial "B" = Results Only Commercial "B" = Results - QC & Surrogate Summary	5 Day RUSH				Co	mmerc	ial "E	3" (Le	evel 2)		L	_] EI	DD F	ormat			KEY	ENTX	H3336	51					
2 Day RUSH Commercial "C" Commercial "C" Commercial "C" Results + QC Surmary				- 1								□ ∘	ther_		_										
1 Day EMERGENCY Commercial "A" = Results Only	1 —																								
Commercial "C" = Results + QC & Surrogate Summary Sample Custody must be documented below each time samples change possession, including courier delivery. Relinquished by Sampler: Date Time:				- 1					ercial "	A" = R	esults	s Only													
Sample Custody must be documented below each time samples change possession, including courier delivery. Color Time: Date Time: Date Time: Date Time: Date Time: Date Time: Date Time: Date Time: Received By: Date Time: Date T	Emergency & Rush T/A data available VIA La	blink													e Sumi	mary									
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		Date Time:							Custo	dy Sea	1#					ct	Preser		e applica	ble				С	poler Temp.

TD49110: Chain of Custody Page 1 of 4

SGS Sample Receipt Summary

Job Number: Ti	D49110		Client:	ETECH	Project	: WHILES CITY RE) INCIDE	ENT	
Date / Time Received:	12/19/2019	9 11:50	0:00 AM	Delv Method:	FEDEX Airbill #'s	493390069670			
# of Coolers:1	<u> </u>	Therm	ID: IR-9	,	Temp A	djustment Factor:	0;		
Cooler Temps (Initial/Ad	ljusted):	#1: (2.8	3/2.8);						
Test Strip Lot #s:	pH 1-12:		10D0391	pH 12+: _	Oti	ner: (Specify)			
Cooler Information	<u> Y</u>	or	<u>N</u>	<u>N/A</u>	Sample Information		<u>Y</u>	or N	N/A
1. Custody Seals Present:	✓]			Sample labels present of	on bottles:	✓		
2. Custody Seals Intact:	✓]			Samples preserved property.		✓		
3. Temp criteria achieved:	✓]			Sufficient volume recvd	for analysis:	✓		
4. Cooler temp verification:					4. Condition of sample:	•		Intact	
3. Cooler media:	Ice (Bag)				5. Sample recvd within HT	:	✓		
Trip Blank Information	<u> Y</u>	or	N	_N/A_	6. Dates/Times/IDs on CO	C match Sample Labe	el 🗸		
Trip Blank present / cool	lor:	1			Container labeling comp	olete:	\checkmark		
	_	•		\checkmark	Analysis requested is class.	ear:	\checkmark		
Trip Blank listed on COC	D:]		✓	VOCs headspace free:				\checkmark
3. Type Of TB Received	<u>v</u>	/ or	S	N/A	10. Bottles received for un	specified tests		✓	
]			11. COC Present:		\checkmark		
Misc. Information					12. Special Instructions (co	ompositing/filtering) cle	ear: 🗌		\checkmark
Number of terracores:		N	lumber of I	ab Filtered Metals:	13. Voa Soil Kits/Jars rece	ived past 48hrs?			
Number of 5035 Field Kits:	. ——				14. % Solids Jar received?)			
Residual Chlorine Test Stri					15. Residual Chlorine Pres	sent?			

Comments

TD49110: Chain of Custody

Page 2 of 4



Page 2 of 3

Sample Receipt Log

 Job #:
 TD49110
 Date / Time Received:
 12/19/2019 11:50:00 AM
 Initials:
 MAURICIM

Client: ETECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD49110-1	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-1	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-1	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-1	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-2	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-2	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-2	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-2	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-3	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-3	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-3	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-3	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-4	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-4	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-4	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-4	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-5	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-5	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-5	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-5	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-6	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-6	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-6	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8

TD49110: Chain of Custody Page 3 of 4



Page 3 of 3

Sample Receipt Log

 Job #:
 TD49110
 Date / Time Received:
 12/19/2019 11:50:00 AM
 Initials: MAURICIM

Client: ETECH

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD49110-6	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-7	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-7	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-7	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-7	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-8	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-8	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-8	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-8	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-9	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-9	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-9	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-9	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-10	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-10	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-10	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-10	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-11	8oz	1	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-11	4oz	2	SUB	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-11	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
1	TD49110-11	4oz	4	2-105	N/P	Note #2 - Preservative check not applicable.	IR-9	2.8	0	2.8
		1	1		ı	T. Control of the con	1	1	1	1

TD49110: Chain of Custody

Page 4 of 4





Houston, TX

Section 5

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method: SW846 8260C

Method Blank Summary

Job Number: TD49110

Account: KEYENTXH Key Energy Project: ETECH:New Mexico

Sample VR2354-MB	File ID R03487781.D	DF 1	Analyzed 12/20/19	By SC	Prep Date n/a	Prep Batch n/a	Analytical Batch VR2354

The QC reported here applies to the following samples:

 $TD49110-1,\ TD49110-2,\ TD49110-3,\ TD49110-4,\ TD49110-5,\ TD49110-6,\ TD49110-7,\ TD49110-8,\ TD49110-9,\ TD49110-10,\ TD49110-11$

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg
100-41-4	Ethylbenzene	ND	4.0	1.0	ug/kg
108-88-3	Toluene	ND	4.0	0.92	ug/kg
1330-20-7	Xylene (total)	ND	4.0	0.93	ug/kg

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	59-126%
2037-26-5	Toluene-D8	91%	70-139%
460-00-4	4-Bromofluorobenzene	96%	63-138%
17060-07-0	1,2-Dichloroethane-D4	102%	54-123%

Method: SW846 8260C

Blank Spike Summary

Job Number: TD49110

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample VR2354-BS	File ID R03487779.D	DF 1	Analyzed 12/20/19	By SC	Prep Date n/a	Prep Batch n/a	Analytical Batch VR2354

The QC reported here applies to the following samples:

 $TD49110-1,\ TD49110-2,\ TD49110-3,\ TD49110-4,\ TD49110-5,\ TD49110-6,\ TD49110-7,\ TD49110-8,\ TD49110-9,\ TD49110-10,\ TD49110-11$

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	37.4	75	58-124
100-41-4	Ethylbenzene	50	35.5	71	57-124
108-88-3	Toluene	50	35.6	71	67-119
1330-20-7	Xylene (total)	150	108	72	62-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	59-126%
2037-26-5	Toluene-D8	92%	70-139%
460-00-4	4-Bromofluorobenzene	99%	63-138%
17060-07-0	1,2-Dichloroethane-D4	102%	54-123%

^{* =} Outside of Control Limits.

Method: SW846 8260C

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD49110

Account: KEYENTXH Key Energy Project: ETECH:New Mexico

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
TD48974-2MS	R03487784.D	200	12/20/19	SC	n/a	n/a	VR2354
TD48974-2MSD	R03487785.D	200	12/20/19	SC	n/a	n/a	VR2354
TD48974-2	R03487782.D	200	12/20/19	SC	n/a	n/a	VR2354

The QC reported here applies to the following samples:

TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7, TD49110-8, TD49110-9, TD49110-10, TD49110-11

CAS No.	Compound	TD48974-2 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
71-43-2	Benzene	8000 U	801000	671000	84	801000	644000	80	4	58-124/26	
100-41-4	Ethylbenzene	64000 U	801000	644000	80	801000	621000	78	4	57-124/29	
108-88-3	Toluene	64000 U	801000	640000	80	801000	617000	77	4	67-119/28	
1330-20-7	Xylene (total)	64000 U	2400000	1950000	81	2400000	1900000	79	3	62-120/27	
CAS No.	Surrogate Recoveries	MS	MSD	TD4	18974-2	Limits					
1868-53-7	Dibromofluoromethane	104%	107%	104%)	59-126%					
2037-26-5	Toluene-D8	91%	92%	92%		70-139%					
460-00-4	4-Bromofluorobenzene	99%	98%	96%		63-138%					
17060-07-0	1.2-Dichloroethane-D4	100%	99%	101%		54-123%					

^{* =} Outside of Control Limits.



Houston, TX

Section 6

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49110 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP56112/GN3344	5.0	0.0	mg/kg	100	94.6	94.6	90-110%

Associated Samples:

Batch GP56112: TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7, TD49110-8, TD49110-9, TD49110-10, TD49110-11 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49110 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP56112/GN3344	TD49110-1	mg/kg	502	509	1.4	0-20%

Associated Samples:

Batch GN3289: TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7, TD49110-8, TD49110-9, TD49110-10, TD49110-11

Batch GP56112: TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7, TD49110-8, TD49110-9, TD49110-10, TD49110-11 (*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49110 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP56112/GN3344	TD49110-1	mg/kg	502	1140	620	10.4N	80-120%

Associated Samples:

Batch GP56112: TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7, TD49110-8, TD49110-9, TD49110-10, TD49110-11 (*) Outside of QC limits

- (N) Matrix Spike Rec. outside of QC limits

6.3



Houston, TX

Section 7

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

• Chain of Custody

11 FL-14

Turnaround Time (Business days)

Std. 10 Business Days 5 Day RUSH

3 Day EMERGENCY 2 Day EMERGENCY

1 Day EMERGENCY

X other Due 12/23/2019

				(CHAIN	(O)	F C	UST	ΟI	ΟY	•												Pa	ıge	1 0	of 1	ı	
	SGS		10165 Harwin Drive, Houston, TX 77036											FED-EX Tracking # SGS Quote #						Bottle Order Control # SGS Job # TD49110								
	Client / Reporting Information	,										sis (see TEST CODE sheet)							\Box	Matrix Codes								
Compar			Project Name:		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										3	2									-		- 1	DW - Drinking Water
SGS	S North America Inc.			H:New I	Mexico								1	,v8015GRO	- 1	1						Ì		1		GW - Ground Water		
Street A	Address		Street												7	98												WW - Water SW - Surface Water
	65 Harwin Drive							on (if differ	ent fr	rom R	eport	to)					1				l				-		1	SO - Soil SL- Sludge
City	State uston TX 77036	Zip	City		State	Company	y Name								5	556												SED-Sediment OI - Oil
Project			Project #			Street Ad	idress								١ إ	,V5035SPM	- 1				1					ļ	-	LIQ - Other Liquid
1 '	ta.brown@sgs.com																											SOL - Other Solid
Phone #		Fax#	Client Purchase C	Order#		City				State			Zip		1 8	,BGC+ORO						11		1			ļ	WP - Wipe FB-Field Blank
	-271-4700	Oher	Project Manager			Attention									- 8	ပ္ပ						11						EB-Equipment Blank RB- Rinse Blank
Sample	r(s) Name(s)	PHON	e Project Manager			,																				1		TB-Trip Blank
-		_			Collection				L.				ed Bot		Π:	ğ	1					11					- 1	
SGS Sample #	Field ID / Point of Collection		MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	E F	NaOH	HZSO4	NONE	MEOH	ENCORE		B8015DRO												LAB USE ONLY
1	NW-7			12/16/19	10:00:00 AN	1	so	2	П	T	†	2	1			х											\Box	2
2	NW-8			12/16/19	10:20:00 AN	/	so	2	H	十	+	2	1			x						П			T			2
3	NW-9	1		12/16/19	10:40:00 AN		so	2	\vdash	+	╁	2	+	H	+	x					†			- A				2
-		-			11:00:00 AN	+	so	2	H	\pm	╁	2	+	H		x				-	1-			11/	16			1/2
4	NW-10	-		12/16/19		┼		<u> </u>	Н	+	+	\vdash	+	H		$\frac{\hat{x}}{x}$	\dashv	_			┼		H G		Ü) //	100	12
5	NW-11			12/16/19	11:20:00 AN		so	2	-	+	-	2	+	\vdash		-				├	-	655		-	-	-	-	7
6	FL-9	1		12/16/19	11:40:00 AN	1	so	2	Ш	\perp	1	2	_	Ш		X				_	-	++	-	+-	+	-		2
7	FL-10			12/16/19	12:00:00 PM	1	so	2			_	2		Ш		X				ļ	ļ	\perp	1_	+	_	_		
8	FL-11			12/16/19	12:00:00 PM	4	so	2	Ш			2				Х						\sqcup	_	\perp	_	_		
9	FL-12	;		12/16/19	12:40:00 PM	4	so	2	П		L	2		Ш		х						\sqcup		\perp	_			Z
10	FL-13			12/16/19	1:00:00 PM	1	so	2				2				х						Ш	1	1	\perp	_		2

Data Delivera

Commercial "A" = Results Only

Sample Custody must be documented below each time samples change possession, including courier delivery.

Planta B. P. Relinguished By:
2 German' Planta B. Sample Custody must be documented below each time samples change possession, including courier delivery.

Planta B. P. Relinguished By:
2 German'

Commercial *B* = Results + QC Summary

so

Lata Deliver

Commercial "A" (Level 1)

Commercial "B" (Level 2)

FULLT1 (Level 3+4)

NJ Reduced

Commercial "C"

1:20:00 PM

Date Ting 19 1800 Recorded By:

12/9/19/1800 10-Come' Peterla 18'0

Date Time: Received By:

oved By (SGS PM): / Date:

Х

☐ Intact ☐ Not intact

LA 12-20-19

4

MYASP Category A
NYASP Category B
State Forms
EDD Format
X Other COMMB

TD49110: Chain of Custody Page 1 of 2 SGS Scott, LA

08:00

per

i (VS)

Cooler Temp. 1143

7.1

SGS Sample Receipt Summary

Job Number: TD49110 Client: SGS NORTH AMERICA								Project: NEW MEXICO										
Date / Time Received: 1	2/20/20	19 8:00	0:00 AM	Delivery	Method:	Ac	cutest Courier Airbill #'s:											
Cooler Temps (Initial/Adju	ısted):	<u>#1: (1</u>	<u>.6/1.6);</u> #1	: (1.6/1.6);_														
Cooler Security	Y or				Y or	N	Sample Integrity	y - Documentation		<u>Y</u> 0	or N							
odolody oddio i rodonii.		✓	3. COC				Sample labels p	present on bottles:		✓								
2. Custody Seals Intact:		\checkmark	4. Smpl Da	tes/Time OK	\checkmark		2. Container labeli	ing complete:		✓								
Cooler Temperature	_`	Y or	N				3. Sample contain	er label / COC agree:		\checkmark								
1. Temp criteria achieved:	Ŋ	/					Sample Integrit	v - Condition		<u>Y</u> 0	or N							
2. Thermometer ID:	OV439;	_			Sample recvd w	=		✓										
3. Cooler media:lce (direct contact)							2. All containers a			~								
4. No. Coolers:	1		_			3. Condition of sar	mple:		_	tact								
Quality Control Preservat	tion_	Y or	N N/	<u>A</u>			Sample Integrity	y - Instructions		Υo	or N	N/A						
1. Trip Blank present / cooler	r: []			1. Analysis reque			<u> </u>								
2. Trip Blank listed on COC:]					, ,	ed for unspecified tests			\checkmark							
3. Samples preserved proper	rly:	7					Sufficient volun	me recvd for analysis:		✓								
4. VOCs headspace free:]			4. Compositing in	structions clear:				✓						
							5. Filtering instruc	ctions clear:				✓						
Comments							-											

TD49110: Chain of Custody

Page 2 of 2



Houston, TX

Section 8

GC Volatiles

QC Data Summaries

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



540-36-3

Page 1 of 1

Method Blank Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLA2844-MB1	File ID LA356761.D	DF 1	Analyzed 12/26/19	By NN	Prep Date n/a	Prep Batch n/a	Analytical Batch GLA2844

52-140%

The QC reported here applies to the following samples:

1,4-Difluorobenzene

Method: SW846 8015C

TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	2.75	5.0	2.4	mg/kg J
CAS No.	Surrogate Recoveries		Limit	es	
460-00-4	4-Bromofluorobenzene	94%	63-13	9%	

98%

460-00-4

540-36-3

Page 1 of 1

Method Blank Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLE1951-MB1	File ID LE366772.D	DF 1	Analyzed 12/26/19	By NN	Prep Date n/a	Prep Batch n/a	Analytical Batch GLE1951

63-139%

52-140%

The QC reported here applies to the following samples:

Method: SW846 8015C

TD49110-8, TD49110-9, TD49110-10, TD49110-11

4-Bromofluorobenzene

1,4-Difluorobenzene

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	3.78	5.0	2.4	mg/kg J
CAS No.	Surrogate Recoveries		Limits	5	

92%

92%

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLA2844-BS2 GLA2844-BSD2	File ID LA356807.D LA356809.D	DF 1 1	Analyzed 12/26/19 12/26/19	By NN NN	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch GLA2844 GLA2844

The QC reported here applies to the following samples:

TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	46.9	94	46.2	92	2	79-121/6
CAS No.	Surrogate Recoveries	BSP	BSI)	Limits			
460-00-4	4-Bromofluorobenzene	98%	96%		63-139%			
540-36-3	1,4-Difluorobenzene	98%	98%		52-140%			

^{* =} Outside of Control Limits.

460-00-4

540-36-3

Page 1 of 1

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

	Sample GLE1951-BS1 GLE1951-BSD1	File ID LE366782.D LE366783.D	DF 1 1	Analyzed 12/26/19 12/26/19	By NN NN	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch GLE1951 GLE1951
--	---------------------------------------	--	---------------	-----------------------------------	----------------	-------------------------	--------------------------	--

The QC reported here applies to the following samples:

TD49110-8, TD49110-9, TD49110-10, TD49110-11

4-Bromofluorobenzene

1,4-Difluorobenzene

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	44.5	89	44.2	88	1	79-121/6
CAS No.	Surrogate Recoveries	BSP	BSD)	Limits			

101%

99%

99%

97%

63-139%

52-140%

^{* =} Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH: New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA60258-19MS	LE366789.D	1	12/27/19	NN	n/a	n/a	GLE1951
LA60258-19MSD	LE366790.D	1	12/27/19	NN	n/a	n/a	GLE1951
LA60258-19	LE366793.D	1	12/27/19	NN	n/a	n/a	GLE1951

The QC reported here applies to the following samples:

Method: SW846 8015C

TD49110-8, TD49110-9, TD49110-10, TD49110-11

CAS No.	Compound	LA60258-19 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	96.2	83.0	86	96.2	82.4	86	1	79-121/6
CAS No.	Surrogate Recoveries	MS	MSD	LAG	60258-19	Limits				
460-00-4 540-36-3	4-Bromofluorobenzene 1,4-Difluorobenzene	103% 99%	102% 98%	91% 92%		63-139% 52-140%				

^{* =} Outside of Control Limits.

Method: SW846 8015C

Page 1 of 1

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

	Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
(a)	TD49110-4MS	LA356949.D	1	12/28/19	NN	n/a	n/a	GLA2844
(a)	TD49110-4MSD	LA356951.D	1	12/28/19	NN	n/a	n/a	GLA2844
	TD49110-4	LA356829.D	1	12/27/19	NN	n/a	n/a	GLA2844

The QC reported here applies to the following samples:

TD49110-1, TD49110-2, TD49110-3, TD49110-4, TD49110-5, TD49110-6, TD49110-7

CAS No.	Compound	TD49110-4 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	693	587	85	693	600	87	2	79-121/6
CAS No.	Surrogate Recoveries	MS	MSD	TD	49110-4	Limits				
460-00-4 540-36-3	4-Bromofluorobenzene	98%	99%	97%	ó	63-139%)			

(a) SAMPLE NOT YET APPROVED BY LAB. DO NOT REPORT.

^{* =} Outside of Control Limits.



Houston, TX

Section 9

GC/LC Semi-volatiles

QC Data Summaries

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method: SW846 8015C

Method Blank Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15909-MB	File ID LG002379.D	DF 1	Analyzed 12/22/19	By PC	Prep Date 12/21/19	Prep Batch OP15909	Analytical Batch GLG914

The QC reported here applies to the following samples:

 $TD49110-1,\ TD49110-2,\ TD49110-3,\ TD49110-4,\ TD49110-5,\ TD49110-6,\ TD49110-7,\ TD49110-8,\ TD49110-9,\ TD49110-10,\ TD49110-11$

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	ND ND	5.0 5.0	0.43 0.92	mg/kg mg/kg
CAS No.	Surrogate Recoveries		Limit	ts	

84-15-1 o-Terphenyl 66% 31-127%

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15909-BS1 OP15909-BSD1	File ID LG002380.D LG002381.D	DF 1 1	Analyzed 12/22/19 12/22/19	By PC PC	Prep Date 12/21/19 12/21/19	Prep Batch OP15909 OP15909	Analytical Batch GLG914 GLG914

The QC reported here applies to the following samples:

 $TD49110-1,\ TD49110-2,\ TD49110-3,\ TD49110-4,\ TD49110-5,\ TD49110-6,\ TD49110-7,\ TD49110-8,\ TD49110-9,\ TD49110-10,\ TD49110-11$

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	149	110	74	117	78	6	49-118/19
CAS No.	Surrogate Recoveries	BSP	BSD	•	Limits			
84-15-1	o-Terphenyl	70%	73%		31-127%			

^{* =} Outside of Control Limits.

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49110

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample	File ID	DF 1 1	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP15909-BS2	LG002382.D		12/22/19	PC	12/21/19	OP15909	GLG914
OP15909-BSD2	LG002383.D		12/22/19	PC	12/21/19	OP15909	GLG914

The QC reported here applies to the following samples:

 $TD49110-1,\ TD49110-2,\ TD49110-3,\ TD49110-4,\ TD49110-5,\ TD49110-6,\ TD49110-7,\ TD49110-8,\ TD49110-9,\ TD49110-10,\ TD49110-11$

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C40)	59.7	53.2	89	56.2	94	5	60-127/10
CAS No.	Surrogate Recoveries	BSP	BSD	•	Limits			
84-15-1	o-Terphenyl	69%	73%		31-127%			

^{* =} Outside of Control Limits.



Houston, TX

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

01/02/20

Technical Report for

Key Energy

ETECH: New Mexico

Whites City Rd.

SGS Job Number: TD49314

Sampling Dates: 12/16/19 - 12/17/19



Key Energy 1301 McKinney Street Houston, TX 77010 msticker@keyenergy.com; jbest@keyenergy.com

ATTN: Maury Sticker

Total number of pages in report: 92

TNI TABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

John Watson Technical Director

Il MA

Client Service contact: Electa Brown 713-271-4700

Certifications: TX (T104704220-19-34) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2018-129) VA (10171)

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Sections:

Table of Contents

-1-

*	
Section 1: Sample Summary	4
Section 2: Summary of Hits	
Section 3: Sample Results	
3.1: TD49314-1: FL-16	
3.2: TD49314-1A: FL-16	
3.3: TD49314-2: FL-17	
3.4: TD49314-2A: FL-17	
3.5: TD49314-3: SW-2	
3.6: TD49314-3A: SW-2	
3.7: TD49314-4: SW-3	
3.8: TD49314-4A: SW-3	_
3.9: TD49314-5: SW-7	
3.10: TD49314-5A: SW-7	
3.11: TD49314-6: SW-4	31
3.12: TD49314-6A: SW-4	33
3.13: TD49314-7: SW-10	35
3.14: TD49314-7A: SW-10	37
3.15: TD49314-8: SW-9	39
3.16: TD49314-8A: SW-9	41
3.17: TD49314-9: SW-8	43
3.18: TD49314-9A: SW-8	45
3.19: TD49314-10: FL-18	47
3.20: TD49314-10A: FL-18	49
3.21: TD49314-11: FL-19	51
3.22: TD49314-11A: FL-19	53
3.23: TD49314-12: EW	55
3.24: TD49314-12A: EW	57
3.25: TD49314-13: FL-15	59
3.26: TD49314-13A: FL-15	61
Section 4: Misc. Forms	63
4.1: Chain of Custody	64
Section 5: MS Volatiles - QC Data Summaries	70
5.1: Method Blank Summary	
5.2: Blank Spike/Blank Spike Duplicate Summary	72
Section 6: General Chemistry - QC Data Summaries	
6.1: Method Blank and Spike Results Summary	
6.2: Duplicate Results Summary	
6.3: Matrix Spike Results Summary	76
Section 7: Misc. Forms (SGS Scott, LA)	
7.1: Chain of Custody	
Section 8: GC Volatiles - QC Data (SGS Scott, LA)	
8.1: Method Blank Summary	



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Sections:

Table of Contents

-2-

8.2: Blank Spike/Blank Spike Duplicate Summary	85
8.3: Matrix Spike/Matrix Spike Duplicate Summary	87
Section 9: GC/LC Semi-volatiles - QC Data (SGS Scott, LA)	89
9.1: Method Blank Summary	90
9.2: Blank Spike/Blank Spike Duplicate Summary	91



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Sample Summary

Key Energy

Job No:

TD49314

ETECH:New Mexico

Project No: Whites City Rd.

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
This report co Organics ND		lts reported as Not detecte			cted. The following app L	blies:
TD49314-1	12/16/19	02:20	12/24/19	SO	Soil	FL-16
TD49314-1A	12/16/19	02:20	12/24/19	SO	Soil	FL-16
TD49314-2	12/16/19	02:30	12/24/19	SO	Soil	FL-17
TD49314-2A	12/16/19	02:30	12/24/19	so	Soil	FL-17
TD49314-3	12/17/19	10:00	12/24/19	SO	Soil	SW-2
TD49314-3A	12/17/19	10:00	12/24/19	SO	Soil	SW-2
TD49314-4	12/17/19	10:15	12/24/19	SO	Soil	SW-3
TD49314-4A	12/17/19	10:15	12/24/19	SO	Soil	SW-3
TD49314-5	12/17/19	10:45	12/24/19	SO	Soil	SW-7
TD49314-5A	12/17/19	10:45	12/24/19	SO	Soil	SW-7
TD49314-6	12/17/19	11:15	12/24/19	SO	Soil	SW-4
TD49314-6A	12/17/19	11:15	12/24/19	SO	Soil	SW-4

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



$\underset{(continued)}{\textbf{Sample Summary}}$

Key Energy

Job No:

TD49314

ETECH:New Mexico

Project No: Whites City Rd.

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
TD49314-7	12/17/19	11:30	12/24/19	SO	Soil	SW-10
TD49314-7A	12/17/19	11:30	12/24/19	SO	Soil	SW-10
TD49314-8	12/17/19	10:30	12/24/19	SO	Soil	SW-9
TD49314-8A	12/17/19	10:30	12/24/19	SO	Soil	SW-9
TD49314-9	12/17/19	11:00	12/24/19	SO	Soil	SW-8
TD49314-9A	12/17/19	11:00	12/24/19	SO	Soil	SW-8
TD49314-10	12/17/19	11:45	12/24/19	so	Soil	FL-18
TD49314-10A	12/17/19	11:45	12/24/19	SO	Soil	FL-18
TD49314-11	12/17/19	12:00	12/24/19	SO	Soil	FL-19
TD49314-11A	12/17/19	12:00	12/24/19	SO	Soil	FL-19
TD49314-12	12/17/19	12:30	12/24/19	SO	Soil	EW
TD49314-12A	12/17/19	12:30	12/24/19	SO	Soil	EW
TD49314-13	12/16/19	13:40	12/24/19	SO	Soil	FL-15

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



$\underset{(continued)}{\textbf{Sample Summary}}$

Key Energy

Job No:

TD49314

ETECH:New Mexico

Project No: Whites City Rd.

Sample Number	Collected Date		Received	Matri Code		Client Sample ID
TD49314-13A	A 12/16/19	13:40	12/24/19	SO	Soil	FL-15

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Summary of Hits Job Number: TD49314 Account: Key Energy

Project: ETECH:New Mexico Collected: 12/16/19 thru 12/17/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD49314-1	FL-16					
Chloride		299	58		mg/kg	EPA 300.0
TD49314-1A	FL-16					
TPH-DRO (C10-	·C28) a	0.979 J	5.7	0.50	mg/kg	SW846 8015C
TD49314-2	FL-17					
Chloride		374	57		mg/kg	EPA 300.0
TD49314-2A	FL-17					
TPH-DRO (C10-	·C28) a	1.18 J	5.8	0.50	mg/kg	SW846 8015C
TD49314-3	SW-2					
Chloride		18.8	11		mg/kg	EPA 300.0
TD49314-3A	SW-2					
TPH-DRO (C10-	-C28) ^a	1.16 J	5.7	0.50	mg/kg	SW846 8015C
TD49314-4	SW-3					
Chloride		13.6	13		mg/kg	EPA 300.0
TD49314-4A	SW-3					
TPH-DRO (C10- TPH-ORO (> C2		2.61 J 9.92	6.5 6.5	0.56 1.2	mg/kg mg/kg	SW846 8015C SW846 8015C
TD49314-5	SW-7					
Chloride		47.3	11		mg/kg	EPA 300.0
TD49314-5A	SW-7					
TPH-DRO (C10-	·C28) a	1.78 J	5.7	0.49	mg/kg	SW846 8015C
TD49314-6	SW-4					
Chloride		23.1	11		mg/kg	EPA 300.0

Page 2 of 3

Summary of Hits Job Number: TD49314 Account: Key Energy

Project: ETECH:New Mexico Collected: 12/16/19 thru 12/17/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD49314-6A	SW-4					
TPH-DRO (C10-	-C28) ^a	1.08 J	5.8	0.50	mg/kg	SW846 8015C
TD49314-7	SW-10					
Chloride		14.7	13		mg/kg	EPA 300.0
TD49314-7A	SW-10					
TPH-GRO (C6-C TPH-DRO (C10-		6.10 J 1.11 J	8.5 6.5	4.2 0.56	mg/kg mg/kg	SW846 8015C SW846 8015C
TD49314-8	SW-9					
Chloride		18.6	11		mg/kg	EPA 300.0
TD49314-8A	SW-9					
TPH-DRO (C10-	-C28) ^a	1.66 J	5.6	0.48	mg/kg	SW846 8015C
TD49314-9	SW-8					
Chloride		564	68		mg/kg	EPA 300.0
TD49314-9A	SW-8					
TPH-DRO (C10-	·C28) ^a	1.22 J	6.8	0.58	mg/kg	SW846 8015C
TD49314-10	FL-18					
Chloride		298	57		mg/kg	EPA 300.0
TD49314-10A	FL-18					
TPH-DRO (C10-	·C28) ^a	1.21 J	5.7	0.49	mg/kg	SW846 8015C
TD49314-11	FL-19					
Chloride		156	28		mg/kg	EPA 300.0
TD49314-11A	FL-19					
TPH-DRO (C10-	·C28) ^a	1.40 J	5.7	0.49	mg/kg	SW846 8015C

Page 3 of 3

Summary of Hits

Job Number: TD49314 **Account:** Key Energy

Project: ETECH:New Mexico Collected: 12/16/19 thru 12/17/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD49314-12	EW					
Chloride		38.8	12		mg/kg	EPA 300.0
TD49314-12A	EW					
TPH-DRO (C10-	C28) a	3.58 J	5.9	0.51	mg/kg	SW846 8015C
TD49314-13	FL-15					
Chloride		170	28		mg/kg	EPA 300.0
TD49314-13A	FL-15					
TPH-DRO (C10- TPH-ORO (> C2		2.21 J 1.11 J	5.7 5.7	0.49 1.1	mg/kg mg/kg	SW846 8015C SW846 8015C

⁽a) Analysis performed at SGS Scott, LA. Associated CCV outside of control limits high.

⁽b) Analysis performed at SGS Scott, LA.



Houston, TX

Section 3



Samp	le l	Resu	lts
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Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID: FL-16

 Lab Sample ID:
 TD49314-1
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 85.7

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487837.D
 5
 12/24/19 15:46
 ZQ
 12/24/19 14:25
 n/a
 VR2356

Run #2

Initial Weight Final Volume
Run #1 5.01 g 100 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.0029 0.023 0.023	0.0020 0.0053 0.0059	mg/kg mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.023	0.0054	mg/kg	
CAS No.	CAS No. Surrogate Recoveries		Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	113%		59-12	26%	
2037-26-5	Toluene-D8	90%		70-13	39%	
460-00-4	4-Bromofluorobenzene	93%		63-13	38%	
17060-07-0	1.2-Dichloroethane-D4	95%		63-138% 54-123%		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B = \ Indicates \ analyte \ found \ in \ associated \ method \ blank$

N = Indicates presumptive evidence of a compound



Report of Analysis

Page 1 of 1

Client Sample ID: FL-16

Lab Sample ID: TD49314-1 Matrix: SO - Soil **Date Sampled:** 12/16/19 **Date Received:** 12/24/19 **Percent Solids:** 85.7

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	299	58	mg/kg	10	12/26/19 23:34	PK	EPA 300.0
Solids, Percent	85.7		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-16

 Lab Sample ID:
 TD49314-1A
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 85.7

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356963.D 1 12/28/19 03:10 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.10 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 96%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 94%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Client Sample ID: FL-16

 Lab Sample ID:
 TD49314-1A
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 85.7

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LG002601.D
 1
 12/31/19 06:20 ALA
 12/30/19 09:30 L:OP15957 L:GLG920
 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) b TPH-ORO (> C28-C40)	0.979 ND	5.7 5.7	0.50 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	
84-15-1	o-Terphenyl	73%		31-12	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Date Sampled: 12/16/19

Percent Solids: 86.1

12/24/19

VR2356

Date Received:

n/a

Page 1 of 1

SGS North America Inc.

Report of Analysis

12/24/19 16:13 ZQ

Client Sample ID: FL-17 Lab Sample ID:

TD49314-2 Matrix: SO - Soil Method: SW846 8260C SW846 5030A

5

Project: ETECH:New Mexico

R03487838.D

File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch**

12/24/19 14:25

Run #1 Run #2

Final Volume Initial Weight Run #1 5.02 g 100 ml

Run #2

Purgeable Aromatics

Compound	Result	RL	MDL	Units	Q
Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0029 0.023 0.023 0.023	0.0020 0.0053 0.0058 0.0054	mg/kg mg/kg mg/kg mg/kg	
Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1,2-Dichloroethane-D4	109% 89% 94% 98%		70-13 63-13	39% 38%	
	Benzene Toluene Ethylbenzene Xylene (total) Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	Benzene ND Toluene ND Ethylbenzene ND Xylene (total) ND Surrogate Recoveries Run# 1 Dibromofluoromethane 109% Toluene-D8 89% 4-Bromofluorobenzene 94%	Benzene ND 0.0029 Toluene ND 0.023 Ethylbenzene ND 0.023 Xylene (total) ND 0.023 Surrogate Recoveries Run# 1 Run# 2 Dibromofluoromethane 109% Toluene-D8 89% 4-Bromofluorobenzene 94%	Benzene ND 0.0029 0.0020 Toluene ND 0.023 0.0053 Ethylbenzene ND 0.023 0.0058 Xylene (total) ND 0.023 0.0054 Surrogate Recoveries Run# 1 Run# 2 Limi Dibromofluoromethane 109% 59-12 Toluene-D8 89% 70-13 4-Bromofluorobenzene 94% 63-12	Benzene

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-17

Lab Sample ID: TD49314-2 Matrix: SO - Soil **Date Sampled:** 12/16/19 **Date Received:** 12/24/19 **Percent Solids:** 86.1

Project: ETECH:New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	374	57	mg/kg	10	12/27/19 00:24	PK	EPA 300.0
Solids, Percent	86.1		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-17

 Lab Sample ID:
 TD49314-2A
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 86.1

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356965.D 1 12/28/19 03:33 ALA n/a n/a L:GLA2846

Run #2

Run #1 4.90 g 5.0 ml 100 ul
Run #2

 CAS No.
 Compound
 Result
 RL
 MDL
 Units
 Q

 TPH-GRO (C6-C10)
 ND
 6.7
 3.3
 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value





Report of Analysis

Page 1 of 1

Client Sample ID: FL-17

 Lab Sample ID:
 TD49314-2A
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 86.1

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a
 LG002602.D
 1
 12/31/19 06:41 ALA
 12/30/19 09:30 L:OP15957 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2	-	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) b TPH-ORO (> C28-C40)	1.18 ND	5.8 5.8	0.50 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	iits	
84-15-1	o-Terphenyl	55%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value





3.5

SGS North America Inc.

Report of Analysis

Page 1 of 1

Date Sampled: 12/17/19

Date Received: 12/24/19

Percent Solids: 87.1

Client Sample ID: SW-2

Lab Sample ID: TD49314-3 Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH:New Mexico

File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 R03487839.D 5 12/24/19 16:40 ZQ 12/24/19 14:25 VR2356 n/a

Run #2

Final Volume Initial Weight Run #1 5.05 g 100 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.0028 0.023 0.023	0.0020 0.0052 0.0057	mg/kg mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.023	0.0053	mg/kg	
	, , , ,					
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
CAS No. 1868-53-7	Surrogate Recoveries Dibromofluoromethane	Run# 1	Run# 2	Limi 59-12		
	Ü		Run# 2		26%	
1868-53-7	Dibromofluoromethane	106%	Run# 2	59-12	26% 39%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: SW-2

Lab Sample ID: TD49314-3 Matrix: SO - Soil **Date Sampled:** 12/17/19 **Date Received:** 12/24/19 **Percent Solids:** 87.1

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	18.8	11	mg/kg	2	12/27/19 00:41	PK	EPA 300.0
Solids, Percent	87.1		%	1	12/26/19	LC	SM 2540 G

3.5

3.6

SGS North America Inc.

Report of Analysis

Client Sample ID: SW-2

 Lab Sample ID:
 TD49314-3A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 87.1

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 a LA356969.D 1 12/28/19 04:19 ALA n/a n/a L:GLA2846

Run #2

Run #1 4.90 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.6 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 100%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-2

 Lab Sample ID:
 TD49314-3A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 87.1

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002603.D 1 12/31/19 07:02 ALA 12/30/19 09:30 L:OP15957 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40)	1.16 ND	5.7 5.7	0.50 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	72%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-3

 Lab Sample ID:
 TD49314-4
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 74.9

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487840.D
 5
 12/24/19 17:08 ZQ
 12/24/19 14:25 n/a
 VR2356

Run #2

Initial Weight Final Volume
Run #1 5.09 g 100 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3	Benzene Toluene	ND ND	0.0033 0.026	0.0023 0.0060	mg/kg mg/kg	
100-41-4 1330-20-7	Ethylbenzene Xylene (total)	ND ND	0.026 0.026	0.0066 0.0061	mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		ts	
1868-53-7	Dibromofluoromethane	106%		59-12	26%	
2037-26-5	Toluene-D8	89%	70-139%			
460-00-4	4-Bromofluorobenzene	93%	63-138%			
	4-Di Ollioliuoi oociizciic	13/0		05 1.	5070	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: SW-3

Lab Sample ID: TD49314-4 SO - Soil

Date Sampled: 12/17/19 **Date Received:** 12/24/19 **Percent Solids:** 74.9

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	13.6	13	mg/kg	2	12/27/19 00:58	PK	EPA 300.0
Solids, Percent	74.9		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-3

 Lab Sample ID:
 TD49314-4A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 74.9

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356971.D 1 12/28/19 04:41 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.10 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 8.2 4.0 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

SGS

Report of Analysis

Page 1 of 1

Client Sample ID: SW-3

 Lab Sample ID:
 TD49314-4A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 74.9

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002604.D 1 12/31/19 07:23 ALA 12/30/19 09:30 L:OP15957 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2	-	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) b TPH-ORO (> C28-C40)	2.61 9.92	6.5 6.5	0.56 1.2	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 2 Limits		
84-15-1	o-Terphenyl	57%		31-1	27%	

⁽a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



⁽b) Associated CCV outside of control limits high.

3.9

Report of Analysis

Page 1 of 1

12/24/19

Client Sample ID: SW-7

SGS North America Inc.

Lab Sample ID: TD49314-5 **Date Sampled:** 12/17/19 Matrix: SO - Soil **Date Received:** Method: SW846 8260C SW846 5030A Percent Solids: 86.7

Project: ETECH:New Mexico

File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 R03487841.D 5 12/24/19 17:35 ZQ 12/24/19 14:25 VR2356 n/a

Run #2

Final Volume Initial Weight Run #1 100 ml 5.06 g

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0028 0.023 0.023 0.023	0.0020 0.0052 0.0058 0.0053	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	106% 89%		59-12 70-13	39%	
460-00-4 17060-07-0	4-Bromofluorobenzene 1,2-Dichloroethane-D4	96% 96%		63-13 54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: SW-7

Lab Sample ID: TD49314-5 Matrix: SO - Soil **Percent Solids:** 86.7

Project: ETECH:New Mexico **Date Sampled:** 12/17/19 **Date Received:** 12/24/19

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	47.3	11	mg/kg	2	12/27/19 01:49	PK	EPA 300.0
Solids, Percent	86.7		%	1	12/26/19	LC	SM 2540 G

3.9

Report of Analysis

Page 1 of 1

Client Sample ID: SW-7

 Lab Sample ID:
 TD49314-5A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 86.7

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356973.D 1 12/28/19 05:05 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.10 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.4 3.1 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 97%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: SW-7

 Lab Sample ID:
 TD49314-5A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 86.7

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1 a LG002605.D
 1
 12/31/19 07:44 ALA
 12/30/19 09:30 L:OP15957 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) b TPH-ORO (> C28-C40)	1.78 ND	5.7 5.7	0.49 1.0	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	65%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-4

 Lab Sample ID:
 TD49314-6
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 85.8

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487842.D
 5
 12/24/19 18:02
 ZQ
 12/24/19 14:25
 n/a
 VR2356

Run #2

Run #1 5.08 g Final Volume
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71 42 2	D	ND	0.0020	0.0020	/1	
71-43-2	Benzene	ND	0.0029	0.0020	mg/kg	
108-88-3	Toluene	ND	0.023	0.0053	mg/kg	
100-41-4	Ethylbenzene	ND	0.023	0.0058	mg/kg	
1330-20-7	Xylene (total)	ND	0.023	0.0053	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	107%		59-12	26%	
2037-26-5	Toluene-D8	89%		70-13	39%	
460-00-4	4-Bromofluorobenzene	93%		63-13	38%	
17060-07-0						

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: SW-4

 Lab Sample ID:
 TD49314-6
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 85.8

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	23.1	11	mg/kg	2	12/27/19 02:06	PK	EPA 300.0
Solids, Percent	85.8		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-4

 Lab Sample ID:
 TD49314-6A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 85.8

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356975.D 1 12/28/19 05:27 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.7 3.3 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 96%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 99%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: SW-4

 Lab Sample ID:
 TD49314-6A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 85.8

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002609.D 1 12/31/19 09:08 ALA 12/30/19 09:30 L:OP15957 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^c	1.08 ND	5.8 5.8	0.50 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	71%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-10

Lab Sample ID: TD49314-7
Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH: New Mexico

Date Sampled: 12/17/19 Date Received: 12/24/19 Percent Solids: 74.8

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487843.D
 5
 12/24/19 18:29
 ZQ
 12/24/19 14:25
 n/a
 VR2356

 Run #2
 VR2356
 VR2356
 VR2356
 VR2356
 VR2356

Run #1 5.07 g Final Volume

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0033 0.026 0.026 0.026	0.0023 0.0061 0.0067 0.0061	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	101% 89% 93%		59-12 70-13 63-13	39%	
17060-07-0	1.2-Dichloroethane-D4	99%		54-17	23%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: SW-10

 Lab Sample ID:
 TD49314-7
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 74.8

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	14.7	13	mg/kg	2	12/27/19 02:23	PK	EPA 300.0
Solids, Percent	74.8		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-10

 Lab Sample ID:
 TD49314-7A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 74.8

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LC081074.D 1 12/27/19 12:42 ALA n/a n/a L:GLC2577

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot

Run #2

 CAS No.
 Compound
 Result
 RL
 MDL
 Units
 Q

 TPH-GRO (C6-C10)
 6.10
 8.5
 4.2
 mg/kg
 J

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 99%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 102%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: SW-10

 Lab Sample ID:
 TD49314-7A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 74.8

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002610.D 1 12/31/19 09:29 ALA 12/30/19 09:30 L:OP15957 L:GLG920

Run #2

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) b TPH-ORO (> C28-C40) c	1.11 ND	6.5 6.5	0.56 1.2	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	71%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Date Sampled: 12/17/19

Date Received: 12/24/19

Percent Solids: 87.3

Client Sample ID: SW-9

Lab Sample ID: TD49314-8 Matrix: SO - Soil

Method: SW846 8260C SW846 5030A

Project: ETECH:New Mexico

> File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** R03487844.D 5 12/24/19 18:56 ZQ 12/24/19 14:25 VR2356 n/a

Run #1 Run #2

Final Volume Initial Weight Run #1 5.04 g 100 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0028 0.023 0.023 0.023	0.0020 0.0052 0.0057 0.0053	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	1 Run# 2 Limits		ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	105% 90% 95%	59-126% 70-139% 63-138%		39%	
17060-07-0	1,2-Dichloroethane-D4	98%		54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-9

 Lab Sample ID:
 TD49314-8
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 87.3

Project: ETECH:New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	18.6	11	mg/kg	2	12/27/19 02:40	PK	EPA 300.0
Solids, Percent	87.3		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-9

 Lab Sample ID:
 TD49314-8A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 87.3

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356983.D 1 12/28/19 06:59 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.5 3.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 96%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-9

 Lab Sample ID:
 TD49314-8A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 87.3

Project: ETECH: New Mexico

	File ID	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Prep Date	Prep Batch	Analytical Batch
Run #1 a	LG002611.D	1	12/31/19 09:50	ALA	12/30/19 09:30	L:OP15957	L:GLG920
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^c	1.66 ND	5.6 5.6	0.48 1.0	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	49%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: SW-8

 Lab Sample ID:
 TD49314-9
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 73.3

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487845.D
 5
 12/24/19 19:24
 ZQ
 12/24/19 14:25
 n/a
 VR2356

Run #2

Run #1 5.00 g Final Volume

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0034 0.027 0.027 0.027	0.0024 0.0063 0.0069 0.0063	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits			
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	102% 90% 95%	59-126% 70-139%			
17060-07-0	1,2-Dichloroethane-D4	95%	63-138% 54-123%			

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: SW-8

 Lab Sample ID:
 TD49314-9
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 73.3

Project: ETECH:New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	564	68	mg/kg	10	12/27/19 02:57	PK	EPA 300.0
Solids, Percent	73.3		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-8

 Lab Sample ID:
 TD49314-9A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 73.3

Project: ETECH:New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356985.D 1 12/28/19 07:21 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.00 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 8.6 4.2 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 99%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: SW-8

 Lab Sample ID:
 TD49314-9A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 73.3

Project: ETECH: New Mexico

Initial Weight Final Volume
Run #1 20.2 g 1.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^c	1.22 ND	6.8 6.8	0.58 1.2	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	Limits	
84-15-1	o-Terphenyl	76%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-18

 Lab Sample ID:
 TD49314-10
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 86.6

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487846.D
 5
 12/24/19 19:51
 ZQ
 12/24/19 14:25
 n/a
 VR2356

Run #2

Run #1 5.06 g 100 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71 42 2	D	ND	0.0020	0.0020	/1	
71-43-2	Benzene	ND	0.0029	0.0020	mg/kg	
108-88-3	Toluene	ND	0.023	0.0052	mg/kg	
100-41-4	Ethylbenzene	ND	0.023	0.0058	mg/kg	
1330-20-7	Xylene (total)	ND	0.023	0.0053	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	103%		59-12	26%	
2037-26-5	Toluene-D8	89%		70-13	39%	
460-00-4	4-Bromofluorobenzene	93%		63-13	38%	
17060-07-0	1.2-Dichloroethane-D4	97%		54-12	20/	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-18

 Lab Sample ID:
 TD49314-10
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 86.6

Project: ETECH:New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	298	57	mg/kg	10	12/27/19 03:14	PK	EPA 300.0
Solids, Percent	86.6		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-18

 Lab Sample ID:
 TD49314-10A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 86.6

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356987.D 1 12/28/19 07:44 ALA n/a n/a L:GLA2846

Run #2

Run #1 4.90 g 5.0 ml Methanol Aliquot

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.7 3.3 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 99%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-18

 Lab Sample ID:
 TD49314-10A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 86.6

Project: ETECH: New Mexico

 Run #1 a
 LG002613.D
 1
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #2
 L:OP15957
 L:GLG920

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
D 110		

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^c	1.21 ND	5.7 5.7	0.49 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	Limits	
84-15-1	o-Terphenyl	77%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: FL-19

 Lab Sample ID:
 TD49314-11
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 87.3

Project: ETECH: New Mexico

| File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch | Run #1 | R03487847.D | 5 | 12/24/19 20:18 | ZQ | 12/24/19 14:25 | n/a | VR2356 | Run #2 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356 | VR2356

Run #2

Run #1 5.12 g 100 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	0.0028 0.022 0.022 0.022	0.0020 0.0051 0.0056 0.0052	mg/kg mg/kg mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	106% 89% 92%		59-12 70-13 63-13	39%	
17060-07-0	1,2-Dichloroethane-D4	96%		54-12	23%	

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-19

 Lab Sample ID:
 TD49314-11
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 87.3

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	156	28	mg/kg	5	12/27/19 03:30	PK	EPA 300.0
Solids, Percent	87.3		%	1	12/26/19	LC	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-19

 Lab Sample ID:
 TD49314-11A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 87.3

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356989.D 1 12/28/19 08:07 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.20 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.2 3.0 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 97%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 95%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-19

 Lab Sample ID:
 TD49314-11A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 87.3

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002614.D 1 12/31/19 10:54 ALA 12/30/19 09:30 L:OP15957 L:GLG920
Run #2

Run #1 20.0 g Final Volume

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^c	1.40 ND	5.7 5.7	0.49 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	73%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: EW

 Lab Sample ID:
 TD49314-12
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 83.9

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487848.D
 5
 12/24/19 20:45
 ZQ
 12/24/19 14:25
 n/a
 VR2356

Run #2

Run #1 5.00 g 100 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	0.0030 0.024 0.024	0.0021 0.0055 0.0060	mg/kg mg/kg mg/kg	
1330-20-7	Xylene (total)	ND	0.024	0.0055	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	99%		59-12	26%	
2037-26-5	Toluene-D8	87%		70-139%		
460-00-4	4-Bromofluorobenzene	93%		63-13	38%	
			54-123%			

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: EW

 Lab Sample ID:
 TD49314-12
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Percent Solids:
 83.9

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	38.8	12	mg/kg	2	12/27/19 03:47	PK	EPA 300.0
Solids, Percent	83.9		%	1	12/26/19	LC	SM 2540 G

3.23

Report of Analysis

Page 1 of 1

Client Sample ID: EW

 Lab Sample ID:
 TD49314-12A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 83.9

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356991.D 1 12/28/19 08:30 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.20 g 5.0 ml 100 ul
Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.7 3.3 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 99%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Report of Analysis

Page 1 of 1

Client Sample ID: EW

 Lab Sample ID:
 TD49314-12A
 Date Sampled:
 12/17/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 83.9

Project: ETECH: New Mexico

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 a	LG002615.D	1	12/31/19 11:16	ALA	12/30/19 09:30	L:OP15957	L:GLG920
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^c	3.58 ND	5.9 5.9	0.51 1.1	mg/kg mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	88%		31-1	27%	

- (a) Analysis performed at SGS Scott, LA.
- (b) Associated CCV outside of control limits high.
- (c) Associated CCV outside of control limits high, sample was ND.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-15

 Lab Sample ID:
 TD49314-13
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8260C
 SW846 5030A
 Percent Solids:
 87.5

Project: ETECH: New Mexico

 File ID
 DF
 Analyzed
 By
 Prep Date
 Prep Batch
 Analytical Batch

 Run #1
 R03487849.D
 5
 12/24/19 21:12
 ZQ
 12/24/19 14:25
 n/a
 VR2356

Run #2

Run #1 5.15 g 100 ml
Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3	Benzene Toluene	ND ND	0.0028 0.022	0.0019 0.0051	mg/kg mg/kg	
100-41-4 1330-20-7	Ethylbenzene Xylene (total)	ND ND	0.022 0.022	0.0056 0.0052	mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	102%		59-12		
2037-26-5	Toluene-D8	88%	70-139% 63-138%			
460-00-4 17060-07-0	4-Bromofluorobenzene 1.2-Dichloroethane-D4	93% 97%		63-13 54-12		

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value



Report of Analysis

Page 1 of 1

Client Sample ID: FL-15

Lab Sample ID: TD49314-13 Matrix: SO - Soil **Date Sampled:** 12/16/19 **Date Received:** 12/24/19 **Percent Solids:** 87.5

Project: ETECH: New Mexico

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	170	28	mg/kg	5	12/27/19 04:04	PK	EPA 300.0
Solids, Percent	87.5		%	1	12/26/19	LC	SM 2540 G

3.25

Report of Analysis

Page 1 of 1

Client Sample ID: FL-15

 Lab Sample ID:
 TD49314-13A
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 Percent Solids:
 87.5

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LA356967.D 1 12/28/19 03:56 ALA n/a n/a L:GLA2846

Run #2

Run #1 5.00 g 5.0 ml 100 ul

Run #2

CAS No. Compound Result RL MDL Units Q

TPH-GRO (C6-C10) ND 6.4 3.1 mg/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 460-00-4
 4-Bromofluorobenzene
 99%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 96%
 52-140%

(a) Analysis performed at SGS Scott, LA.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: FL-15

 Lab Sample ID:
 TD49314-13A
 Date Sampled:
 12/16/19

 Matrix:
 SO - Soil
 Date Received:
 12/24/19

 Method:
 SW846 8015C
 SW846 3546
 Percent Solids:
 87.5

Project: ETECH: New Mexico

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch
Run #1 a LG002616.D 1 12/31/19 11:37 ALA 12/30/19 09:30 L:OP15957 L:GLG920
Run #2

Run #1 20.1 g 1.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28) ^b TPH-ORO (> C28-C40) ^b	2.21 1.11	5.7 5.7	0.49 1.1	mg/kg mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
84-15-1	o-Terphenyl	65%		31-1	27%	

(a) Analysis performed at SGS Scott, LA.

(b) Associated CCV outside of control limits high.

ND = Not detected

MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound



Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

SGS			CHAIN SGS Nor 10165 Harw TEL. 713-	th Am in Dr, S 271-470	erica I te 150 H	nc. lous	- Ho ston, 13-27	ous TX	ston 7703					FED-E	O 9	ng#	7246	0		Bottle Ord	der Control	1614-	-46	0F_Z
Client / Reporting Information			100	t Inform					-10		100						Ren	11001	b a	Anal	vses		7/	Matrix Codes
Vey Energy Elech Enr Street Address 3100 Plains Huy City State Lovington Nm 86260	Project #	os City	Rd 1, NM State	Billing Compar	Informati	on (i	if diffe	erent Y	from I	Repor	t to)	wy	sticle						· · ·		yses			DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL- Sludge SEO-Sediment OI - Oil
Phone # Sampler(s) Name(s) Sampler(s) Name(s) Det Clow Au Phone #	Client Purchase Project Manage	Order#		Crty					State			Zıç			1015 M. By	6.300								LIQ - Other Liquid AIR - Air SOL - Other Sofid WP - Wijne FB - Field Blank EB - Equipment Blank RB - Rinse Blank
Single Field ID / Point of Collection FL-16	Date 17114119	Time	Sampled By	Matrix	# of bottles	ō	NeOH	5	T SO ST	T às	T	tiles 70SHBN	ENCORE	X 8701	8 HOLX	1 17								TB - Tnp Blank
2 FL-17 3 5w-2 4 5w-3 5 5w-7	12/16/19	7:30 10100 10:15		Í											1	1								
6 5w-9 7 3w-10	9/	10:45 10:30	J	1	J			-		+				1		1						+	+	
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Emergency & Rush T/A data available via Lablink Appro		mple Custody m	ust be docum	Comm Comm	ercial "A" ercial "B" ercial "C" elow eac	= Re = Re h tin	sults +	QC QC	Summ es cha	nary +	poss	l Raw essio	Data n, inclu	ding c	ourier	dolivo	ry.					No.		
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Date / Time:

EHSA-QAC-0024-00-FORM-Houston - Standard COC

TD49314: Chain of Custody Page 1 of 6

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CHAIN OF CUSTODY
SGS North America Inc. - Houston

USTODY 1093 b

PAGE 2 OF 2

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							gs.com/e			,,,	•				SG	iS Que	te#					SGS	3 Job# 4u3	4		TM	49314
Compar	Client / Reporting Information				Project	Inform	nation												Red	a u e :	sted	d An				14	Matrix Codes
		U V	t Name:	les Cit	7 Pd	Zu	neide	w																			DW - Drinking Water GW - Ground Water
310 City Loui	thersy Etechtin O Plains Huy State nuton, NM Contact E-mai	Zip City	aval	Eddy,	NM State	Billing	Informati ny Name	on (if	differe	ent fro	m Rep	ort to															WW - Water SW - Surface Water SO - Soil SL- Sludge SEO-Sediment
Project C	Contact E-mai	I Projec	t #			Street	Address				-				+		UKI										OI - Oil LIO - Other Liquid AIR - Air
Phone #	-406-4450	Client	Purchase	Order#		City				S	tate		Z	ip.	-		ME	-									SOL - Other Solid WP - Wipe FB - Field Blank
Sampler	(s) Name(s)	Phone # Project	t Manager			Attentio	ın.								1		POLS M	E 30									EB - Equipment Blank RB - Rinse Blank TB - Tnp Blank
5GS				Col	lection				- Tex	Numbe	T	_	T 1	3 2		(6)	T	1									10 - Hip Siank
Sample #	Field ID / Point of Collect		Date	Time	Sampled By	Matrix	# of bottles	P	ZAMAOH	HOSO4	NON	DI Wate	TSP	ENCC	TO C	18.1	1PH	2			-	1					LAB USE ONLY
9	5w-8	1211	7/14	10:30	1	,	4				H	+	+	\dagger	X	+	<u> </u>	<u>\</u>			-	+	+	+	+	+	
10	FL-18 FL-19			11:45		+	\vdash	\mathbb{H}			H	-	H	П	\square	1	\prod	T					1				
12	EW	1		17:30	1	4	4							\parallel	9	J	V	V			\vdash	-	+	+	+		
13	FL-15	12/11	vila	1:40	X	Λ	X	H	+	+	H	+	+	H	X		X	X				-		F	-		
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	Turnaround Time (Business days)					1179818			ata De	elivera	able in	forma	tion	11	975053			Liliubi		32313029	Con	ment	/ Cno	nial last	ructions		
	Standard 10 Business Days 5 Business Days RUSH 4 Business Days RUSH	Approve	d By (SGS	PM): / Date:			Commerc Commerc FULT1 (L	ial "A" ial "B"	' (Leve	el 1}			TRRE	Forma	at		T				1 000		у оре	Jai IIIsi	ructions		
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	Emergency & Rush T/A data available via L	ablink Approval needer				Comm	nercial "B"	= Res	ults + C	C Sur	mman	+ Part	al Rav	v Data													
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EHS	SA-QAC-0024-00-FORM-Houston - Standar	4 COC																	iitt	D.//WW	w.sg	s.com	en/te	rns-ar	nd-cond	itions	

TD49314: Chain of Custody Page 2 of 6

SGS Sample Receipt Summary

Job Number: TD	49314		Client:	KEY ENERGY	Project:	WHITE CITY RD			
Date / Time Received: _1	2/24/201	9 12:00	:00 PM	Delv Method:	FEDEX Airbill #'s:	493390072460			
# of Coolers: 2		Therm	ID: <u>IR-</u> 3	3;	Temp Ad	justment Factor: 0;	,		
Cooler Temps (Initial/Adj	usted):	#1: (2/2	2); #2: (2	.5/2.5);					
Test Strip Lot #s:	pH 1-12:		10D0391	pH 12+:	Oth	er: (Specify)			
Cooler Information	<u>_Y</u>	or	<u>N</u>	<u>N/A</u>	Sample Information		Y or	N_	N/A
1. Custody Seals Present:	✓]			Sample labels present or	ı bottles:	✓		
2. Custody Seals Intact:	✓]			Samples preserved property.	erly:	✓		
3. Temp criteria achieved:	✓]			Sufficient volume recvd for	or analysis:	✓		
4. Cooler temp verification:					4. Condition of sample:		Inta	ct	
3. Cooler media:	Ice (Bag)	!			5. Sample recvd within HT:		✓		
Trip Blank Information	<u> Y</u>	or	N	N/A	6. Dates/Times/IDs on COC	match Sample Label	\checkmark		
Trip Blank present / coole	ır. 🗆	1	П	~	7. Container labeling compl	ete:	✓		
	_			_	8. Analysis requested is cle	ar:	✓		
2. Trip Blank listed on COC:]		✓	9. VOCs headspace free:				✓
3. Type Of TB Received		/ or	S	N/A	10. Bottles received for uns	pecified tests		\checkmark	
]			11. COC Present:		✓		
Misc. Information					12. Special Instructions (cor	mpositing/filtering) clear:	: 🗌		✓
Number of terracores:		N	lumber of	Lab Filtered Metals:	13. Voa Soil Kits/Jars receiv	red past 48hrs?			
Number of 5035 Field Kits:					14. % Solids Jar received?				
Residual Chlorine Test Strip	Lot #:				15. Residual Chlorine Prese	ent?			

Comments

TD49314: Chain of Custody Page 3 of 6

Sample Receipt Log

 Job #:
 TD49314
 Date / Time Received:
 12/24/2019 12:00:00 PM
 Initials:
 MAURICIM

Client: KEY ENERGY

Cooler#	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD49314-1	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-1	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-1	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-1	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-2	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-2	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-2	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-2	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-3	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-3	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-3	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-3	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-4	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-4	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-4	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-4	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-5	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-5	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-5	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-5	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-6	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-6	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-6	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2

TD49314: Chain of Custody Page 4 of 6

Page 3 of 4

Sample Receipt Log

 Job #:
 TD49314
 Date / Time Received:
 12/24/2019 12:00:00 PM
 Initials:
 MAURICIM

Client: KEY ENERGY

Cooler#	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD49314-6	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-7	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-7	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-7	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
1	TD49314-7	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2	0	2
2	TD49314-8	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-8	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-8	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-8	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-9	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-9	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-9	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-9	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-10	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-10	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-10	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-10	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-11	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-11	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-11	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-11	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-12	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-12	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5

TD49314: Chain of Custody Page 5 of 6



Page 4 of 4

Sample Receipt Log

 Job #:
 TD49314
 Date / Time Received:
 12/24/2019 12:00:00 PM
 Initials:
 MAURICIM

Client: KEY ENERGY

Cooler#	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
2	TD49314-12	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-12	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-13	8oz	1	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-13	4oz	2	2-109	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-13	4oz	3	VRFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5
2	TD49314-13	4oz	4	TPHFREEZ	N/P	Note #2 - Preservative check not applicable.	IR-3	2.5	0	2.5

TD49314: Chain of Custody Page 6 of 6





Section 5

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method: SW846 8260C

Method Blank Summary

Job Number: TD49314

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
VR2356-MB	R03487831.D	1	12/24/19	ZQ	n/a	n/a	VR2356

The QC reported here applies to the following samples:

TD49314-1, TD49314-2, TD49314-3, TD49314-4, TD49314-5, TD49314-6, TD49314-7, TD49314-8, TD49314-9, TD49314-10, TD49314-11, TD49314-12, TD49314-13

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	0.50	0.35	ug/kg
100-41-4	Ethylbenzene	ND	4.0	1.0	ug/kg
108-88-3	Toluene	ND	4.0	0.92	ug/kg
1330-20-7	Xylene (total)	ND	4.0	0.93	ug/kg

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	115%	59-126%
2037-26-5	Toluene-D8	90%	70-139%
460-00-4	4-Bromofluorobenzene	97%	63-138%
17060-07-0	1,2-Dichloroethane-D4	105%	54-123%

Method: SW846 8260C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49314

Account: KEYENTXH Key Energy **Project:** ETECH:New Mexico

Sample VR2356-BS VR2356-BSD	File ID R03487829.D R03487834.D	DF 1 5	Analyzed 12/24/19 12/24/19	By ZQ ZQ	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch VR2356 VR2356

The QC reported here applies to the following samples:

TD49314-1, TD49314-2, TD49314-3, TD49314-4, TD49314-5, TD49314-6, TD49314-7, TD49314-8, TD49314-9, TD49314-10, TD49314-11, TD49314-12, TD49314-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	50	47.8	96	45.6	91	5	58-124/30
100-41-4	Ethylbenzene	50	43.8	88	41.1	82	6	57-124/30
108-88-3	Toluene	50	43.3	87	40.9	82	6	67-119/30
1330-20-7	Xylene (total)	150	132	88	125	83	5	62-120/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	117%	119%	59-126%
2037-26-5	Toluene-D8	90%	89%	70-139%
460-00-4	4-Bromofluorobenzene	98%	99%	63-138%
17060-07-0	1,2-Dichloroethane-D4	103%	101%	54-123%

^{* =} Outside of Control Limits.



Section 6

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49314 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP56156/GN3440	5.0	0.0	mg/kg	100	99.9	99.9	90-110%

Associated Samples:

Batch GP56156: TD49314-1, TD49314-2, TD49314-3, TD49314-4, TD49314-5, TD49314-6, TD49314-7, TD49314-8, TD49314-9, TD49314-10, TD49314-11, TD49314-12, TD49314-13

(*) Outside of QC limits

TD49314

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49314 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP56156/GN3440	TD49314-1	mg/kg	299	299	0.0	0-20%
Solids, Percent	GN3417	TD49314-1	%	85.7	85.3		0-5%

Associated Samples:

Batch GN3417: TD49314-1, TD49314-2, TD49314-3, TD49314-4, TD49314-5, TD49314-6, TD49314-7, TD49314-8, TD49314-9, TD49314-10, TD49314-11, TD49314-12, TD49314-13

Batch GP56156: TD49314-1, TD49314-2, TD49314-3, TD49314-4, TD49314-5, TD49314-6, TD49314-7, TD49314-8, TD49314-9, TD49314-10, TD49314-11, TD49314-12, TD49314-13 (*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49314 Account: KEYENTXH - Key Energy Project: ETECH:New Mexico

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP56156/GN3440	TD49314-1	mg/kg	299	1160	563	22.7N	80-120%

Associated Samples:

Batch GP56156: TD49314-1, TD49314-2, TD49314-3, TD49314-4, TD49314-5, TD49314-6, TD49314-7, TD49314-8, TD49314-9, TD49314-10, TD49314-11, TD49314-12, TD49314-13 (*) Outside of QC limits

- (N) Matrix Spike Rec. outside of QC limits

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Section 7

Misc. Forms

Custody Documents and Other Forms

(SGS Scott, LA)

Includes the following where applicable:

· Chain of Custody

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mar a				10165 Ha TEL, 713-										SGS Quo	te #	***				SGS Job	#	TD	49314		
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City	State Zip	City		State	Company		n (n dinei	ent in	OIII KE	port				,V8015GRO				i	1						SL- Sludge SED-Sediment
	iston TX 77036																		ļ	1					OI - Oil LIQ - Other Liquid
Project		Project #			Street Ac	ddress								V5035SPM					İ			ļ		ļ	AIR - Air
	a.brown@sgs.com Fax#	Client Purchase 0	Out of the		City			- 5	State			Zip		- 2032						ì		1	1		SOL - Other Solid WP - Wipe
Phone #	-271-4700	Client Purchase	Jidei #		0,													1							FB-Field Blank EB-Equipment Blank
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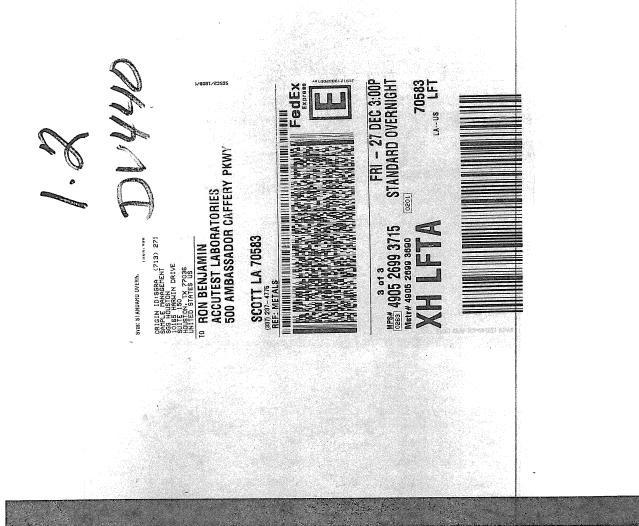
TD49314: Chain of Custody
Page 1 of 4
SGS Scott, LA

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CHAIN OF CUSTODY	Page 2 of 2
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TD49314: Chain of Custody Page 2 of 4



TD49314: Chain of Custody Page 3 of 4

7.1

SGS Sample Receipt Summary

Job Number:	TD49314	Client	: SGS NORTH AMERICA		Project: ETECH NEW ME	EXICO		
Date / Time Received:	12/27/2019	9:30:00 AM	Delivery Method:	FedEx	Airbill #'s: 4905 2699 37	15		
Cooler Temps (Initial/Adj	usted): <u>#</u> 1	1: (1.2/1.2);						
Cooler Security	Y or N	_	Y or N	Sample Integr	rity - Documentation	<u>Y</u> 0	or N	
1. Custody Seals Present:	V	_		1. Sample labe	Is present on bottles:	✓		
2. Custody Seals Intact:	✓	4. Smpl Date	es/Time OK 🔽 🗌	2. Container lat	peling complete:	✓		
Cooler Temperature	<u>Y</u>	or N		3. Sample contr	ainer label / COC agree:	✓		
Temp criteria achieved:	✓			Sample Integ	rity - Condition	<u>Y</u> 0	or N	
2. Thermometer ID:	DV44	0; DV440;	-	Sample recve	· -	✓		
3. Cooler media:	lce (di	irect contact)	-		s accounted for:	<u> </u>		
4. No. Coolers:		1		3. Condition of		_	tact	
Quality Control Preserva	<u>ition Y</u>	or N N/A	<u>\</u>	Sample Integ	rity - Instructions	Υo	or N	N/A
1. Trip Blank present / coole	er:				quested is clear:	<u> </u>		
2. Trip Blank listed on COC:					ived for unspecified tests		✓	
3. Samples preserved prope	erly:			3. Sufficient vo	olume recvd for analysis:	✓		
4. VOCs headspace free:				4. Compositinç	g instructions clear:			✓
				5. Filtering inst	tructions clear:			\checkmark
Comments								

TD49314: Chain of Custody Page 4 of 4



Section 8

GC Volatiles

QC Data Summaries

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH: New Mexico

Sample GLC2577-MB1	File ID LC081072.D	DF 1	Analyzed 12/27/19	By NN	Prep Date n/a	Prep Batch n/a	Analytical Batch GLC2577

The QC reported here applies to the following samples:

Method: SW846 8015C

TD49314-7A

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	5.50	5.0	2.4	mg/kg
CAS No.	Surrogate Recoveries		Limits		
CAS No. 460-00-4	Surrogate Recoveries 4-Bromofluorobenzene	92%	Limits 63-139		

Method: SW846 8015C

Method Blank Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLA2846-MB1	File ID LA356889.D	DF 1	Analyzed 12/27/19	By NN	Prep Date n/a	Prep Batch n/a	Analytical Batch GLA2846

The QC reported here applies to the following samples:

TD49314-1A, TD49314-2A, TD49314-3A, TD49314-4A, TD49314-5A, TD49314-6A, TD49314-8A, TD49314-9A, TD49314-10A, TD49314-11A, TD49314-12A, TD49314-13A

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	ND	5.0	2.4	mg/kg
CAS No.	Surrogate Recoveries		Limit	s	

 460-00-4
 4-Bromofluorobenzene
 98%
 63-139%

 540-36-3
 1,4-Difluorobenzene
 98%
 52-140%

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample File ID DF Analyzed By GLC2577-BS1 LC081070.D 1 12/27/19 NN GLC2577-BSD1 LC081071.D 1 12/27/19 NN	Prep DatePrep BatchAnalytical Batchn/an/aGLC2577n/an/aGLC2577
--	---

The QC reported here applies to the following samples:

1,4-Difluorobenzene

TD49314-7A

540-36-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	53.0	106	51.4	103	3	79-121/6
CAS No.	Surrogate Recoveries	BSP	BSI)	Limits			
460-00-4	4-Bromofluorobenzene	112%	1079	%	63-139%	,)		

52-140%

102%

^{* =} Outside of Control Limits.

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample GLA2846-BS2	File ID LA356885.D	DF	Analyzed 12/27/19	By NN	Prep Date	Prep Batch	Analytical Batch GLA2846
GLA2846-BSD2	LA356887.D	1	12/27/19	NN	n/a n/a	n/a	GLA2846

The QC reported here applies to the following samples:

TD49314-1A, TD49314-2A, TD49314-3A, TD49314-4A, TD49314-5A, TD49314-6A, TD49314-8A, TD49314-9A, TD49314-10A, TD49314-11A, TD49314-12A, TD49314-13A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	50	41.7	83	42.9	86	3	79-121/6
CAS No.	Surrogate Recoveries	BSP	BSI)	Limits			
460-00-4 540-36-3	4-Bromofluorobenzene 1.4-Difluorobenzene	98% 99%	98% 98%		63-139% 52-140%			

^{* =} Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH: New Mexico

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA60298-5MS	LC081075.D	1	12/27/19	NN	n/a	n/a	GLC2577
LA60298-5MSD	LC081076.D	1	12/27/19	NN	n/a	n/a	GLC2577
LA60298-5	LC081079.D	1	12/27/19	NN	n/a	n/a	GLC2577

The QC reported here applies to the following samples:

Method: SW846 8015C

TD49314-7A

CAS No.	Compound	LA60298-5 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	3.81	96.2	89.2	89	96.2	92.6	92	4	79-121/6
CAS No.	Cumus asts Deservaries	MC	MCD	T A /		T,				
C115 110.	Surrogate Recoveries	MS	MSD	LA	60298-5	Limits				

^{* =} Outside of Control Limits.

Method: SW846 8015C

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA356955.D	1	12/28/19	NN	n/a	n/a	GLA2846
LA356957.D	1	12/28/19	NN	n/a	n/a	GLA2846
LA356953.D	1	12/28/19	NN	n/a	n/a	GLA2846
	LA356955.D LA356957.D	LA356955.D 1 LA356957.D 1	LA356955.D 1 12/28/19 LA356957.D 1 12/28/19	LA356955.D 1 12/28/19 NN LA356957.D 1 12/28/19 NN	LA356955.D 1 12/28/19 NN n/a LA356957.D 1 12/28/19 NN n/a	LA356955.D 1 12/28/19 NN n/a n/a LA356957.D 1 12/28/19 NN n/a n/a

The QC reported here applies to the following samples:

TD49314-1A, TD49314-2A, TD49314-3A, TD49314-4A, TD49314-5A, TD49314-6A, TD49314-8A, TD49314-9A, TD49314-10A, TD49314-11A, TD49314-12A, TD49314-13A

CAS No.	Compound	LA60258-8 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	481	401	83	481	413	86	3	79-121/6
CAS No.	Surrogate Recoveries	MS	MSD	LA	60258-8	Limits				
460-00-4 540-36-3	4-Bromofluorobenzene 1,4-Difluorobenzene	98% 98%	98% 100%	96% 97%		63-139% 52-140%				

^{* =} Outside of Control Limits.



Section 9

GC/LC Semi-volatiles

QC Data Summaries

(SGS Scott, LA)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method: SW846 8015C

Method Blank Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

Sample OP15957-MB	File ID LG002596.D	DF 1	Analyzed 12/31/19	By PC	Prep Date 12/30/19	Prep Batch OP15957	Analytical Batch GLG920

The QC reported here applies to the following samples:

TD49314-1A, TD49314-2A, TD49314-3A, TD49314-4A, TD49314-5A, TD49314-6A, TD49314-7A, TD49314-8A, TD49314-9A, TD49314-10A, TD49314-11A, TD49314-12A, TD49314-13A

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-DRO (C10-C28) TPH-ORO (> C28-C40)	ND ND	5.0 5.0	0.43 0.92	mg/kg mg/kg
CAS No.	Surrogate Recoveries		Limi	ts	
84-15-1	o-Terphenyl	88%	31-12	27%	

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LG002597.D	1	12/31/19	PC	12/30/19	OP15957	GLG920
LG002598.D	1	12/31/19	PC	12/30/19	OP15957	GLG920
]	LG002597.D	LG002597.D 1	LG002597.D 1 12/31/19	LG002597.D 1 12/31/19 PC	LG002597.D 1 12/31/19 PC 12/30/19	LG002597.D 1 12/31/19 PC 12/30/19 OP15957

The QC reported here applies to the following samples:

TD49314-1A, TD49314-2A, TD49314-3A, TD49314-4A, TD49314-5A, TD49314-6A, TD49314-7A, TD49314-8A, TD49314-9A, TD49314-10A, TD49314-11A, TD49314-12A, TD49314-13A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	150	138	92	145	97	5	49-118/19
CAS No.	Surrogate Recoveries	BSP	BSI)	Limits			
84-15-1	o-Terphenyl	88%	94%	ó	31-1279	ó		

^{* =} Outside of Control Limits.

Method: SW846 8015C

Blank Spike/Blank Spike Duplicate Summary

Job Number: TD49314

Account: ALGC SGS Houston, TX

Project: KEYENTXH: ETECH:New Mexico

	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
599.D 1	12/31/19	PC	12/30/19	OP15957	GLG920
600.D 1	12/31/19	PC	12/30/19	OP15957	GLG920

The QC reported here applies to the following samples:

TD49314-1A, TD49314-2A, TD49314-3A, TD49314-4A, TD49314-5A, TD49314-6A, TD49314-7A, TD49314-8A, TD49314-9A, TD49314-10A, TD49314-11A, TD49314-12A, TD49314-13A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-ORO (> C28-C40)	59.7	53.5	90	54.7	91	2	60-127/10
CAS No.	Surrogate Recoveries	BSP BSD)	Limits			
84-15-1	o-Terphenyl	84%	84%	Ď	31-127%	ó		

^{* =} Outside of Control Limits.



The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

01/08/20

Technical Report for

Key Energy

ETECH: Whites City, Rd.

SGS Job Number: TD49693

Sampling Date: 01/03/20



Key Energy 1301 McKinney Street Houston, TX 77010

msticker@keyenergy.com; jbest@keyenergy.com;

joel@etechenv.com ATTN: Maury Sticker

Total number of pages in report: 21

ELAP ACCREONE TNI FABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

John Watson Technical Director

If the

Client Service contact: Electa Brown 713-271-4700

Certifications: TX (T104704220-19-34) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2018-129) VA (10171)

This report shall not be reproduced, except in its entirety, without the written approval of SGS. Test results relate only to samples analyzed.

Sections:

Table of Contents

-1-

Section 1: Sample Summary 3	3
Section 2: Summary of Hits4	
Section 3: Sample Results 5	5
3.1: TD49693-1: FL-3B	5
3.2: TD49693-2: FL-4B	7
3.3: TD49693-3: FL-7B	3
3.4: TD49693-4: FL-9B)
3.5: TD49693-5: WW-B	0
3.6: TD49693-6: NW-4B	1
3.7: TD49693-7: SW-1B	2
3.8: TD49693-8: SW-5B	13
Section 4: Misc. Forms	4
4.1: Chain of Custody1	15
Section 5: General Chemistry - QC Data Summaries 1	
5.1: Method Blank and Spike Results Summary	
5.2: Duplicate Results Summary	
5.3: Matrix Spike Results Summary	







SGS North America Inc.

Sample Summary

Key Energy

ETECH: Whites City, Rd.

Job No: TD49693

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
TD49693-1	01/03/20	13:00	01/07/20	SO	Soil	FL-3B
TD49693-2	01/03/20	12:30	01/07/20	SO	Soil	FL-4B
TD49693-3	01/03/20	12:00	01/07/20	SO	Soil	FL-7B
TD49693-4	01/03/20	11:30	01/07/20	SO	Soil	FL-9B
TD49693-5	01/03/20	10:00	01/07/20	SO	Soil	WW-B
TD49693-6	01/03/20	11:00	01/07/20	SO	Soil	NW-4B
TD49693-7	01/03/20	13:30	01/07/20	SO	Soil	SW-1B
TD49693-8	01/03/20	10:30	01/07/20	SO	Soil	SW-5B



Summary of Hits Job Number: TD49693 **Account:** Key Energy

Project: ETECH: Whites City, Rd.

Collected: 01/03/20

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD49693-1	FL-3B					
Chloride		13.2	5.9		mg/kg	EPA 300.0
TD49693-2	FL-4B					
Chloride		11.1	6.0		mg/kg	EPA 300.0
TD49693-3	FL-7B					
Chloride		16.2	5.9		mg/kg	EPA 300.0
TD49693-4	FL-9B					
Chloride		34.2	5.9		mg/kg	EPA 300.0
TD49693-5	WW-B					
Chloride		17.9	5.4		mg/kg	EPA 300.0
TD49693-6	NW-4B					
Chloride		11.9	5.4		mg/kg	EPA 300.0
TD49693-7	SW-1B					
Chloride		12.1	5.4		mg/kg	EPA 300.0
TD49693-8	SW-5B					
Chloride		12.0	5.4		mg/kg	EPA 300.0



Section 3

Sample	e Re	esu	lts

Report of Analysis

SGS North America Inc.

Report of Analysis

Page 1 of 1

Client Sample ID: FL-3B

Lab Sample ID: TD49693-1 Matrix: SO - Soil **Date Sampled:** 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 83.6

Project: ETECH: Whites City, Rd.

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	13.2	5.9	mg/kg	1	01/07/20 22:06	PK	EPA 300.0
Solids, Percent	83.6		%	1	01/08/20	PK	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-4B

Lab Sample ID: TD49693-2 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 83.6

Project: ETECH: Whites City, Rd.

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	11.1	6.0	mg/kg	1	01/07/20 22:57	PK	EPA 300.0
Solids, Percent	83.6		%	1	01/08/20	PK	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: FL-7B

Lab Sample ID: TD49693-3 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 83.7

Project: ETECH: Whites City, Rd.

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	Ву	Method
Chloride	16.2	5.9	mg/kg	1	01/07/20 23:13	PK	EPA 300.0
Solids, Percent	83.7		%	1	01/08/20	PK	SM 2540 G

TD49693

Report of Analysis

Page 1 of 1

Client Sample ID: FL-9B

Lab Sample ID: TD49693-4 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 84.2

Project: ETECH: Whites City, Rd.

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	34.2	5.9	mg/kg	1	01/07/20 23:30	PK	EPA 300.0
Solids, Percent	84.2		%	1	01/08/20	PK	SM 2540 G



Report of Analysis

Page 1 of 1

Client Sample ID: WW-B

Lab Sample ID: TD49693-5 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 91.9

Project: ETECH: Whites City, Rd.

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	17.9	5.4	mg/kg	1	01/07/20 23:47	PK	EPA 300.0
Solids, Percent	91.9		%	1	01/08/20	PK	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: NW-4B

Lab Sample ID: TD49693-6 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 92.0

Project: ETECH: Whites City, Rd.

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	11.9	5.4	mg/kg	1	01/08/20 00:04	PK	EPA 300.0
Solids, Percent	92		%	1	01/08/20	PK	SM 2540 G

3.6

Report of Analysis

Page 1 of 1

Client Sample ID: SW-1B

Lab Sample ID: TD49693-7 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 91.9

Project: ETECH: Whites City, Rd.

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	12.1	5.4	mg/kg	1	01/08/20 00:55	PK	EPA 300.0
Solids, Percent	91.9		%	1	01/08/20	PK	SM 2540 G

Report of Analysis

Page 1 of 1

Client Sample ID: SW-5B

Lab Sample ID: TD49693-8 **Matrix:** SO - Soil

Date Sampled: 01/03/20 **Date Received:** 01/07/20 **Percent Solids:** 92.0

Project: ETECH: Whites City, Rd.

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	12.0	5.4	mg/kg	1	01/08/20 01:12	PK	EPA 300.0
Solids, Percent	92		%	1	01/08/20	PK	SM 2540 G

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Houston, TX

Section 4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody

EHSA-QAC-0024-00-FORM-Houston - Standard COC

CC	1	CHAIN OF	(
		SGS North Amori	

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	Client / Reporting Information	11/1/2			Project				Alle	16.8	bein			100		-				sted					<i>y</i> !	Matrix Codes
	tech Env	Project		ile's Ci	Ly R	20				100	We.	, and		100												DW - Drinking Water
Street	ddress	Street									Post Contrac						at at	-					-			WW - Water SW - Surface Water
City	60 Plains Huy State State NM 86240 Contact E-mail	City			State	Billing Information (if different from Report to) Company Name								120				1					SO - Soil SL- Sludge			
hou	inton NM 88260				Street A	y F	vo.	14.							0							1			SED-Sediment Oi - Oil	
Project	Contact E-mail	Project	#	3		Street A	dress		,	1						2			-							LIQ - Other Liquid
20	er howy protections.	ron		4												4	-									SOL - Other Solid WP - Wipe
43°	Contact E-mail Ped Lowy Procedechense. 2-466-4650 (3) Namo(s) Phone #	Client P	urchase	Order #		City					State			Zip												FB - Field Blank
smpte	(S) Name(s) Phone #	Project	Manage	,		Attention										3										EB • Equipment Blank
2	vel boury	7.70	18.			Ma	111-	,	51	v.	100	-				0	- 1		'							RB - Rense Blank TB - Trip Blank
		200		Colle	ection		1			Num	ber of p	presen			Total T	hloria										
SGS smple#	Field ID / Point of Collection		ite	Twne	Sampled By	Matrix	# of bottles	ō	OH CHANGE	103	50 P	Water	H	HBO	ENCORE	0										
1	FL-3b	100	7	100	3L	Matrix	Domes	Ī	2 2	I	Y 2	0	× 1	Z	to o	V		-	+	+	+	+	-	+		LAB USE ONLY
2	F1-46	113	20		36	-5		Н	+	+	+	+	-	+	+	X	-	+	-	+-	+-	- 46	-			
3	FL.76			12:30		1	+	Н	+	Н	+	+	+	+	+	1		+	+	+	+-	+	+-	-		× ;;
4	F1-96	\vdash		12:00	++-	\vdash	-	Н	+	Н	+	+	Н	+	+	1		-	+	+-	+	-	+	-	_	
-	- · ·	\vdash		11:30	\vdash	-	-	Н	+	Н	+	+	H	+	L		-	-4	_	-	+	+	-	\perp	_	
e e	WWb	\vdash		10:00		\vdash	-	H	+	Н	-	+	\vdash	+	+	H	- 1		-	-	_	1	_			
7	NW-46	\vdash		11:00		\vdash	-	Н	-	Н	-	\perp	4			\sqcup	_			1 is	_	-	1			
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TD49693: Chain of Custody Page 1 of 3

http://www.sgs.com/en/terms-and-conditions

Page 1 of 2

SGS Sample Receipt Summary

Job Number: TD	49693		Client:	ETECH ENV	Project	:: WHITE CITY RD			
Date / Time Received: 1	/7/2020 9	:00:00	AM	Delv Method:	FEDEX Airbill #'	s: 493390069681			
# of Coolers: 1		Therm	1 D : <u>IR-</u> 3	;	Temp A	djustment Factor:	0;		
Cooler Temps (Initial/Adj	usted): #	‡1: (2. ′	1/2.1);						
Test Strip Lot #s:	pH 1-12:		10D0391	pH 12+:	Ot	her: (Specify)			
Cooler Information	<u>Y</u>	or	<u>N</u>	<u>N/A</u>	Sample Information		<u>Y</u> c	or N	N/A
1. Custody Seals Present:			\checkmark		Sample labels present	on bottles:	✓		
2. Custody Seals Intact:					Samples preserved pro		✓		
3. Temp criteria achieved:	✓				Sufficient volume recvd	for analysis:	\checkmark		
4. Cooler temp verification:					4. Condition of sample:		In	tact	
3. Cooler media:	Ice (Bag)				5. Sample recvd within HT	*	✓		
Trip Blank Information	<u>Y</u>	or	N	N/A	6. Dates/Times/IDs on CC	C match Sample Label	✓		
Trip Blank present / coole	r 🗆		П	✓	Container labeling com	olete:	\checkmark		
					8. Analysis requested is c	ear:	\checkmark		
2. Trip Blank listed on COC:	Ш			\checkmark	VOCs headspace free:				✓
3. Type Of TB Received	_ <u>W</u>	or	S	N/A	Bottles received for ur	specified tests		✓	
					11. COC Present:		✓		
Misc. Information					12. Special Instructions (c	ompositing/filtering) clea	ar: 🗌		✓
Number of terracores:		N	lumber of I	Lab Filtered Metals:	13. Voa Soil Kits/Jars rece	ived past 48hrs?			
Number of 5035 Field Kits:					14. % Solids Jar received	?			
Residual Chlorine Test Strip	Lot #:				15. Residual Chlorine Pre	sent?			

Comments

TD49693: Chain of Custody Page 2 of 3

Page 2 of 2

Sample Receipt Log

 Job #:
 TD49693
 Date / Time Received:
 1/7/2020 9:00:00 AM
 Initials:
 DAG

Client: ETECH ENV

Cooler#	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD49693-1	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-2	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-3	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-4	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-5	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-6	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-7	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1
1	TD49693-8	4oz	1	4-14	N/P	Note #2 - Preservative check not applicable.	IR-3	2.1	0	2.1

TD49693: Chain of Custody Page 3 of 3





Houston, TX

Section 5

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

Login Number: TD49693 Account: KEYENTXH - Key Energy Project: ETECH: Whites City, Rd.

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP56265/GN3614	5.0	0.0	mg/kg	100	98.9	98.9	90-110%

5.1

Associated Samples:

Batch GP56265: TD49693-1, TD49693-2, TD49693-3, TD49693-4, TD49693-5, TD49693-6, TD49693-7, TD49693-8 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49693 Account: KEYENTXH - Key Energy Project: ETECH: Whites City, Rd.

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP56265/GN3614	TD49693-1	mg/kg	13.2	12.7	3.9	0-20%
Solids, Percent	GN3613	TD49579-1	%	99.5	99.5		0-5%

Associated Samples:

Batch GP56265: TD49693-1, TD49693-2, TD49693-3, TD49693-4, TD49693-5, TD49693-6, TD49693-7, TD49693-8
Batch GP56265: TD49693-1, TD49693-2, TD49693-3, TD49693-4, TD49693-5, TD49693-6, TD49693-7, TD49693-8
(*) Outside of QC limits

C

5.2

MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TD49693 Account: KEYENTXH - Key Energy Project: ETECH: Whites City, Rd.

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP56265/GN3614	TD49693-1	mg/kg	13.2	118	130	98.8	80-120%

§ 51

Associated Samples:

Batch GP56265: TD49693-1, TD49693-2, TD49693-3, TD49693-4, TD49693-5, TD49693-6, TD49693-7, TD49693-8

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

Appendix D Photographic Log