Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

39HHS-191205-C-1410

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?	230 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 vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

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 wells.
☑ 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
☑ Photographs including date and GIS information
☑ Topographic/Aerial maps
☑ Laboratory data including chain of custody

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.

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Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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 regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Teffanie Fawks Title: Environmental Technician

Signature: Date: 12-05-2019

email: teffanies@eeronline.com Telephone: 432-262-4203

OCD Only

Received by: Date:

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☑ Detailed description of proposed remediation technique
☑ Scaled sitemap with GPS coordinates showing delineation points
☑ Estimated volume of material to be remediated
☑ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☑ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

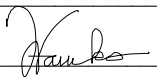
☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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 regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Teffanie Fawks Title: Environmental Technician

Signature:  Date: 12-05-2019

email: teffanies@eeronline.com Telephone: 432-262-4203

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

Site Assessment Report and Proposed Remediation Workplan

Endeavor Energy Resources, LP
NC State SWD #1
Lea County, New Mexico
Unit Letter "A", Section 3, Township 16 South, Range 32 East
Latitude 32.9624 North, Longitude 103.74775 West
NMOCD Reference No.

Prepared By:

Etech Environmental & Safety Solutions, Inc.
3100 Plains Highway
Lovington, New Mexico 88260

Daniel Dominguez

Joel W. Lowry

TABLE OF CONTENTS

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Endeavor Energy Resources, LP, has prepared this Report for the Release Site known as the NC State SWD #1. Details of the release are summarized below:

Location of Release Source

Latitude: 32.9624 Longitude: -103.74775

Provided GPS are in WGS84 format.

Site Name:	NC State SWD #1	Site Type:	SWD
Date Release Discovered:	11/5/2019	API # (if applicable):	30-025-28695

Unit Letter	Section	Township	Range	County
"A"	3	16S	32E	Lea

Surface Owner: [X] State [ ] Federal [ ] Tribal [ ] Private (Name _____)

Nature and Volume of Release

[ ] Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
[X] Produced Water	Volume Released (bbls) 85.3	Volume Recovered (bbls) 55
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	[X] Yes [ ] No [ ] N/A
[ ] Condensate	Volume Released (bbls)	Volume Recovered (bbls)
[ ] Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
[ ] Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:

Triplex pump failure

Initial Response

- [X] The source of the release has been stopped.
- [X] The impacted area has been secured to protect human health and the environment.
- [X] Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- [X] All free liquids and recoverable materials have been removed and managed appropriately.

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?	~230 Ft.
Did the 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 any occupied permanent residence, school, hospital, institution or church?	☐ Yes ☒ No
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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

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**
~230	Chloride	EPA 300.0 or SM4500 Cl B	20000 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	2500 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	1000 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 INITIAL SITE ASSESSMENT

On **November 11, 2019,** Etech conducted an initial site assessment. During the initial site assessment, a series of hand-augered soil bores and/or test trenches were advanced within the release margins in an effort to determine the vertical extent of soil impacts. In addition, hand-augered soil bores and/or test trenches 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 the presence of Volatile Organic Compounds utilizing a Photoionization Detector (PID) and/or 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, **twenty-six (26)** delineation soil samples **(SP2 thru SP6, NH1, NH2, EH1, EH2, SH1,SH2, WH1,WH2)** 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 (Max Ft. bgs) and the horizontal extent of affected soil impacted above the NMOCD Closure Criteria was adequately defined. A "Soil Chemistry Table" is provided as Table 1. Laboratory Analytical Reports are provided in Appendix C.

5.0 PROPOSED REMEDIATION PLAN

Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment, Endeavor Energy Resources, LP proposes the following remediation activities designed to advance the Site toward an approved closure:

•Utilizing mechanical equipment, excavate impacted soil affected above the NMOCD Closure Criteria in the areas characterized by sample points SP2 thru SP6 to a depth of approximately 6 inches bgs.

•The floor and sidewalls of the excavated area will be advanced until laboratory analytical results indicate impacted soil affected above the NMOCD Closure Criteria has been removed.

•Excavated material will be temporarily stockpiled on-site, then transported to an NMOCD-approved disposal facility.

•Upon excavating impacted soil affected above the NMOCD Closure Criteria, collect the requisite excavation confirmation soil samples.

•Upon receiving laboratory analytical results from excavation confirmation soil samples, backfill the excavated area with locally sourced, non-impacted "like" material.

•Excavation backfill will be contoured to match the surrounding topography.

•Upon completion of remediation activities, prepare a Remediation Summary and Site Closure Request detailing remediation activities and the results of confirmation soil samples.

6.0 SAMPLING PLAN

Upon completion of excavation activities, representative five-point composite excavation confirmation soil samples will be collected from the excavation sidewalls in each cardinal direction, representing no more than 50 linear ft. A minimum of **one (1)** representative five-point composite excavation confirmation soil sample will be collected from the base of the excavated area representing every **500 square feet**. Additional, discrete grab samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary.

7.0 TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

Remediation activities are expected to be completed **within 90 days** of receiving necessary approval(s) of the Site Assessment Summary and Proposed Remediation Plan. Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment it is estimated that approximately **480 cubic yards** is in need of removal.

8.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

Areas affected by remediation and closure activities will be substantially restored to the condition that existed prior to the release, to the extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area will be 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 and/or landowner-approved seed mixture during the first favorable growing season following closure of the site.

9.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Site Assessment Report and Proposed Remediation Plan 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 Endeavor Energy Resources, LP. Use of the information contained in this report is prohibited within the consent of Etech and/or Endeavor Energy Resources, LP.

10.0 DISTRIBUTION

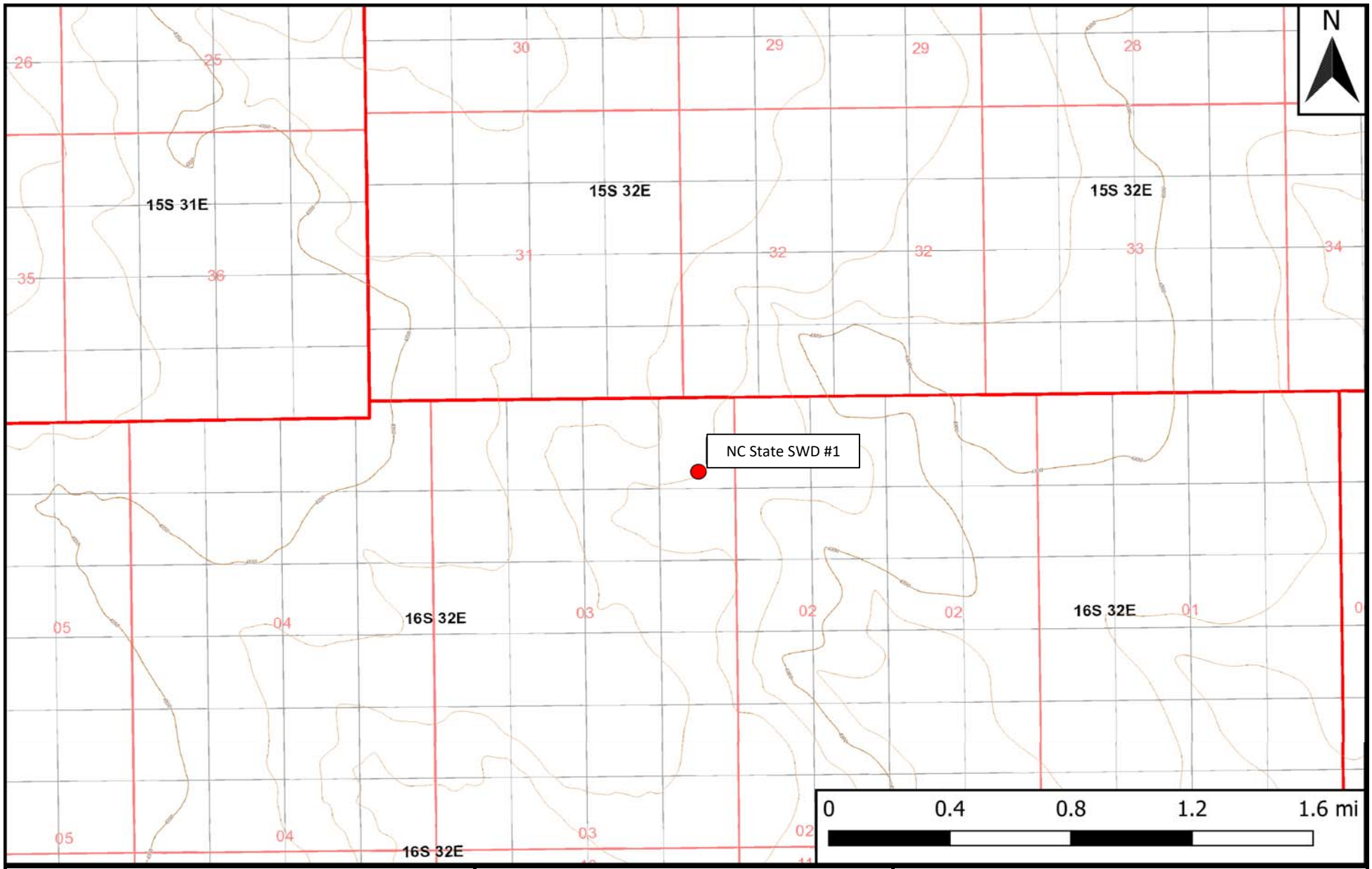
Endeavor Energy Resources, LP
110 N. Marienfeld St
Ste 200
Midland, TX 79701

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1220 South St. Francis Drive
Santa Fe, NM 87505

United States Department of the Interior
Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

(Electronic Submission)

Figure 1
Topographic Map



Legend:

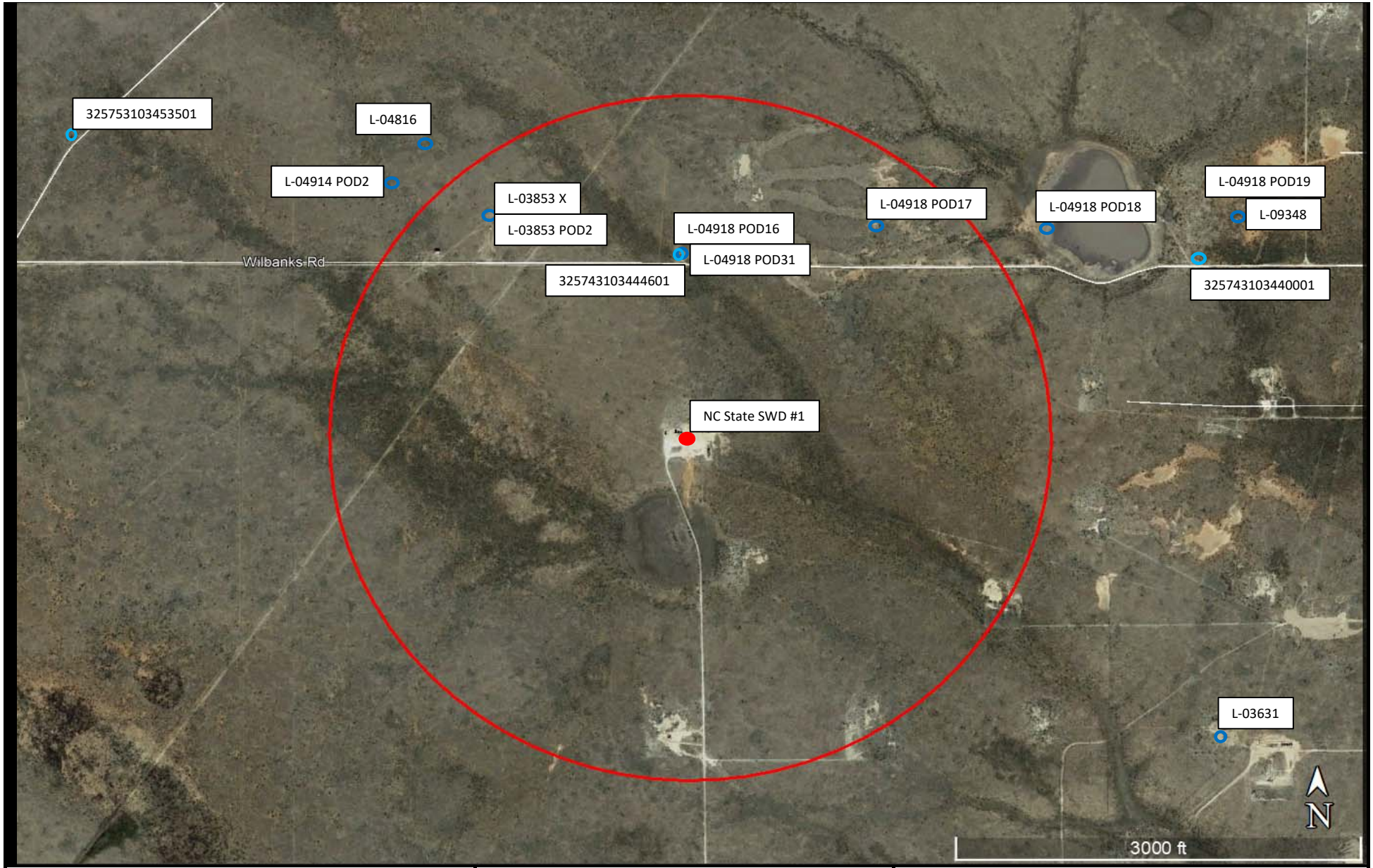
- Site Location

Figure 1
Topographic Map
Endeavor Energy Resources, LP
NC State SWD #1
GPS: 32.9624, -103.74775
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 12/3/19

Figure 2
Aerial Proximity Map



Legend:

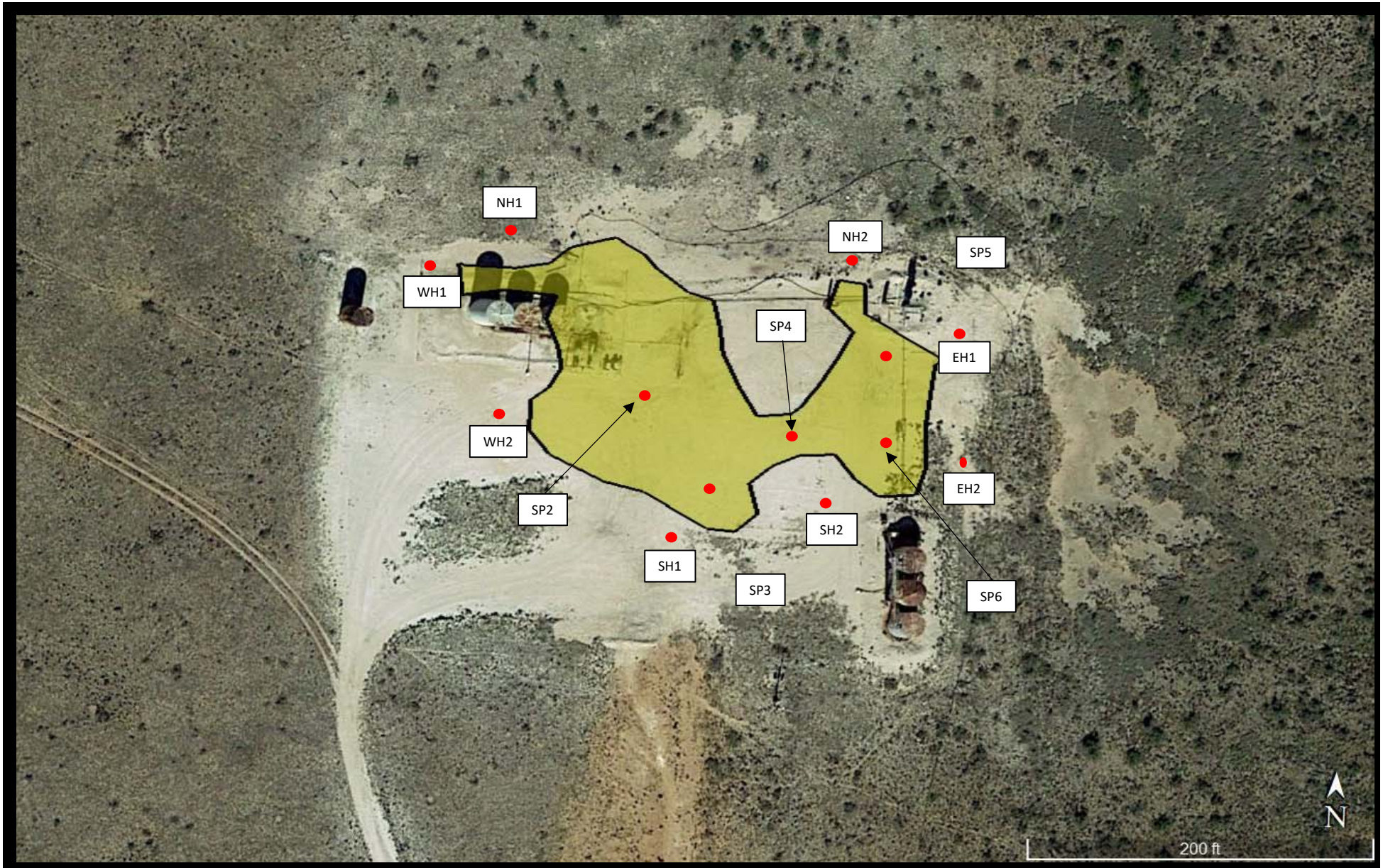
- Site Location
- Well - USGS
- Well - NMOSE
- Half Mile Radius

Figure 2
Aerial Map
Endeavor Energy Resources, LP
NC State SWD #1
GPS: 32.9624, -103.74775
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 12/3/19

Figure 3
Site and Sample Location Map



Legend:

Sample Point

Affected Area

Figure 3

Site and Sample Location Map

Endeavor Energy Resources, LP

NC State SWD #1

GPS: 32.9624, -103.74775

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: Checked: jwl Date: 12/3/19

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

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX TPH AND CHLORIDE IN SOIL
Endeavor Energy Resources, LP
NC State SWD #1
NMOCD Ref. #:

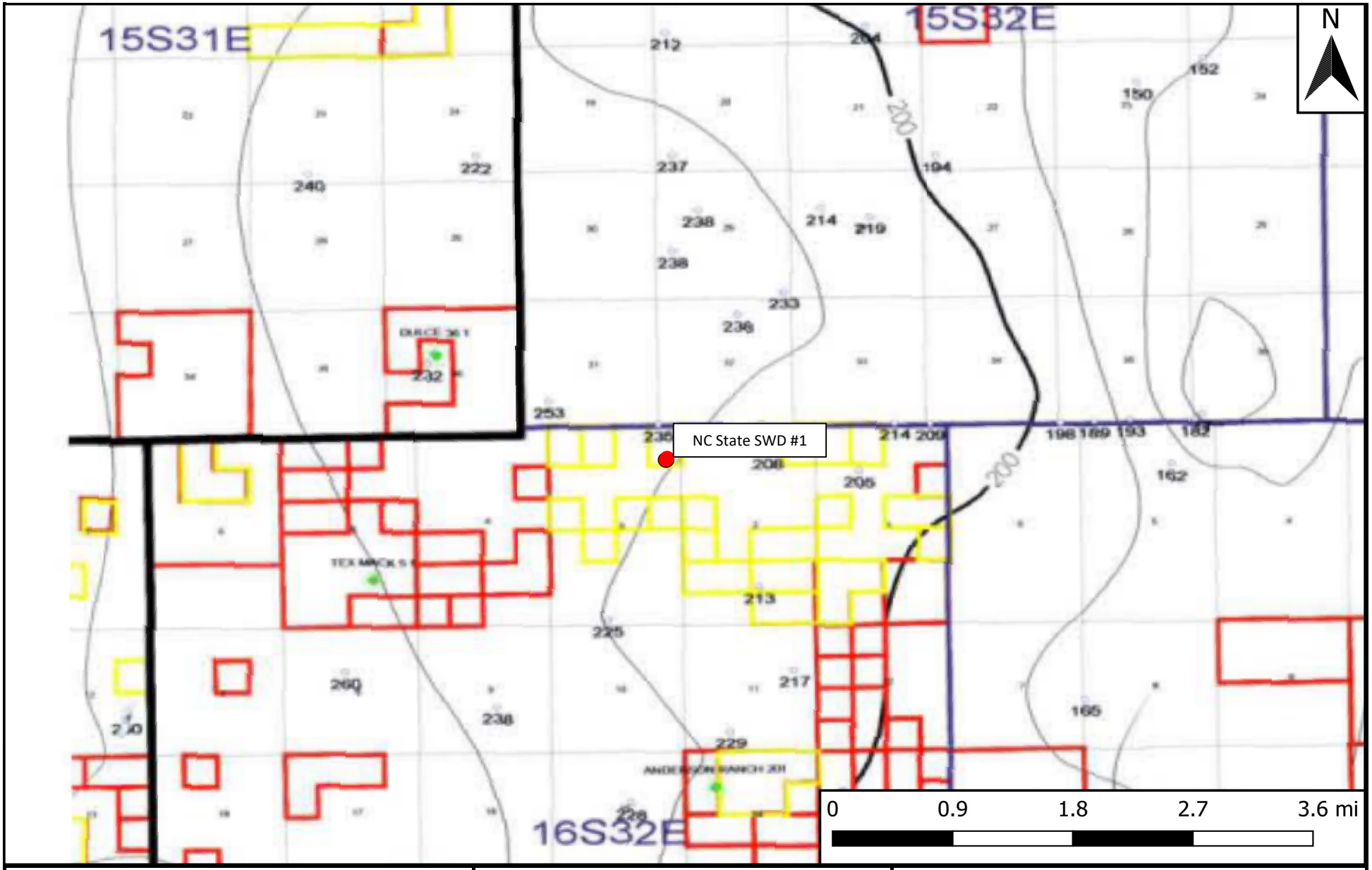
Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{36} (mg/kg)	TPH C_6-C_{36} (mg/kg)	Chloride (mg/kg)
SP2	11/18/19	Surf	In-Situ	<0.002	0.01	<50	58.4	58.4	<50	58.4	**28,200**
SP2	11/18/19	1'	In-Situ	<50.0	<0.001	<50	<50	<50	<50	<50	4,410
SP3	11/18/19	Surf	In-Situ	<0.002	<0.002	<50	152	152	<50	152	**31,100**
SP3	11/18/19	1'	In-Situ	<0.002	<0.002	<50	<50	<50	<50	<30.0	2,010
SP4	11/18/19	Surf	In-Situ	<0.002	0.01	<50	132	132	<50	132	**28,200**
SP4	11/18/19	1'	In-Situ	<0.002	<0.002	<50	<50	<50	<50	<50	4,870
SP5	11/18/19	Surf	In-Situ	<0.002	0.01	<50	148	148	50.4	198.4	**24,800**
SP5	11/18/19	2'	In-Situ	<0.002	0.01	<50	<50	<50	<50	<50	1,280
SP6	11/18/19	Surf	In-Situ	<0.002	<0.002	<50	152	152	<50	152	**32,000**
SP6	11/18/19	1'	In-Situ	<0.002	<0.002	<50	<50	<50	<50	<50	16.1
SH1	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	1,490
SH1	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	144
SH2	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	377
SH2	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	1,870
EH1	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	8.80
EH1	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	11.1
EH2	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	13.4
EH2	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	12.2
WH1	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	20.4
WH1	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	13.4
WH2	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	392
WH2	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	20.0
NH1	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	10.0
NH1	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	14.3
NH2	11/18/19	Surf	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	15.1
NH2	11/18/19	1'	In-Situ	<0.001	<0.001	<50	<50	<50	<50	<50	18.8
Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**20,000**

NOTES:

- =

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Appendix A
Depth to Groundwater Information



Legend:

● Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

Endeavor Energy Resources, LP

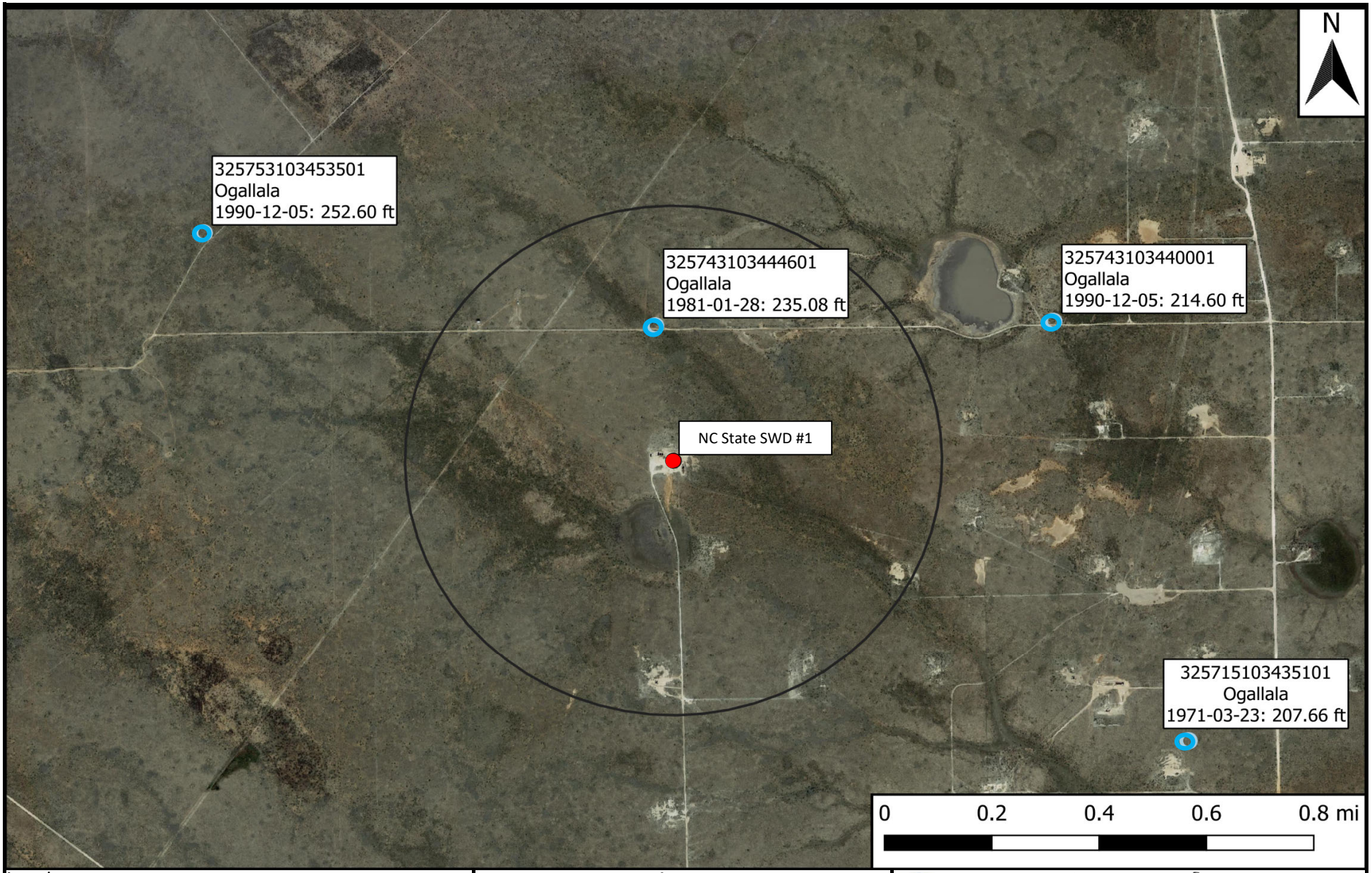
NC State SWD #1

GPS: 32.9624, -103.74775

Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 12/5/19



Legend:

- Site Location
- USGS Water Well

Figure 5
USGS Well Proximity Map
Endeavor Energy Resources, LP
NC State SWD #1
GPS: 32.9624, -103.74775
Lea County

eTECH Environmental & Safety Solutions, Inc.

Drafted: mag Checked: jwl Date: 12/5/19

New Mexico Office of the State Engineer

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)

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

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
L 04918 POD16		L	LE	3	3	3	32	15S	32E	616978	3648237	426	330	224	106
L 04918 POD16	R	L	LE	3	3	3	32	15S	32E	616978	3648237	426	330	224	106
L 04918 POD31		L	LE	3	3	3	32	15S	32E	616984	3648240	429	340	244	96
L 04918 POD17		L	LE	3	4	3	32	15S	32E	617451	3648328*	661	325	205	120
L 03853 X	R	L	LE	3	4	4	31	15S	32E	616571	3648341	700	305	260	45
L 03853 POD2		L	ED	3	4	4	31	15S	32E	616570	3648340	700	342	248	94

Average Depth to Water: **234 feet**
Minimum Depth: **205 feet**
Maximum Depth: **260 feet**

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 617033.4 **Northing (Y):** 3647814.54 **Radius:** 804.67

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	L 03853 POD2	3	4	4	31	15S	32E	616570	3648340

Driller License: 1472 **Driller Company:** HYDROGEOLOGIC SERVICES, INC.

Driller Name: DENNISSON, RONNIE

Drill Start Date:	12/18/2013	**Drill Finish Date:**	12/31/2013	**Plug Date:**	
Log File Date:	02/04/2014	**PCW Rcv Date:**	04/15/2015	**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	20 GPM
Casing Size:	17.25	**Depth Well:**	342 feet	**Depth Water:**	248 feet

Water Bearing Stratifications:	Top	Bottom	Description
	84	332	Sandstone/Gravel/Conglomerate

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	L 03853 X	3	4	4	31	15S	32E	616571	3648341

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

Driller License:	353	**Driller Company:**	OSBOURN DRILLING & PUMP CO.		
Driller Name:	F.M. OSBOURN				
Drill Start Date:	01/15/1965	**Drill Finish Date:**	02/01/1965	**Plug Date:**	
Log File Date:	02/08/1965	**PCW Rcv Date:**	03/30/1965	**Source:**	Shallow
Pump Type:	TURBIN	**Pipe Discharge Size:**		**Estimated Yield:**	110 GPM
Casing Size:	8.63	**Depth Well:**	305 feet	**Depth Water:**	260 feet

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twws	Rng	X	Y
	L 04918 POD16	3	3	3	32	15S	32E	616978	3648237

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

Driller License: 111 **Driller Company:** BURKE, EDWARD B.

Driller Name: EDWARD B. BURKE

Drill Start Date:	04/27/1965	**Drill Finish Date:**	04/30/1965	**Plug Date:**	
Log File Date:	05/07/1965	**PCW Rcv Date:**	05/28/1965	**Source:**	Shallow
Pump Type:	TURBIN	**Pipe Discharge Size:**		**Estimated Yield:**	160 GPM
Casing Size:	8.63	**Depth Well:**	330 feet	**Depth Water:**	224 feet

Water Bearing Stratifications:	Top	Bottom	Description
	224	275	Sandstone/Gravel/Conglomerate
	292	301	Sandstone/Gravel/Conglomerate
	301	314	Sandstone/Gravel/Conglomerate
	314	321	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	220	325

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twws	Rng	X	Y
	L 04918 POD17	3	4	3	32	15S	32E	617451	3648328*

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

Driller License: 111 **Driller Company:** BURKE, EDWARD B.

Driller Name: EDWARD B. BURKE

Drill Start Date:	05/06/1965	**Drill Finish Date:**	05/11/1965	**Plug Date:**	
Log File Date:	05/19/1965	**PCW Rcv Date:**	05/28/1965	**Source:**	Shallow
Pump Type:	TURBIN	**Pipe Discharge Size:**		**Estimated Yield:**	170 GPM
Casing Size:	8.63	**Depth Well:**	325 feet	**Depth Water:**	205 feet

Water Bearing Stratifications:	Top	Bottom	Description
	205	256	Sandstone/Gravel/Conglomerate
	271	302	Sandstone/Gravel/Conglomerate
	302	309	Sandstone/Gravel/Conglomerate
	309	321	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	213	321

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	L 04918 POD31	3	3	3	32	15S	32E	616984	3648240

Driller License: 1472 **Driller Company:** HYDROGEOLOGIC SERVICES, INC.

Driller Name: WHALEY, BILL W.

Drill Start Date: 12/10/2013 **Drill Finish Date:** 12/21/2013 **Plug Date:**

Log File Date: 02/04/2014 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 35 GPM

Casing Size: 17.25 **Depth Well:** 340 feet **Depth Water:** 244 feet

Water Bearing Stratifications:	Top	Bottom	Description
	258	330	Sandstone/Gravel/Conglomerate

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 325715103435101

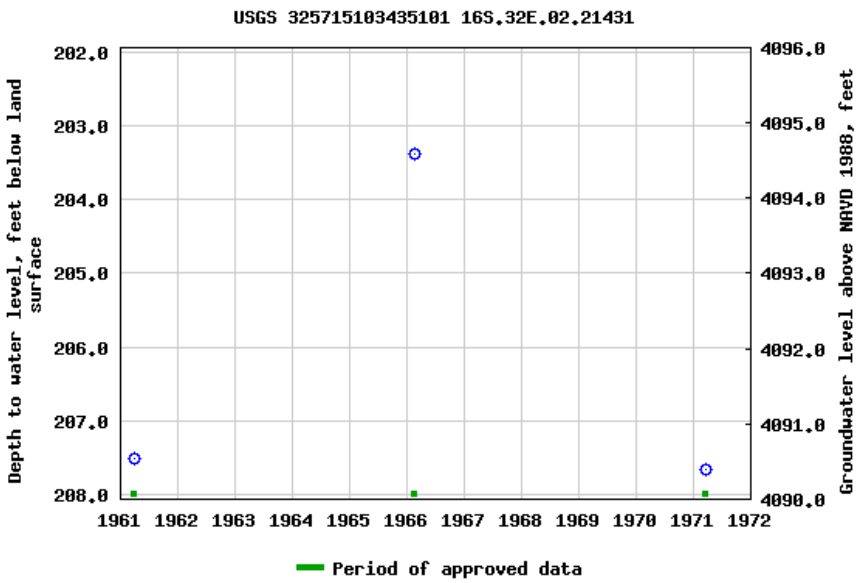
Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 325715103435101 16S.32E.02.21431

Available data for this site Groundwater: Field measurements ▼ GO
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°57'15", Longitude 103°43'51" NAD27
Land-surface elevation 4,298 feet above NAVD88
The depth of the well is 315 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

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- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 325743103440001

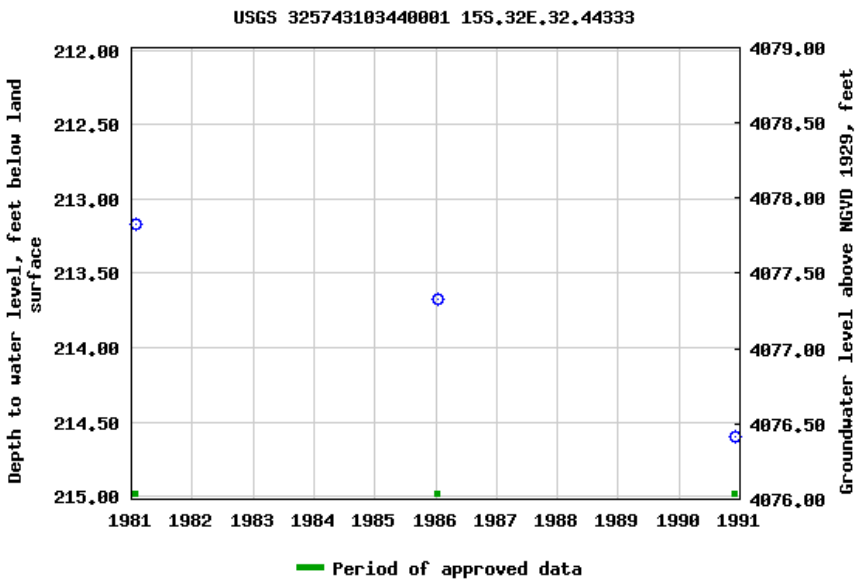
Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 325743103440001 15S.32E.32.44333

Available data for this site Groundwater: Field measurements ▼ GO
Lea County, New Mexico
Hydrologic Unit Code 12080003
Latitude 32°57'58", Longitude 103°44'06" NAD27
Land-surface elevation 4,291.00 feet above NGVD29
The depth of the well is 323 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 325743103444601

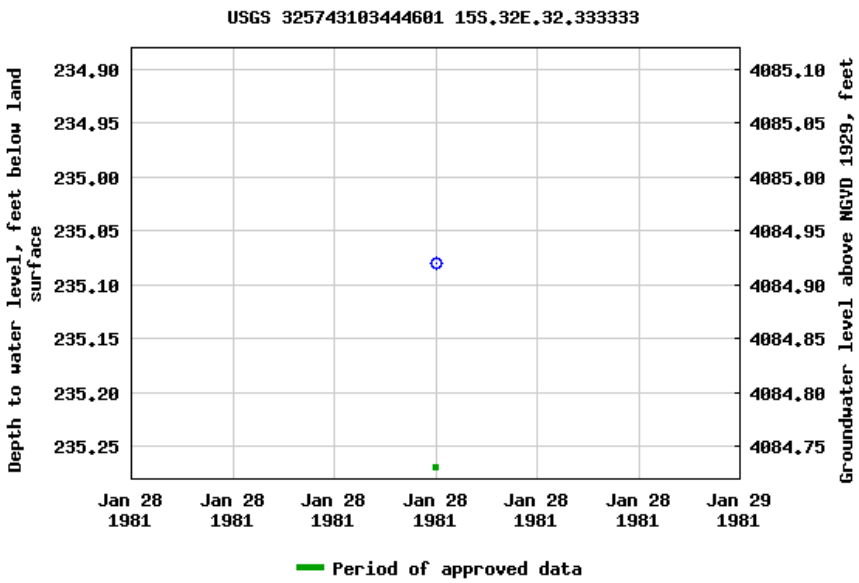
Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 325743103444601 15S.32E.32.333333

Available data for this site Groundwater: Field measurements ▼ GO
Lea County, New Mexico
Hydrologic Unit Code 12080003
Latitude 32°57'58", Longitude 103°44'52" NAD27
Land-surface elevation 4,320.00 feet above NGVD29
The depth of the well is 330 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
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U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2019-11-12 11:49:47 EST
0.52 0.47 nadww02

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- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 325753103453501

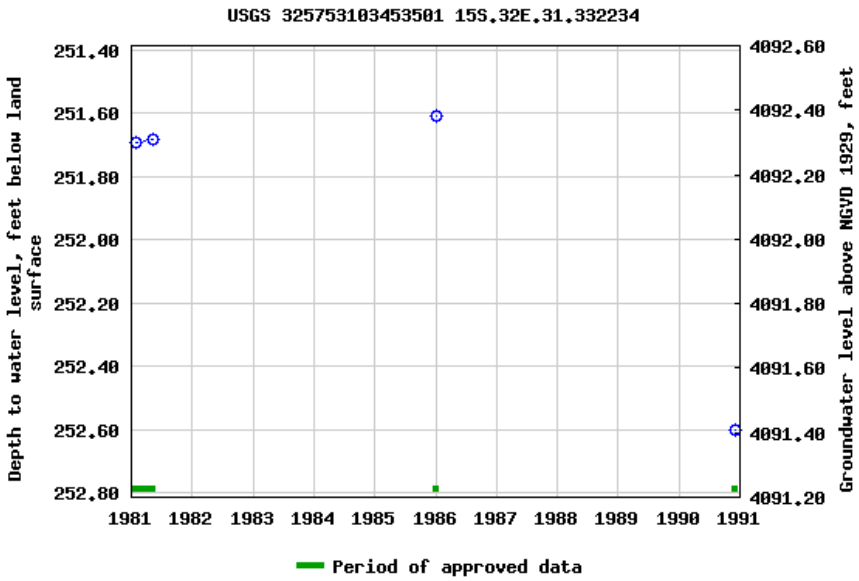
Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 325753103453501 15S.32E.31.332234

Available data for this site Groundwater: Field measurements ▼ GO
Lea County, New Mexico
Hydrologic Unit Code 12080003
Latitude 32°58'08", Longitude 103°45'44" NAD27
Land-surface elevation 4,344.00 feet above NGVD29
The depth of the well is 345 feet below land surface.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
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Appendix B
Field Data and Soil Profile Logs

eTECH Environmental & Safety Solutions, Inc.

Sample Log

Date: 11-18-19

Project: NC State SWD #1

Project Number: 11503 Latitude: 32.9624 Longitude: -103.74775

Sample ID	PID/Odor	Chloride Conc.		GPS
SP 1 @ S ✓	None	2492	5768	32.96265, -103.74749
SP 2 @ S ✓	None	2492	21,820	32.96260, -103.74797
SP 3 @ S ✓	Slight	2492	[illegible]	24756 32.96726, -103.74783
SP 4 @ S ✓	None	2492	24,756 >	32.96236, -103.74766
SP 5 @ S ✓	Slight	2492	7392	32.96250, -103.74743
SP 6 @ S ✓	Slight	2492	4536	32.96230, -103.74743
SP 2 @ 1' ✓	None	2492	4176	–
SP 3 @ 1' ✓	"	1752		–
SP 4 @ 1' ✓	"	2492	3852	–
SP 4 @ 2' ✓	"	1144		–
SP 2 @ 2'	"	refusal		–
SP 3 @ 2'	"	refusal		–
SP 5 @ 1 ✓	Slight	1524		–
SP 6 @ 1 ✓	–	67960		–
SH 2 @ S ✓	–	5460		32.96229, -103.74765
SH 2 @ 1' ✓	–	180		–
SH 1 @ S ✓	–	3960		32.96272, -103.74741
SH 1 @ 1 ✓	–	128		–
WH 2 @ S ✓	–	128		32.96236, -103.74817
WH 2 @ 1' ✓	–	128		–
NH-1 @ S ✓	–	128		32.96266, -103.74821
NH 1 @ 1' ✓	–	128		–
WH 1 @ S ✓	–	128		32.96260, -103.74835
WH 1 @ 1' ✓	–	128		–
NH 2 @ S ✓	–	128		32.96263, -103.74757
NH 2 @ 1 ✓	–	128		–
EH 1 @ S ✓	–	128		32.96751, -103.74737
EH 1 @ 1 ✓	–	128		–
EH 2 @ S ✓	–	128		32.96234, -103.74735
EH 2 @ 1 ✓	–	128		–

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

eTECH Environmental & Safety Solutions, Inc.

Soil Profile

Date: 11.18.2019

Project: NC State SWD #1

Project Number: 11503 Latitude: 32.9624 Longitude: -103.74775

Depth (ft. bgs)	Description
1	0-6" Imported Fill
2	6-2' Brown Clayey Topsoil
3 TD	2' - Rock
4	
5	
6	
7	
8	
9	
10	
11	
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Appendix C
Laboratory Analytical Reports

Certificate of Analysis Summary 644197

Endeavor Energy, Midland, TX

Project Name: NC State SWD #1

Project Id: 11503
Contact: Lance Crenshaw
Project Location: Rural Lea County

Date Received in Lab: Fri Nov-22-19 11:10 am
Report Date: 26-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644197-001		644197-002		644197-003		644197-004		644197-005		644197-006	
	Field Id:	SP2 @ S		SP3 @ S		SP4 @ S		SP5 @ S		SP6 @ S		SP2 @1'	
	Depth:											1- ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-19 08:20		Nov-18-19 08:25		Nov-18-19 08:30		Nov-18-19 08:35		Nov-18-19 08:45		Nov-18-19 08:50	
BTEX by EPA 8021B	***Extracted:***	Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30	
	Analyzed:	Nov-23-19 01:40		Nov-23-19 02:01		Nov-23-19 02:21		Nov-23-19 02:41		Nov-23-19 03:01		Nov-23-19 03:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Toluene		0.00533	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Ethylbenzene		0.00288	0.00201	<0.00202	0.00202	0.00290	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
m,p-Xylenes		<0.00402	0.00402	<0.00403	0.00403	0.00434	0.00400	<0.00398	0.00398	<0.00399	0.00399	<0.00397	0.00397
o-Xylene		<0.00201	0.00201	<0.00202	0.00202	<0.00200	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Total Xylenes		<0.00201	0.00201	<0.00202	0.00202	0.00434	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Total BTEX		0.00821	0.00201	<0.00202	0.00202	0.00724	0.00200	<0.00199	0.00199	<0.00200	0.00200	<0.00198	0.00198
Chloride by EPA 300	***Extracted:***	Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45	
	Analyzed:	Nov-22-19 20:23		Nov-22-19 20:30		Nov-22-19 20:37		Nov-22-19 20:43		Nov-22-19 21:03		Nov-22-19 21:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		28200	252	31100	249	28200	250	24800	252	32000	248	4410	24.8
TPH By SW8015 Mod	***Extracted:***	Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00	
	Analyzed:	Nov-24-19 00:02		Nov-24-19 00:58		Nov-24-19 01:17		Nov-24-19 01:36		Nov-24-19 01:56		Nov-24-19 02:15	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	<50.0	50.0	<49.8	49.8	<50.0	50.0
Diesel Range Organics (DRO)		58.4	50.0	152	49.8	132	49.9	148	50.0	152	49.8	<50.0	50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<49.9	49.9	50.4	50.0	<49.8	49.8	<50.0	50.0
Total TPH		58.4	50.0	152	49.8	132	49.9	198	50.0	152	49.8	<50.0	50.0

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644197

Endeavor Energy, Midland, TX

Project Name: NC State SWD #1

Project Id: 11503
Contact: Lance Crenshaw
Project Location: Rural Lea County

Date Received in Lab: Fri Nov-22-19 11:10 am
Report Date: 26-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644197-007		644197-008		644197-009		644197-010		644197-011		644197-012	
	Field Id:	SP3 @ 1'		SP4 @ 1'		SP5 @ 2'		SP6 @1'		SP6 @ 1'		SH2 @ S	
	Depth:	1- ft		1- ft		2- ft		1- ft		1- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-19 08:55		Nov-18-19 09:05		Nov-18-19 09:10		Nov-18-19 09:20		Nov-18-19 09:30		Nov-18-19 09:40	
BTEX by EPA 8021B	***Extracted:***	Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30	
	Analyzed:	Nov-23-19 03:41		Nov-23-19 04:01		Nov-23-19 04:22		Nov-23-19 04:42		Nov-23-19 06:00		Nov-23-19 06:20	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00402	0.00402	<0.00399	0.00399	<0.00400	0.00400	<0.00403	0.00403	<0.00398	0.00398	<0.00402	0.00402
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200	<0.00202	0.00202	<0.00199	0.00199	<0.00201	0.00201
Chloride by EPA 300	***Extracted:***	Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45	
	Analyzed:	Nov-22-19 21:17		Nov-22-19 21:23		Nov-22-19 21:30		Nov-22-19 22:56		Nov-22-19 23:03		Nov-22-19 21:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2010	24.8	4870	24.8	1280	24.9	16.1	5.04	15.1	5.05	377	5.00
TPH By SW8015 Mod	***Extracted:***	Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00	
	Analyzed:	Nov-24-19 02:34		Nov-24-19 02:53		Nov-24-19 03:12		Nov-24-19 03:31		Nov-24-19 03:51		Nov-24-19 04:10	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8
Diesel Range Organics (DRO)		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8
Total TPH		<49.9	49.9	<49.9	49.9	<50.0	50.0	<49.9	49.9	<50.0	50.0	<49.8	49.8

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644197

Endeavor Energy, Midland, TX

Project Name: NC State SWD #1

Project Id: 11503
Contact: Lance Crenshaw
Project Location: Rural Lea County

Date Received in Lab: Fri Nov-22-19 11:10 am
Report Date: 26-NOV-19
Project Manager: Jessica Kramer

Analysis Requested		644197-013		644197-014		644197-015		644197-016		644197-017		644197-018	
	Field Id:	SH2 @ 1'		SH1 @ S		SH1 @1'		WH2@ S		WH2 @ 1'		NH1@ S	
	Depth:	1- ft				1- ft				1- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-19 09:50		Nov-18-19 09:50		Nov-18-19 10:00		Nov-18-19 10:10		Nov-18-19 10:15		Nov-18-19 10:20	
BTEX by EPA 8021B	Extracted:	Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:30	
	Analyzed:	Nov-23-19 06:40		Nov-23-19 07:01		Nov-23-19 07:21		Nov-23-19 07:41		Nov-23-19 08:01		Nov-23-19 08:21	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Toluene		<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Ethylbenzene		<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
m,p-Xylenes		<0.00397	0.00397	<0.00398	0.00398	<0.00398	0.00398	<0.00399	0.00399	<0.00398	0.00398	<0.00398	0.00398
o-Xylene		<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Total Xylenes		<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Total BTEX		<0.00198	0.00198	<0.00199	0.00199	<0.00199	0.00199	<0.00200	0.00200	<0.00199	0.00199	<0.00199	0.00199
Chloride by EPA 300	Extracted:	Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45		Nov-22-19 15:45	
	Analyzed:	Nov-22-19 21:57		Nov-22-19 22:03		Nov-22-19 22:23		Nov-22-19 22:30		Nov-22-19 22:36		Nov-22-19 22:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		1870	25.0	1490	5.00	144	5.02	392	4.96	20.1	4.97	10.8	4.95
TPH By SW8015 Mod	Extracted:	Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00		Nov-23-19 15:00	
	Analyzed:	Nov-24-19 04:29		Nov-24-19 04:48		Nov-24-19 05:07		Nov-24-19 05:26		Nov-24-19 05:45		Nov-24-19 06:05	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9
Total TPH		<50.0	50.0	<49.9	49.9	<49.8	49.8	<50.0	50.0	<49.9	49.9	<49.9	49.9

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644197

Endeavor Energy, Midland, TX

Project Name: NC State SWD #1

Project Id: 11503
Contact: Lance Crenshaw
Project Location: Rural Lea County

Date Received in Lab: Fri Nov-22-19 11:10 am
Report Date: 26-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644197-019		644197-020		644197-021		644197-022		644197-023		644197-024	
	Field Id:	NH1@ 1'		WH1 @ S		WH1 @ 1'		NH2 @ S		NH2 @ 1'		EH1 @ S	
	Depth:	1- ft				1- ft				1- ft			
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Nov-18-19 10:30		Nov-18-19 10:40		Nov-18-19 11:00		Nov-18-19 11:10		Nov-18-19 11:20		Nov-18-19 11:30	
BTEX by EPA 8021B	Extracted:	Nov-22-19 12:30		Nov-22-19 12:30		Nov-22-19 12:20		Nov-22-19 12:20		Nov-22-19 12:20		Nov-22-19 12:20	
	Analyzed:	Nov-23-19 08:41		Nov-23-19 09:01		Nov-22-19 21:53		Nov-22-19 22:13		Nov-22-19 22:33		Nov-22-19 22:53	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Toluene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Ethylbenzene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
m,p-Xylenes		<0.00401	0.00401	<0.00399	0.00399	<0.00398	0.00398	<0.00402	0.00402	<0.00398	0.00398	<0.00402	0.00402
o-Xylene		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Total Xylenes		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Total BTEX		<0.00200	0.00200	<0.00200	0.00200	<0.00199	0.00199	<0.00201	0.00201	<0.00199	0.00199	<0.00201	0.00201
Chloride by EPA 300	Extracted:	Nov-22-19 15:45		Nov-25-19 08:05		Nov-25-19 08:05		Nov-25-19 08:05		Nov-25-19 08:05		Nov-25-19 08:05	
	Analyzed:	Nov-22-19 22:50		Nov-25-19 08:45		Nov-25-19 09:01		Nov-25-19 09:07		Nov-25-19 09:12		Nov-25-19 09:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		14.3	4.95	20.4	5.02	13.4	4.98	15.1	4.99	18.8	5.03	8.68	4.96
TPH By SW8015 Mod	Extracted:	Nov-23-19 15:00		Nov-23-19 15:00		Nov-25-19 15:00		Nov-25-19 15:00		Nov-25-19 15:00		Nov-25-19 15:00	
	Analyzed:	Nov-24-19 06:24		Nov-24-19 06:43		Nov-25-19 22:32		Nov-25-19 23:29		Nov-25-19 23:48		Nov-26-19 00:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9
Diesel Range Organics (DRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9
Total TPH		<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.8	49.8	<50.0	50.0	<49.9	49.9

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Version: 1.%

Jessica Kramer
Project Assistant

Certificate of Analysis Summary 644197

Endeavor Energy, Midland, TX

Project Name: NC State SWD #1

Project Id: 11503
Contact: Lance Crenshaw
Project Location: Rural Lea County

Date Received in Lab: Fri Nov-22-19 11:10 am
Report Date: 26-NOV-19
Project Manager: Jessica Kramer

Analysis Requested													
	Lab Id:	644197-025		644197-026		644197-027							
	Field Id:	EH1 @ 1'		EH2 @ S		EH2 @ 1'							
	Depth:	1- ft				1- ft							
	Matrix:	SOIL		SOIL		SOIL							
	Sampled:	Nov-18-19 11:45		Nov-18-19 12:00		Nov-18-19 12:45							
BTEX by EPA 8021B	***Extracted:***	Nov-22-19 12:20		Nov-22-19 14:00		Nov-22-19 14:00							
	Analyzed:	Nov-22-19 23:14		Nov-23-19 18:52		Nov-23-19 19:12							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Benzene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200						
Toluene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200						
Ethylbenzene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200						
m,p-Xylenes		<0.00402	0.00402	<0.00401	0.00401	<0.00400	0.00400						
o-Xylene		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200						
Total Xylenes		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200						
Total BTEX		<0.00201	0.00201	<0.00200	0.00200	<0.00200	0.00200						
Chloride by EPA 300	***Extracted:***	Nov-25-19 08:05		Nov-25-19 08:05		Nov-25-19 08:05							
	Analyzed:	Nov-25-19 09:33		Nov-25-19 09:39		Nov-25-19 09:44							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Chloride		11.1	5.00	13.4	5.02	12.2	4.96						
TPH By SW8015 Mod	***Extracted:***	Nov-25-19 15:00		Nov-25-19 15:00		Nov-22-19 11:30							
	Analyzed:	Nov-26-19 00:25		Nov-26-19 00:44		Nov-22-19 20:12							
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL						
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9						
Diesel Range Organics (DRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9						
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<49.9	49.9	<49.9	49.9						
Total TPH		<50.0	50.0	<49.9	49.9	<49.9	49.9						

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Version: 1.%

Jessica Kramer
Project Assistant

Analytical Report 644197

for

Endeavor Energy

Project Manager: Lance Crenshaw

NC State SWD #1

11503

26-NOV-19

Collected By: Client

1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-19-30), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (19-037-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (TX104704295-19-22), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-19-16)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-19-21)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-19-5)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)

26-NOV-19

Project Manager: **Lance Crenshaw**
Endeavor Energy
110 N. Marienfeld, Suite 200

Midland, TX 79701

Reference: XENCO Report No(s): **644197**
NC State SWD #1
Project Address: Rural Lea County

Lance Crenshaw:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 644197. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 644197 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

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Sample Cross Reference 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP2 @ S	S	11-18-19 08:20	ft	644197-001
SP3 @ S	S	11-18-19 08:25	ft	644197-002
SP4 @ S	S	11-18-19 08:30	ft	644197-003
SP5 @ S	S	11-18-19 08:35	ft	644197-004
SP6 @ S	S	11-18-19 08:45	ft	644197-005
SP2 @1'	S	11-18-19 08:50	1 ft	644197-006
SP3 @ 1'	S	11-18-19 08:55	1 ft	644197-007
SP4 @ 1'	S	11-18-19 09:05	1 ft	644197-008
SP5 @ 2'	S	11-18-19 09:10	2 ft	644197-009
SP6 @1'	S	11-18-19 09:20	1 ft	644197-010
SP6 @ 1'	S	11-18-19 09:30	1 ft	644197-011
SH2 @ S	S	11-18-19 09:40	ft	644197-012
SH2 @ 1'	S	11-18-19 09:50	1 ft	644197-013
SH1 @ S	S	11-18-19 09:50	ft	644197-014
SH1 @1'	S	11-18-19 10:00	1 ft	644197-015
WH2@ S	S	11-18-19 10:10	ft	644197-016
WH2 @ 1'	S	11-18-19 10:15	1 ft	644197-017
NH1@ S	S	11-18-19 10:20	ft	644197-018
NH1@ 1'	S	11-18-19 10:30	1 ft	644197-019
WH1 @ S	S	11-18-19 10:40	ft	644197-020
WH1 @ 1'	S	11-18-19 11:00	1 ft	644197-021
NH2 @ S	S	11-18-19 11:10	ft	644197-022
NH2 @ 1'	S	11-18-19 11:20	1 ft	644197-023
EH1 @ S	S	11-18-19 11:30	ft	644197-024
EH1 @ 1'	S	11-18-19 11:45	1 ft	644197-025
EH2 @ S	S	11-18-19 12:00	ft	644197-026
EH2 @ 1'	S	11-18-19 12:45	1 ft	644197-027

CASE NARRATIVE

Client Name: Endeavor Energy

Project Name: NC State SWD #1

Project ID: *11503*
Work Order Number(s): *644197*

Report Date: *26-NOV-19*
Date Received: *11/22/2019*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3108538 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3108542 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3108546 BTEX by EPA 8021B
Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3108588 Chloride by EPA 300
Lab Sample ID 644259-009 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 644197-020, -021, -022, -023, -024, -025, -026, -027.
The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-001	Date Collected:	11.18.19 08.20		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28200**	252	mg/kg	11.22.19 20.23		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 00.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	**58.4**	50.0	mg/kg	11.24.19 00.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 00.02	U	1
Total TPH	PHC635	**58.4**	50.0	mg/kg	11.24.19 00.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.24.19 00.02	
o-Terphenyl	84-15-1	115	%	70-135	11.24.19 00.02	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-001	Date Collected:	11.18.19 08.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.23.19 01.40	U	1
Toluene	108-88-3	**0.00533**	0.00201	mg/kg	11.23.19 01.40		1
Ethylbenzene	100-41-4	**0.00288**	0.00201	mg/kg	11.23.19 01.40		1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.23.19 01.40	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.23.19 01.40	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.23.19 01.40	U	1
Total BTEX		**0.00821**	0.00201	mg/kg	11.23.19 01.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	11.23.19 01.40	
4-Bromofluorobenzene	460-00-4	102	%	70-130	11.23.19 01.40	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP3 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-002	Date Collected:	11.18.19 08.25		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**31100**	249	mg/kg	11.22.19 20.30		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.24.19 00.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	**152**	49.8	mg/kg	11.24.19 00.58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.24.19 00.58	U	1
Total TPH	PHC635	**152**	49.8	mg/kg	11.24.19 00.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.24.19 00.58	
o-Terphenyl	84-15-1	119	%	70-135	11.24.19 00.58	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP3 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-002	Date Collected:	11.18.19 08.25		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.23.19 02.01	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.23.19 02.01	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.23.19 02.01	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.23.19 02.01	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.23.19 02.01	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.23.19 02.01	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.23.19 02.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	111	%	70-130	11.23.19 02.01	
1,4-Difluorobenzene	540-36-3	114	%	70-130	11.23.19 02.01	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP4 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-003	Date Collected:	11.18.19 08.30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**28200**	250	mg/kg	11.22.19 20.37		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 01.17	U	1
Diesel Range Organics (DRO)	C10C28DRO	**132**	49.9	mg/kg	11.24.19 01.17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 01.17	U	1
Total TPH	PHC635	**132**	49.9	mg/kg	11.24.19 01.17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	11.24.19 01.17	
o-Terphenyl	84-15-1	118	%	70-135	11.24.19 01.17	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP4 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-003	Date Collected:	11.18.19 08.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 02.21	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 02.21	U	1
Ethylbenzene	100-41-4	**0.00290**	0.00200	mg/kg	11.23.19 02.21		1
m,p-Xylenes	179601-23-1	**0.00434**	0.00400	mg/kg	11.23.19 02.21		1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 02.21	U	1
Total Xylenes	1330-20-7	**0.00434**	0.00200	mg/kg	11.23.19 02.21		1
Total BTEX		**0.00724**	0.00200	mg/kg	11.23.19 02.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	11.23.19 02.21	
4-Bromofluorobenzene	460-00-4	110	%	70-130	11.23.19 02.21	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP5 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-004	Date Collected:	11.18.19 08.35		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**24800**	252	mg/kg	11.22.19 20.43		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 01.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	**148**	50.0	mg/kg	11.24.19 01.36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	**50.4**	50.0	mg/kg	11.24.19 01.36		1
Total TPH	PHC635	**198**	50.0	mg/kg	11.24.19 01.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.24.19 01.36	
o-Terphenyl	84-15-1	114	%	70-135	11.24.19 01.36	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP5 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-004	Date Collected:	11.18.19 08.35		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.23.19 02.41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.23.19 02.41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.23.19 02.41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.23.19 02.41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.23.19 02.41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.23.19 02.41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.23.19 02.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	11.23.19 02.41	
1,4-Difluorobenzene	540-36-3	109	%	70-130	11.23.19 02.41	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP6 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-005	Date Collected:	11.18.19 08.45		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**32000**	248	mg/kg	11.22.19 21.03		50

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.24.19 01.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	**152**	49.8	mg/kg	11.24.19 01.56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.24.19 01.56	U	1
Total TPH	PHC635	**152**	49.8	mg/kg	11.24.19 01.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.24.19 01.56	
o-Terphenyl	84-15-1	115	%	70-135	11.24.19 01.56	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP6 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-005	Date Collected:	11.18.19 08.45		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 03.01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 03.01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 03.01	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.23.19 03.01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 03.01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 03.01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 03.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	11.23.19 03.01	
1,4-Difluorobenzene	540-36-3	112	%	70-130	11.23.19 03.01	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP2 @1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-006	Date Collected:	11.18.19 08.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4410**	24.8	mg/kg	11.22.19 21.10		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 02.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.24.19 02.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 02.15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.24.19 02.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-135	11.24.19 02.15	
o-Terphenyl	84-15-1	114	%	70-135	11.24.19 02.15	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP2 @1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-006	Date Collected:	11.18.19 08.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.23.19 03.21	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.23.19 03.21	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.23.19 03.21	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	11.23.19 03.21	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.23.19 03.21	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	11.23.19 03.21	U	1
Total BTEX		<0.00198	0.00198	mg/kg	11.23.19 03.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	11.23.19 03.21	
4-Bromofluorobenzene	460-00-4	110	%	70-130	11.23.19 03.21	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP3 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-007	Date Collected:	11.18.19 08.55	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**2010**	24.8	mg/kg	11.22.19 21.17		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 02.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.24.19 02.34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 02.34	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.24.19 02.34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	11.24.19 02.34	
o-Terphenyl	84-15-1	116	%	70-135	11.24.19 02.34	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP3 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-007	Date Collected:	11.18.19 08.55	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.23.19 03.41	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.23.19 03.41	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.23.19 03.41	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.23.19 03.41	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.23.19 03.41	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.23.19 03.41	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.23.19 03.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	11.23.19 03.41	
1,4-Difluorobenzene	540-36-3	112	%	70-130	11.23.19 03.41	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP4 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-008	Date Collected:	11.18.19 09.05	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**4870**	24.8	mg/kg	11.22.19 21.23		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 02.53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.24.19 02.53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 02.53	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.24.19 02.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-135	11.24.19 02.53	
o-Terphenyl	84-15-1	116	%	70-135	11.24.19 02.53	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP4 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-008	Date Collected:	11.18.19 09.05	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 04.01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 04.01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 04.01	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.23.19 04.01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 04.01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 04.01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 04.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	112	%	70-130	11.23.19 04.01	
4-Bromofluorobenzene	460-00-4	111	%	70-130	11.23.19 04.01	

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NC State SWD #1

Sample Id:	**SP5 @ 2'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-009	Date Collected:	11.18.19 09.10	Sample Depth:	2 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1280**	24.9	mg/kg	11.22.19 21.30		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 03.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.24.19 03.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 03.12	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.24.19 03.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.24.19 03.12	
o-Terphenyl	84-15-1	110	%	70-135	11.24.19 03.12	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP5 @ 2'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-009	Date Collected:	11.18.19 09.10	Sample Depth:	2 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 04.22	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 04.22	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 04.22	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	11.23.19 04.22	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 04.22	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 04.22	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 04.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	11.23.19 04.22	
4-Bromofluorobenzene	460-00-4	105	%	70-130	11.23.19 04.22	

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NC State SWD #1

Sample Id:	**SP6 @1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-010	Date Collected:	11.18.19 09.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**16.1**	5.04	mg/kg	11.22.19 22.56		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 03.31	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.24.19 03.31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 03.31	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.24.19 03.31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	11.24.19 03.31	
o-Terphenyl	84-15-1	112	%	70-135	11.24.19 03.31	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP6 @1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-010	Date Collected:	11.18.19 09.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	11.23.19 04.42	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	11.23.19 04.42	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	11.23.19 04.42	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	11.23.19 04.42	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	11.23.19 04.42	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	11.23.19 04.42	U	1
Total BTEX		<0.00202	0.00202	mg/kg	11.23.19 04.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	11.23.19 04.42	
1,4-Difluorobenzene	540-36-3	111	%	70-130	11.23.19 04.42	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP6 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-011	Date Collected:	11.18.19 09.30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.1**	5.05	mg/kg	11.22.19 23.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 03.51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.24.19 03.51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 03.51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.24.19 03.51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.24.19 03.51	
o-Terphenyl	84-15-1	110	%	70-135	11.24.19 03.51	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SP6 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-011	Date Collected:	11.18.19 09.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.23.19 06.00	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.23.19 06.00	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.23.19 06.00	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.23.19 06.00	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.23.19 06.00	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.23.19 06.00	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.23.19 06.00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.23.19 06.00	
4-Bromofluorobenzene	460-00-4	98	%	70-130	11.23.19 06.00	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-012	Date Collected:	11.18.19 09.40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**377**	5.00	mg/kg	11.22.19 21.37		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.24.19 04.10	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.24.19 04.10	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.24.19 04.10	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.24.19 04.10	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.24.19 04.10	
o-Terphenyl	84-15-1	107	%	70-135	11.24.19 04.10	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-012	Date Collected:	11.18.19 09.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.23.19 06.20	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.23.19 06.20	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.23.19 06.20	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.23.19 06.20	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.23.19 06.20	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.23.19 06.20	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.23.19 06.20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	11.23.19 06.20	
1,4-Difluorobenzene	540-36-3	105	%	70-130	11.23.19 06.20	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-013	Date Collected:	11.18.19 09.50	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1870**	25.0	mg/kg	11.22.19 21.57		5

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 04.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.24.19 04.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 04.29	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.24.19 04.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.24.19 04.29	
o-Terphenyl	84-15-1	115	%	70-135	11.24.19 04.29	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-013	Date Collected:	11.18.19 09.50	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	11.23.19 06.40	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	11.23.19 06.40	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	11.23.19 06.40	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	11.23.19 06.40	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	11.23.19 06.40	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	11.23.19 06.40	U	1
Total BTEX		<0.00198	0.00198	mg/kg	11.23.19 06.40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	11.23.19 06.40	
1,4-Difluorobenzene	540-36-3	109	%	70-130	11.23.19 06.40	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH1 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-014	Date Collected:	11.18.19 09.50		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**1490**	5.00	mg/kg	11.22.19 22.03		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 04.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.24.19 04.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 04.48	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.24.19 04.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.24.19 04.48	
o-Terphenyl	84-15-1	107	%	70-135	11.24.19 04.48	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH1 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-014	Date Collected:	11.18.19 09.50		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.23.19 07.01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.23.19 07.01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.23.19 07.01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.23.19 07.01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.23.19 07.01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.23.19 07.01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.23.19 07.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	11.23.19 07.01	
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.23.19 07.01	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH1 @1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-015	Date Collected:	11.18.19 10.00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**144**	5.02	mg/kg	11.22.19 22.23		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.24.19 05.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.24.19 05.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.24.19 05.07	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.24.19 05.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	11.24.19 05.07	
o-Terphenyl	84-15-1	110	%	70-135	11.24.19 05.07	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**SH1 @1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-015	Date Collected:	11.18.19 10.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.23.19 07.21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.23.19 07.21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.23.19 07.21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.23.19 07.21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.23.19 07.21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.23.19 07.21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.23.19 07.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	11.23.19 07.21	
1,4-Difluorobenzene	540-36-3	113	%	70-130	11.23.19 07.21	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH2@ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-016	Date Collected:	11.18.19 10.10		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**392**	4.96	mg/kg	11.22.19 22.30		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 05.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.24.19 05.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 05.26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.24.19 05.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	11.24.19 05.26	
o-Terphenyl	84-15-1	99	%	70-135	11.24.19 05.26	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH2@ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-016	Date Collected:	11.18.19 10.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 07.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 07.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 07.41	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.23.19 07.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 07.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 07.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 07.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	11.23.19 07.41	
1,4-Difluorobenzene	540-36-3	113	%	70-130	11.23.19 07.41	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-017	Date Collected:	11.18.19 10.15	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**20.1**	4.97	mg/kg	11.22.19 22.36		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 05.45	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.24.19 05.45	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 05.45	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.24.19 05.45	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	11.24.19 05.45	
o-Terphenyl	84-15-1	117	%	70-135	11.24.19 05.45	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-017	Date Collected:	11.18.19 10.15	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.23.19 08.01	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.23.19 08.01	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.23.19 08.01	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.23.19 08.01	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.23.19 08.01	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.23.19 08.01	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.23.19 08.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	11.23.19 08.01	
1,4-Difluorobenzene	540-36-3	112	%	70-130	11.23.19 08.01	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH1@ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-018	Date Collected:	11.18.19 10.20		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**10.8**	4.95	mg/kg	11.22.19 22.43		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.24.19 06.05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.24.19 06.05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.24.19 06.05	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.24.19 06.05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.24.19 06.05	
o-Terphenyl	84-15-1	110	%	70-135	11.24.19 06.05	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH1@ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-018	Date Collected:	11.18.19 10.20		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.23.19 08.21	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.23.19 08.21	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.23.19 08.21	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.23.19 08.21	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.23.19 08.21	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.23.19 08.21	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.23.19 08.21	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	11.23.19 08.21	
1,4-Difluorobenzene	540-36-3	112	%	70-130	11.23.19 08.21	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH1@ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-019	Date Collected:	11.18.19 10.30	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.22.19 15.45	Basis:	Wet Weight
Seq Number:	3108493				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**14.3**	4.95	mg/kg	11.22.19 22.50		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.24.19 06.24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.24.19 06.24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.24.19 06.24	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.24.19 06.24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.24.19 06.24	
o-Terphenyl	84-15-1	110	%	70-135	11.24.19 06.24	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH1@ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-019	Date Collected:	11.18.19 10.30	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 08.41	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 08.41	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 08.41	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.23.19 08.41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 08.41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 08.41	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 08.41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	113	%	70-130	11.23.19 08.41	
4-Bromofluorobenzene	460-00-4	101	%	70-130	11.23.19 08.41	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH1 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-020	Date Collected:	11.18.19 10.40		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**20.4**	5.02	mg/kg	11.25.19 08.45		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.23.19 15.00	Basis:	Wet Weight
Seq Number:	3108566				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.24.19 06.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.24.19 06.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.24.19 06.43	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.24.19 06.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	11.24.19 06.43	
o-Terphenyl	84-15-1	110	%	70-135	11.24.19 06.43	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH1 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-020	Date Collected:	11.18.19 10.40		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.30	Basis:	Wet Weight
Seq Number:	3108538				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 09.01	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 09.01	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 09.01	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	11.23.19 09.01	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 09.01	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 09.01	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 09.01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	11.23.19 09.01	
1,4-Difluorobenzene	540-36-3	115	%	70-130	11.23.19 09.01	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH1 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-021	Date Collected:	11.18.19 11.00	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.4**	4.98	mg/kg	11.25.19 09.01		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.25.19 15.00	Basis:	Wet Weight
Seq Number:	3108706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.25.19 22.32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.25.19 22.32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.25.19 22.32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.25.19 22.32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	11.25.19 22.32	
o-Terphenyl	84-15-1	123	%	70-135	11.25.19 22.32	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**WH1 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-021	Date Collected:	11.18.19 11.00	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.20	Basis:	Wet Weight
Seq Number:	3108542				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.22.19 21.53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.22.19 21.53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.22.19 21.53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.22.19 21.53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.22.19 21.53	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.22.19 21.53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.22.19 21.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	11.22.19 21.53	
1,4-Difluorobenzene	540-36-3	107	%	70-130	11.22.19 21.53	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-022	Date Collected:	11.18.19 11.10		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**15.1**	4.99	mg/kg	11.25.19 09.07		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.25.19 15.00	Basis:	Wet Weight
Seq Number:	3108706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	11.25.19 23.29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	11.25.19 23.29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	11.25.19 23.29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	11.25.19 23.29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	120	%	70-135	11.25.19 23.29	
o-Terphenyl	84-15-1	119	%	70-135	11.25.19 23.29	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-022	Date Collected:	11.18.19 11.10		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.20	Basis:	Wet Weight
Seq Number:	3108542				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.22.19 22.13	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.22.19 22.13	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.22.19 22.13	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.22.19 22.13	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.22.19 22.13	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.22.19 22.13	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.22.19 22.13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.22.19 22.13	
4-Bromofluorobenzene	460-00-4	99	%	70-130	11.22.19 22.13	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-023	Date Collected:	11.18.19 11.20	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**18.8**	5.03	mg/kg	11.25.19 09.12		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.25.19 15.00	Basis:	Wet Weight
Seq Number:	3108706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.25.19 23.48	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.25.19 23.48	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.25.19 23.48	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.25.19 23.48	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	11.25.19 23.48	
o-Terphenyl	84-15-1	126	%	70-135	11.25.19 23.48	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**NH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-023	Date Collected:	11.18.19 11.20	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.20	Basis:	Wet Weight
Seq Number:	3108542				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	11.22.19 22.33	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	11.22.19 22.33	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	11.22.19 22.33	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	11.22.19 22.33	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	11.22.19 22.33	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	11.22.19 22.33	U	1
Total BTEX		<0.00199	0.00199	mg/kg	11.22.19 22.33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	97	%	70-130	11.22.19 22.33	
1,4-Difluorobenzene	540-36-3	106	%	70-130	11.22.19 22.33	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH1 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-024	Date Collected:	11.18.19 11.30		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**8.68**	4.96	mg/kg	11.25.19 09.17		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.25.19 15.00	Basis:	Wet Weight
Seq Number:	3108706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.26.19 00.07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.26.19 00.07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.26.19 00.07	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.26.19 00.07	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	127	%	70-135	11.26.19 00.07	
o-Terphenyl	84-15-1	123	%	70-135	11.26.19 00.07	

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Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH1 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-024	Date Collected:	11.18.19 11.30		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.20	Basis:	Wet Weight
Seq Number:	3108542				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.22.19 22.53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.22.19 22.53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.22.19 22.53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.22.19 22.53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.22.19 22.53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.22.19 22.53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.22.19 22.53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	11.22.19 22.53	
4-Bromofluorobenzene	460-00-4	96	%	70-130	11.22.19 22.53	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH1 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-025	Date Collected:	11.18.19 11.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**11.1**	5.00	mg/kg	11.25.19 09.33		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.25.19 15.00	Basis:	Wet Weight
Seq Number:	3108706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	11.26.19 00.25	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	11.26.19 00.25	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	11.26.19 00.25	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	11.26.19 00.25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	121	%	70-135	11.26.19 00.25	
o-Terphenyl	84-15-1	115	%	70-135	11.26.19 00.25	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH1 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-025	Date Collected:	11.18.19 11.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 12.20	Basis:	Wet Weight
Seq Number:	3108542				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	11.22.19 23.14	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	11.22.19 23.14	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	11.22.19 23.14	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	11.22.19 23.14	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	11.22.19 23.14	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	11.22.19 23.14	U	1
Total BTEX		<0.00201	0.00201	mg/kg	11.22.19 23.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	99	%	70-130	11.22.19 23.14	
1,4-Difluorobenzene	540-36-3	108	%	70-130	11.22.19 23.14	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-026	Date Collected:	11.18.19 12.00		

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**13.4**	5.02	mg/kg	11.25.19 09.39		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.25.19 15.00	Basis:	Wet Weight
Seq Number:	3108706				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.26.19 00.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.26.19 00.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.26.19 00.44	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.26.19 00.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-135	11.26.19 00.44	
o-Terphenyl	84-15-1	113	%	70-135	11.26.19 00.44	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH2 @ S**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-026	Date Collected:	11.18.19 12.00		
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 14.00	Basis:	Wet Weight
Seq Number:	3108546				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 18.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 18.52	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 18.52	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	11.23.19 18.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 18.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 18.52	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 18.52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	11.23.19 18.52	
4-Bromofluorobenzene	460-00-4	93	%	70-130	11.23.19 18.52	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-027	Date Collected:	11.18.19 12.45	Sample Depth:	1 ft

Analytical Method:	Chloride by EPA 300			Prep Method:	E300P
Tech:	CHE			% Moisture:	
Analyst:	CHE	Date Prep:	11.25.19 08.05	Basis:	Wet Weight
Seq Number:	3108588				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.2**	4.96	mg/kg	11.25.19 09.44		1

Analytical Method:	TPH By SW8015 Mod			Prep Method:	SW8015P
Tech:	DVM			% Moisture:	
Analyst:	ARM	Date Prep:	11.22.19 11.30	Basis:	Wet Weight
Seq Number:	3108553				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	11.22.19 20.12	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	11.22.19 20.12	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	11.22.19 20.12	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	11.22.19 20.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	11.22.19 20.12	
o-Terphenyl	84-15-1	113	%	70-135	11.22.19 20.12	

Certificate of Analytical Results 644197

Endeavor Energy, Midland, TX

NC State SWD #1

Sample Id:	**EH2 @ 1'**	Matrix:	Soil	Date Received:	11.22.19 11.10
Lab Sample Id:	644197-027	Date Collected:	11.18.19 12.45	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5030B
Tech:	KTL			% Moisture:	
Analyst:	KTL	Date Prep:	11.22.19 14.00	Basis:	Wet Weight
Seq Number:	3108546				

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	11.23.19 19.12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	11.23.19 19.12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	11.23.19 19.12	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	11.23.19 19.12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	11.23.19 19.12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	11.23.19 19.12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	11.23.19 19.12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	11.23.19 19.12	
4-Bromofluorobenzene	460-00-4	94	%	70-130	11.23.19 19.12	

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 644197

Endeavor Energy

NC State SWD #1

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3108493 Matrix: Solid Date Prep: 11.22.19
MB Sample Id: 7691016-1-BLK LCS Sample Id: 7691016-1-BKS LCSD Sample Id: 7691016-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	240	96	240	96	90-110	0	20	mg/kg	11.22.19 19:50	

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3108588 Matrix: Solid Date Prep: 11.25.19
MB Sample Id: 7691080-1-BLK LCS Sample Id: 7691080-1-BKS LCSD Sample Id: 7691080-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	240	96	238	95	90-110	1	20	mg/kg	11.25.19 08:35	

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3108493 Matrix: Soil Date Prep: 11.22.19
Parent Sample Id: 644192-035 MS Sample Id: 644192-035 S MSD Sample Id: 644192-035 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	15.7	248	263	100	261	99	90-110	1	20	mg/kg	11.22.19 20:10	

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3108493 Matrix: Soil Date Prep: 11.22.19
Parent Sample Id: 644197-012 MS Sample Id: 644197-012 S MSD Sample Id: 644197-012 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	377	250	612	94	612	94	90-110	0	20	mg/kg	11.22.19 21:43	

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3108588 Matrix: Soil Date Prep: 11.25.19
Parent Sample Id: 644197-020 MS Sample Id: 644197-020 S MSD Sample Id: 644197-020 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	20.4	201	181	80	180	79	90-110	1	20	mg/kg	11.25.19 08:51	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 644197

Endeavor Energy

NC State SWD #1

Analytical Method: Chloride by EPA 300 Prep Method: E300P
Seq Number: 3108588 Matrix: Soil Date Prep: 11.25.19
Parent Sample Id: 644259-009 MS Sample Id: 644259-009 S MSD Sample Id: 644259-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	27.1	202	235	103	236	103	90-110	0	20	mg/kg	11.25.19 10:05	

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
Seq Number: 3108553 Matrix: Solid Date Prep: 11.22.19
MB Sample Id: 7691075-1-BLK LCS Sample Id: 7691075-1-BKS LCSD Sample Id: 7691075-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1080	108	1100	110	70-135	2	20	mg/kg	11.22.19 12:43	
Diesel Range Organics (DRO)	<15.0	1000	1020	102	1050	105	70-135	3	20	mg/kg	11.22.19 12:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	105		126		128		70-135	%	11.22.19 12:43
o-Terphenyl	104		111		119		70-135	%	11.22.19 12:43

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
Seq Number: 3108566 Matrix: Solid Date Prep: 11.23.19
MB Sample Id: 7691089-1-BLK LCS Sample Id: 7691089-1-BKS LCSD Sample Id: 7691089-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1130	113	1140	114	70-135	1	20	mg/kg	11.23.19 23:25	
Diesel Range Organics (DRO)	<15.0	1000	1070	107	1090	109	70-135	2	20	mg/kg	11.23.19 23:25	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		125		128		70-135	%	11.23.19 23:25
o-Terphenyl	105		118		114		70-135	%	11.23.19 23:25

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
Seq Number: 3108706 Matrix: Solid Date Prep: 11.25.19
MB Sample Id: 7691187-1-BLK LCS Sample Id: 7691187-1-BKS LCSD Sample Id: 7691187-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1170	117	1170	117	70-135	0	20	mg/kg	11.25.19 21:54	
Diesel Range Organics (DRO)	<15.0	1000	1070	107	1090	109	70-135	2	20	mg/kg	11.25.19 21:54	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		127		126		70-135	%	11.25.19 21:54
o-Terphenyl	113		121		114		70-135	%	11.25.19 21:54

MS/MSD Percent Recovery	[D] = 100*(C-A) / B	LCS = Laboratory Control Sample	MS = Matrix Spike
Relative Percent Difference	RPD = 200* | (C-E) / (C+E) |	A = Parent Result	B = Spike Added
LCS/LCSD Recovery	[D] = 100 * (C) / [B]	C = MS/LCS Result	D = MSD/LCSD % Rec
Log Difference	Log Diff. = Log(Sample Duplicate) - Log(Original Sample)	E = MSD/LCSD Result	

QC Summary 644197

Endeavor Energy

NC State SWD #1

Analytical Method: TPH By SW8015 Mod
Seq Number: 3108553
Prep Method: SW8015P
Date Prep: 11.22.19
Matrix: Solid
MB Sample Id: 7691075-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.22.19 12:24	

Analytical Method: TPH By SW8015 Mod
Seq Number: 3108566
Prep Method: SW8015P
Date Prep: 11.23.19
Matrix: Solid
MB Sample Id: 7691089-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.23.19 23:06	

Analytical Method: TPH By SW8015 Mod
Seq Number: 3108706
Prep Method: SW8015P
Date Prep: 11.25.19
Matrix: Solid
MB Sample Id: 7691187-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	11.25.19 21:35	

Analytical Method: TPH By SW8015 Mod
Seq Number: 3108553
Prep Method: SW8015P
Date Prep: 11.22.19
Matrix: Soil
Parent Sample Id: 644017-001
MS Sample Id: 644017-001 S
MSD Sample Id: 644017-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	1190	119	1220	122	70-135	2	20	mg/kg	11.22.19 13:39	
Diesel Range Organics (DRO)	<15.0	997	1190	119	1190	119	70-135	0	20	mg/kg	11.22.19 13:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		130		70-135	%	11.22.19 13:39
o-Terphenyl	115		127		70-135	%	11.22.19 13:39

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 644197

Endeavor Energy
NC State SWD #1

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3108566 — Matrix: Soil — Date Prep: 11.23.19
Parent Sample Id: 644197-001 — MS Sample Id: 644197-001 S — MSD Sample Id: 644197-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	1200	120	1200	120	70-135	0	20	mg/kg	11.24.19 00:21	
Diesel Range Organics (DRO)	58.4	997	1180	112	1190	113	70-135	1	20	mg/kg	11.24.19 00:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	128		124		70-135	%	11.24.19 00:21
o-Terphenyl	118		119		70-135	%	11.24.19 00:21

Analytical Method: TPH By SW8015 Mod — Prep Method: SW8015P
Seq Number: 3108706 — Matrix: Soil — Date Prep: 11.25.19
Parent Sample Id: 644197-021 — MS Sample Id: 644197-021 S — MSD Sample Id: 644197-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	1200	120	1230	123	70-135	2	20	mg/kg	11.25.19 22:51	
Diesel Range Organics (DRO)	<15.0	998	1210	121	1240	124	70-135	2	20	mg/kg	11.25.19 22:51	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		127		70-135	%	11.25.19 22:51
o-Terphenyl	120		123		70-135	%	11.25.19 22:51

Analytical Method: BTEX by EPA 8021B — Prep Method: SW5030B
Seq Number: 3108542 — Matrix: Solid — Date Prep: 11.22.19
MB Sample Id: 7690967-1-BLK — LCS Sample Id: 7690967-1-BKS — LCSD Sample Id: 7690967-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.104	104	0.104	104	70-130	0	35	mg/kg	11.22.19 13:53	
Toluene	<0.000456	0.100	0.100	100	0.101	101	70-130	1	35	mg/kg	11.22.19 13:53	
Ethylbenzene	<0.000565	0.100	0.0980	98	0.0979	98	70-130	0	35	mg/kg	11.22.19 13:53	
m,p-Xylenes	<0.00101	0.200	0.200	100	0.199	100	70-130	1	35	mg/kg	11.22.19 13:53	
o-Xylene	<0.000344	0.100	0.0975	98	0.0988	99	70-130	1	35	mg/kg	11.22.19 13:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		99		100		70-130	%	11.22.19 13:53
4-Bromofluorobenzene	92		92		101		70-130	%	11.22.19 13:53

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

QC Summary 644197

Endeavor Energy

NC State SWD #1

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108538 | Matrix: Solid | Date Prep: 11.22.19
MB Sample Id: 7690973-1-BLK | LCS Sample Id: 7690973-1-BKS | LCSD Sample Id: 7690973-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.111	111	0.109	109	70-130	2	35	mg/kg	11.22.19 23:41	
Toluene	<0.00200	0.100	0.104	104	0.102	102	70-130	2	35	mg/kg	11.22.19 23:41	
Ethylbenzene	<0.00200	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	11.22.19 23:41	
m,p-Xylenes	<0.00400	0.200	0.219	110	0.216	108	70-130	1	35	mg/kg	11.22.19 23:41	
o-Xylene	<0.00200	0.100	0.109	109	0.107	107	70-130	2	35	mg/kg	11.22.19 23:41	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		111		110		70-130	%	11.22.19 23:41
4-Bromofluorobenzene	101		107		105		70-130	%	11.22.19 23:41

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108546 | Matrix: Solid | Date Prep: 11.22.19
MB Sample Id: 7690988-1-BLK | LCS Sample Id: 7690988-1-BKS | LCSD Sample Id: 7690988-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.101	101	0.109	109	70-130	8	35	mg/kg	11.23.19 00:32	
Toluene	<0.000456	0.100	0.0934	93	0.104	104	70-130	11	35	mg/kg	11.23.19 00:32	
Ethylbenzene	<0.000565	0.100	0.0890	89	0.101	101	70-130	13	35	mg/kg	11.23.19 00:32	
m,p-Xylenes	<0.00101	0.200	0.178	89	0.206	103	70-130	15	35	mg/kg	11.23.19 00:32	
o-Xylene	<0.000344	0.100	0.0884	88	0.104	104	70-130	16	35	mg/kg	11.23.19 00:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		97		100		70-130	%	11.23.19 00:32
4-Bromofluorobenzene	86		94		105		70-130	%	11.23.19 00:32

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108542 | Matrix: Soil | Date Prep: 11.22.19
Parent Sample Id: 644192-021 | MS Sample Id: 644192-021 S | MSD Sample Id: 644192-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000449	0.101	0.0976	96	0.0984	97	70-130	1	35	mg/kg	11.22.19 14:33	
Toluene	0.00461	0.101	0.109	103	0.106	100	70-130	3	35	mg/kg	11.22.19 14:33	
Ethylbenzene	0.00502	0.101	0.101	95	0.0913	85	70-130	10	35	mg/kg	11.22.19 14:33	
m,p-Xylenes	0.0247	0.202	0.214	94	0.199	86	70-130	7	35	mg/kg	11.22.19 14:33	
o-Xylene	0.0112	0.101	0.107	95	0.107	95	70-130	0	35	mg/kg	11.22.19 14:33	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	92		89		70-130	%	11.22.19 14:33
4-Bromofluorobenzene	115		125		70-130	%	11.22.19 14:33

MS/MSD Percent Recovery	[D] = 100*(C-A) / B	LCS = Laboratory Control Sample	MS = Matrix Spike
Relative Percent Difference	RPD = 200* | (C-E) / (C+E) |	A = Parent Result	B = Spike Added
LCS/LCSD Recovery	[D] = 100 * (C) / [B]	C = MS/LCS Result	D = MSD/LCSD % Rec
Log Difference	Log Diff. = Log(Sample Duplicate) - Log(Original Sample)	E = MSD/LCSD Result	

QC Summary 644197

Endeavor Energy

NC State SWD #1

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108538 | Matrix: Soil | Date Prep: 11.22.19
Parent Sample Id: 644197-001 | MS Sample Id: 644197-001 S | MSD Sample Id: 644197-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.00106	0.0996	0.0883	88	0.0922	91	70-130	4	35	mg/kg	11.23.19 00:21	
Toluene	0.00533	0.0996	0.0799	75	0.0837	79	70-130	5	35	mg/kg	11.23.19 00:21	
Ethylbenzene	0.00288	0.0996	0.0746	72	0.0799	77	70-130	7	35	mg/kg	11.23.19 00:21	
m,p-Xylenes	0.00293	0.199	0.148	73	0.159	78	70-130	7	35	mg/kg	11.23.19 00:21	
o-Xylene	0.00194	0.0996	0.0733	72	0.0779	76	70-130	6	35	mg/kg	11.23.19 00:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	114		116		70-130	%	11.23.19 00:21
4-Bromofluorobenzene	117		119		70-130	%	11.23.19 00:21

Analytical Method: BTEX by EPA 8021B | Prep Method: SW5030B
Seq Number: 3108546 | Matrix: Soil | Date Prep: 11.22.19
Parent Sample Id: 644197-026 | MS Sample Id: 644197-026 S | MSD Sample Id: 644197-026 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000383	0.0996	0.0825	83	0.0905	91	70-130	9	35	mg/kg	11.23.19 01:13	
Toluene	<0.000454	0.0996	0.0777	78	0.0846	85	70-130	9	35	mg/kg	11.23.19 01:13	
Ethylbenzene	<0.000563	0.0996	0.0749	75	0.0811	81	70-130	8	35	mg/kg	11.23.19 01:13	
m,p-Xylenes	<0.00101	0.199	0.149	75	0.162	81	70-130	8	35	mg/kg	11.23.19 01:13	
o-Xylene	<0.000343	0.0996	0.0749	75	0.0809	81	70-130	8	35	mg/kg	11.23.19 01:13	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		103		70-130	%	11.23.19 01:13
4-Bromofluorobenzene	104		104		70-130	%	11.23.19 01:13

MS/MSD Percent Recovery | [D] = 100*(C-A) / B | LCS = Laboratory Control Sample | MS = Matrix Spike
Relative Percent Difference | RPD = 200* | (C-E) / (C+E) | | A = Parent Result | B = Spike Added
LCS/LCSD Recovery | [D] = 100 * (C) / [B] | C = MS/LCS Result | D = MSD/LCSD % Rec
Log Difference | Log Diff. = Log(Sample Duplicate) - Log(Original Sample) | E = MSD/LCSD Result

Chain of Custody

Work Order No: 604197

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
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Project Manager:	Lance Crenshaw	Bill to: (if different)	Etech Environmental
Company Name:	Endeavor Energy	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:	pm@etechenv.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level II ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	NC State SWD #1	Turn Around	
Project Number:	11503	Routine:	☒
Project Location	Rural Lea County, NM	Rush:	☐
Sampler's Name:	Catalina Baeza	Due Date:	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5 | 0.3	Thermometer ID	128
Received Intact:	Yes (No)		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Preservative Codes

HNO3: HN
H2S04: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Cl	BTEX	TPH 8015 M	Sample Comments
SP6 @ 1'		18-Nov	9:30	1'	1	X	X	X	
SH2 @ S		18-Nov	9:40	Surf	1	X	X	X	
SH2 @ 1'		18-Nov	9:50	1'	1	X	X	X	
SH1 @ S'		18-Nov	9:50	Surf	1	X	X	X	
SH1 @ 1'		18-Nov	10:00	1'	1	X	X	X	
WH2 @ S		18-Nov	10:10	Surf	1	X	X	X	
WH2 @ 1'		18-Nov	10:15	1'	1	X	X	X	
NH1 @ S		18-Nov	10:20	Surf	1	X	X	X	
NH1 @ 1'		18-Nov	10:30	1'	1	X	X	X	
WH1 @ S		18-Nov	10:40	Surf	1	X	X	X	

Total 200.7 / 6010 **200.8 / 6020:** 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of $75.00 will be applied to each project and a charge of $5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Stephanie Rojas	11/21/19 4:00	2	Stephanie Rojas	11/21/19 4:10
3				4		1110
5				6		11/22/19

Revised Date 101419 Rev. 2019.1

Chain of Custody

Work Order No: 641197

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800
www.xenco.com

Project Manager:	Lance Crenshaw	Bill to: (if different)	Etech Environmental
Company Name:	Endeavor Energy	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:	pm@etechenv.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	NC State SWD #1	Turn Around	
Project Number:	11503	Routine:	☒
Project Location	Rural Lea County, NM	Rush:	☐
Sampler's Name:	Catalina Baeza	Due Date:	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5/0.3	Thermometer ID	68
Received Intact:	(Yes) No		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

Preservative Codes

HNO3: HN
H2S04: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Cl	BTEX	TPH 8015 M	Sample Comments
SP2 @ S		18-Nov	8:20	Surf	1	X	X	X	
SP3 @ S		18-Nov	8:25	Surf	1	X	X	X	
SP4 @ S		18-Nov	8:30	Surf	1	X	X	X	
SP5 @ S		18-Nov	8:35	Surf	1	X	X	X	
SP6 @ S		18-Nov	8:45	Surf	1	X	X	X	
SP2 @ 1'		18-Nov	8:50	1'	1	X	X	X	
SP3 @ 1'		18-Nov	8:55	1'	1	X	X	X	
SP4 @ 1'		18-Nov	9:05	1'	1	X	X	X	
SP4 @ 2'		18-Nov	9:10	2'	1	X	X	X	
SP5 @ 1'		18-Nov	9:20	1'	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Stephanie Tapia	11/21/19 4:00	2	Stephanie Tapia	11/21/19 4:10
3			4		1110
5			6		11/20/19

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300, San Antonio, TX (210) 509-3334
Midland, TX (432) 704-5440, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6701
Atlanta, GA (770) 449-8800

Work Order No: 614197

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Project Manager:	Lance Crenshaw	Bill to: (if different)	Etech Environmental
Company Name:	Endeavor Energy	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:	pm@etechenv.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfield ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level I ☐ Level II ☐ PST/US ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	NC State SWD #1	Turn Around	
Project Number:	11503	Routine:	☒
Project Location	Rural Lea County, NM	Rush:	☐
Sampler's Name:	Catalina Baeza	Due Date:	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	0.5	Thermometer ID	
Received Intact:	Yes (No)		
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Cl	BTEX	TPH 8015 M
WH1 @ 1'		18-Nov	11:00	1'	1	X	X	X
NH2 @ S		18-Nov	11:10	Surf	1	X	X	X
NH2 @ 1'		18-Nov	11:20	1'	1	X	X	X
EH1 @ S		18-Nov	11:30	Surf	1	X	X	X
EH1 @ 1'		18-Nov	11:45	1'	1	X	X	X
EH2 @ S		18-Nov	12:00	Surf	1	X	X	X
EH2 @ 1'		18-Nov	12:45	1'	1	X	X	X

Preservative Codes

HNO3: HN
H2S04: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

TAT starts the day recevied by the lab, if received by 4:30pm

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U **1631 / 245.1 / 7470 / 7471** : Hg

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Stephanie Rojos	11/21/19 4:00	2	Stephanie Rojos	11/21/19 4:10
3				4		11/22/19 1110
5				6		

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Endeavor Energy

Date/ Time Received: 11/22/2019 11:10:00 AM

Work Order #: 644197

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.3
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6*Custody Seals Signed and dated?	**N/A**
#7 *Chain of Custody present?	**Yes**
#8 Any missing/extra samples?	**No**
#9 Chain of Custody signed when relinquished/ received?	**Yes**
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**
#11 Container label(s) legible and intact?	**Yes**
#12 Samples in proper container/ bottle?	**Yes**
#13 Samples properly preserved?	**Yes**
#14 Sample container(s) intact?	**Yes**
#15 Sufficient sample amount for indicated test(s)?	**Yes**
#16 All samples received within hold time?	**Yes**
#17 Subcontract of sample(s)?	**N/A**
#18 Water VOC samples have zero headspace?	**N/A**

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Brianna Teel Date: 11/22/2019
Brianna Teel

Checklist reviewed by: Jessica Kramer Date: 11/22/2019
Jessica Kramer

Appendix D
Photographic Log

Photographic Log

Photo Number: 1	
Photo Direction: Southeast	
Photo Description: View of Surface Staining from the initial release.	

Photo Number: 2	
Photo Direction: Southwest	
Photo Description: View of Surface Staining from the initial release.	

Photographic Log

Dates: mm/dd/yyyy - mm/dd/yyyy

Photo Number: 3 **Photo Direction:** Northwest **Photo Description:** View of Surface Staining from the initial release.	

Photo Number: 4 **Photo Direction:** Southeast **Photo Description:** View of Surface Staining from the initial release.