

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2030434227
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Endeavor Energy Resources, LP	OGRID 190595
Contact Name Teffanie Fawks	Contact Telephone 432-262-4203
Contact email teffanies@eeronline.com	Incident # (assigned by OCD)
Contact mailing address 110 N. Marienfeld, Suite 200, Midland, TX 79706	

Location of Release Source

Latitude 32.16415 Longitude -104.04453
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Hopi Federal #002	Site Type Pumping Unit
Date Release Discovered 4/5/20	API# (if applicable) 30-015-30819

Unit Letter	Section	Township	Range	County
A	01	25S	28E	Eddy

NOT ACCEPTED

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 0.5	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 4.5	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Pin hole leak developed in 2" line coming off of well head

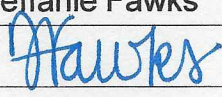
State of New Mexico
Oil Conservation Division

Incident ID	NRM2030434227
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? 	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☒ The source of the release has been stopped.	
☒ The impacted area has been secured to protect human health and the environment.	
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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: <u>Teffanie Fawks</u>	Title: <u>Environmental Technician</u>
Signature: <u></u>	Date: <u>10/20/20</u>
email: <u>teffanies@eeronline.com</u>	Telephone: <u>432-262-4203</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>10/30/2020</u> NOT ACCEPTED

Hopi Federal #002

Incident ID	NRM2030434227
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>~40 Ft</u> (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

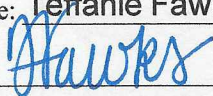
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NRM2030434227
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 FawksTitle: Environmental TechnicianSignature: Date: 10/20/20email: teffanies@eeronline.comTelephone: 432-262-4203**OCD Only**Received by: Ramona MarcusDate: 10/30/2020

CONDO #1 TB

State of New Mexico
Oil Conservation Division

Incident ID	NRM2030434227
District RP	
Facility ID	
Application ID	

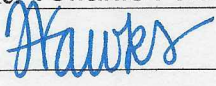
Closure

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

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Teffanie FawksTitle: Environmental TechnicianSignature: Date: 10/20/20email: teffanies@eeronline.comTelephone: 432-262-4203**OCD Only**Received by: Ramona MarcusDate: 10/30/2020

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Hopi Federal #002

NRM2030434227

Remediation Summary and Soil Closure Request

Endeavor Energy Resources, LP Hopi Federal #2 (4-5-2020)

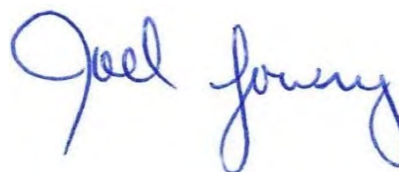
Eddy County, New Mexico
Unit Letter A, Section 1, Township 25 South, Range 28 East
Latitude 32.16416 North, Longitude 104.04459 West
NMOCD Reference No. pending

Prepared By:

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



Matthew Grieco



Joel W. Lowry



Midland • San Antonio • Lubbock • Lovington • Lafayette

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1.0 PROJECT INFORMATION

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?	~40 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
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 the 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

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
~40 ft	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg
	DRO + GRO	EPA SW-846 Method 8015M	N/A mg/kg
	BTEX	EPA SW-846 Methods 8021b or 8260b	50 mg/kg
	Benzene	EPA SW-846 Methods 8021b or 8260b	10 mg/kg

4.0 REMEDIATION ACTIVITIES SUMMARY

On April 7, 2020, 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 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 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.

Based on field observations and field test data, twenty-four (24) delineation soil samples (NH1 @ Surface, NH1 @ 1', NH2 @ Surface, NH2 @ 1', EH1 @ Surface, EH1 @ 1', EH2 @ Surface, EH2 @ 1', SH1 @ Surface, SH1 @ 1', SH2 @ Surface, SH2 @ 1', SP1 @ Surface, SP1 @ 3'-R, SP2 @ Surface, SP2 @ 4'-R, SP3 @ Surface, SP3 @ 4'-R, SP4 @ Surface, SP4 @ 3'-R, WH1 @ Surface, WH1 @ 1', WH2 @ Surface, and WH2 @ 1') were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria beyond 4 Ft. BGS with the exception of the areas characterized by soil samples SP1 @ 3'-R (3,440 mg/kg Cl-), SP3 @ 4'-R (2,210 mg/kg Cl-), and SP4 @ 3'-R (6,250 mg/kg Cl-), which encountered auger refusal before vertical delineation could be achieved. The horizontal extent of affected soil impacted above the NMOCD Closure Criteria was adequately defined.

On July 16, 2020, Etech continued the initial site assessment. Based on field observations and field test data, three (3) delineation soil samples (SP1 @ 5', SP3 @ 3', and SP4 @ 5') were submitted to the laboratory for analysis of Chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria beyond 5 Ft. BGS with the exception of the area characterized by soil sample SP1 @ 5' (1,140 mg/kg Cl-).

On July 22, 2020, Etech continued the initial site assessment. Based on field observations and field test data, one (1) delineation soil sample (SP1 @ 7') was collected submitted to the laboratory for analysis of chloride. Based on laboratory analytical results, soil was not affected above the NMOCD Closure Criteria beyond 7 Ft. BGS in the area characterized by soil

On August 4, 2020, remediation activities commenced at the Site. In accordance with the NMOCD, impacted soil affected above the NMOCD Closure Criteria was excavated and stockpiled on-site, pending final disposition at an NMOCD-approved surface waste facility for disposal. The floor and sidewalls of the excavation were advanced until field observations and test results suggested BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria..

On August 4, 2020, Etech collected ten (10) excavation confirmation soil samples (NWW, NWHFSB @ 4', WWWPJ, WW, NWH @ 3', NWA, WFS, SWWPJ, SP1FS @ 8', and NWB) from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the applicable NMOCD Closure Criteria in each of the submitted soil samples with the exceptions of soil samples NWW (4,050 mg/kg Cl-), WWWPJ (731 mg/kg Cl-), and NWH @ 3' (922 mg/kg Cl-).

On August 5, 2020, Etech collected five (5) excavation confirmation soil samples (NW1, SW1, SW2, SP4FS @ 5', and SP4FSA @ 5') from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations below the applicable NMOCD Closure Criteria in each of the submitted soil samples with the exception of soil sample SP4FS @ 5', which had a chloride concentration of 623 mg/kg.

On August 6, 2020, Etech collected three (3) excavation confirmation soil samples (SW3, BWHS @ 5', and SP4FSB @ 7') from the floor and sidewalls of the excavated area. The collected soil samples were submitted to a certified commercial laboratory for analysis of BTEX, TPH and chloride concentrations which were determined to be below the applicable NMOCD Closure Criteria in each of the submitted soil samples.

On August 10, 2020, excavation activities resumed at the Site. Impacted soil in the areas characterized by sample points NWW, WWWPJ, and NWH @ 3' was excavated and transported to an NMOCD-approved surface waste facility for disposal. Upon excavating impacted soil remaining in-situ, Etech collected, twelve (12) additional excavation confirmation soil samples (SP #5 @ 2', SP #6 @ 4', SP #7 @ 4', NW #1, NW #2, EW #1, SW#1, WW #1, NWHB @ 4', BWHSB @1', WWPJB, and NWWB) and submitted them to the laboratory for analysis of BTEX, TPH and chloride concentrations which were determined to be below the applicable NMOCD Closure Criteria in each of the submitted soil samples.

On August 12, 2020, excavation activities resumed at the Site. Impacted soil in the areas characterized by sample point SP4FS @ 5' was excavated and transported to an NMOCD-approved surface waste facility for disposal. Upon excavating impacted soil remaining in-situ, Etech collected, one (1) additional excavation confirmation soil sample (SP4F5 @ 6') and submitted it to the laboratory for analysis of BTEX, TPH and chloride concentrations which were determined to be below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in the submitted soil sample.

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

The final dimensions of the excavated area were 200 Ft. in length, 20 to 80 Ft. in width and ranged from 1 to 8 Ft. in depth. During the course of remediation activities approximately 860 cubic yards of impacted soil were transported to an NMOCD-approved surface waste facility for disposal.

5.0 RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

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

6.0 SOIL CLOSURE REQUEST

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

Based on laboratory analytical results and field activities conducted to date, Etech recommends Endeavor Energy Resources, LP provide copies of this Remediation Summary and Soil Closure Request to the appropriate agencies and request closure be granted to the Hopi Federal #2 (4-5-2020) Site.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this Remediation Summary and Soil Closure Request 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. Etech 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 without the consent of Etech and/or Endeavor Energy Resources, LP.

8.0 DISTRIBUTION

Endeavor Energy Resources, LP

*110 N. Marienfeld St
Suite 200
Midland, TX 79701*

New Mexico Energy, Minerals and Natural Resources Department

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

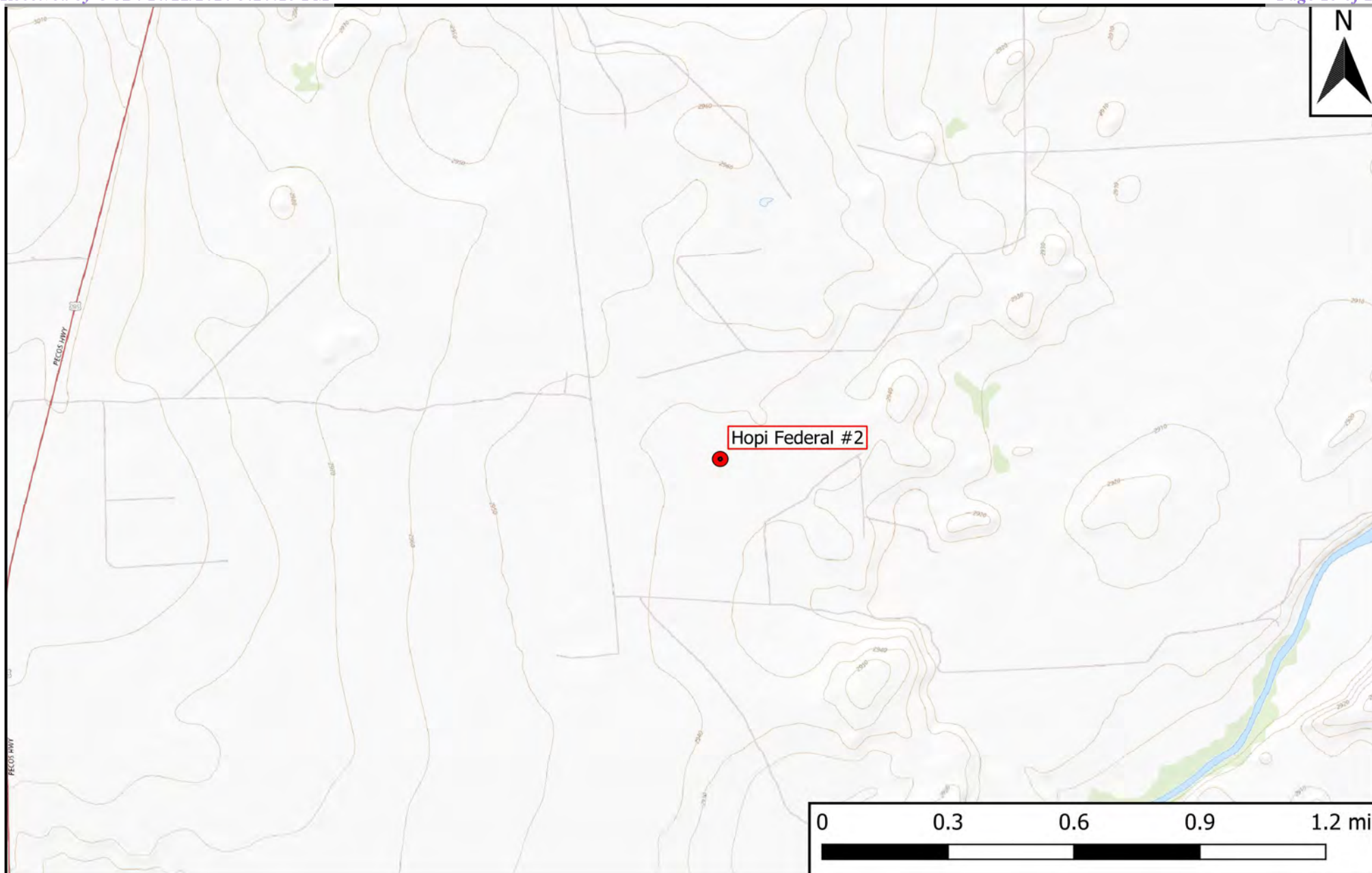
Hobbs Field Office

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

(Electronic Submission)

Figure 1

Topographic Map



Legend

 Site Location

Figure 1
Topographic Map
Endeavor Energy Resources, LP
Hopi Federal #2 (4-5-2020)
GPS: 32.16416, -104.04459
Eddy County

eTECH 
Environmental & Safety Solutions, Inc.

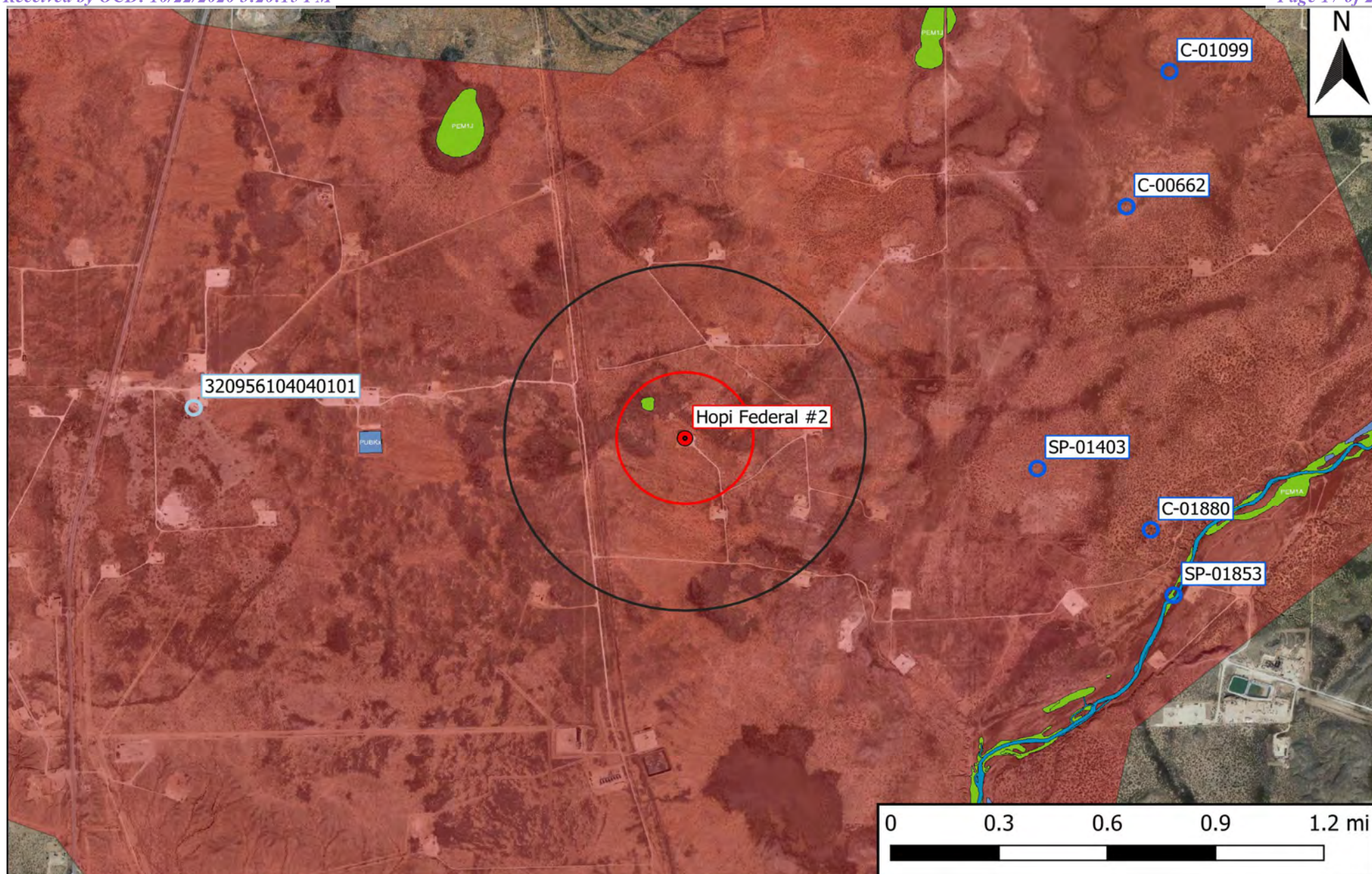
Drafted: mag

Checked: jwl

Date: 4/13/20

Figure 2

Aerial Proximity Map



Legend	
● Site Location	 0.5 Mi Radius
○ Well - NMOSE	 1000 Ft Radius
○ Well - USGS	 1% Annual Flood Chance
 High Karst	 Lake/Freshwater Pond
 Potash Mine Workings	 Emergent/Forested Wetlands
	 Riverine

Figure 2
Aerial Map
Endeavor Energy Resources, LP
Hopi Federal #2 (4-5-2020)
GPS: 32.16416, -104.04459
Eddy County



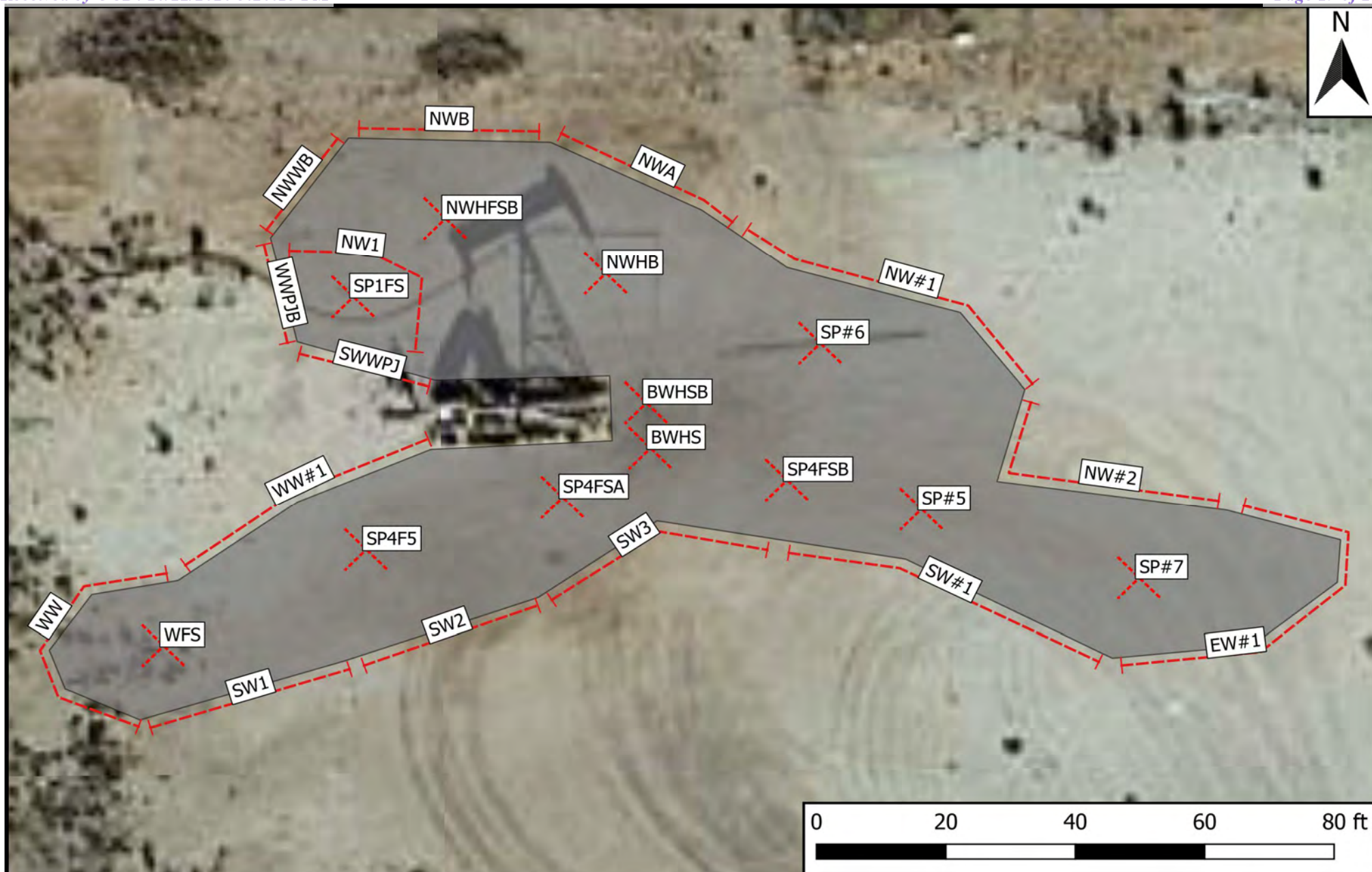
Drafted: mag

Checked: jwl

Date: 4/13/20

Figure 3

Site and Sample Location Map



Legend

- Wall Sample
- Floor Sample
- Excavated Area

Figure 3

Site and Sample Location Map
 Endeavor Energy Resources, LP
 Hopi Federal #2 (4-5-2020)
 GPS: 32.16416, -104.04459
 Eddy County



Drafted: mag

Checked: jwl

Date: 8/31/20

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
Hopi Federal #2 (4-5-2020)
NMOCD Ref. #: pending

NMOCD Closure Criteria				10	50	-	-	-	-	100	600
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)
NH1	4/7/2020	Surface	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	<5.00
NH1	4/7/2020	1'	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	12.5
NH2	4/7/2020	Surface	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	8.13
NH2	4/7/2020	1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	135
EH1	4/7/2020	Surface	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	118
EH1	4/7/2020	1'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	9.26
EH2	4/7/2020	Surface	In-Situ	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	8.84
EH2	4/7/2020	1'	In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	247
SH1	4/7/2020	Surface	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	100
SH1	4/7/2020	1'	In-Situ	<0.00200	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	81.8
SH2	4/7/2020	Surface	In-Situ	<0.00202	<0.00202	<50.0	<50.0	<50.0	<50.0	<50.0	<5.04
SH2	4/7/2020	1'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	<5.03
Sp1	4/7/2020	Surface	Excavated	<0.00200	<0.00200	<49.9	123	123	<49.9	123	24,700
SP1	4/7/2020	3'-R	Excavated	<0.00202	<0.00202	<49.8	<49.8	<49.8	<49.8	<49.8	3,440
SP2	4/7/2020	Surface	Excavated	<0.00200	<0.00200	<50.0	115	115	<50.0	115	28,500
SP2	4/7/2020	4'-R	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	435
SP3	4/7/2020	Surface	Excavated	<0.00200	<0.00200	<49.9	96.3	96.0	<49.9	96.3	16,600
SP3	4/7/2020	4'-R	Excavated	<0.00201	<0.00201	<49.8	<49.8	<49.8	<49.8	<49.8	2,210
SP4	4/7/2020	Surface	Excavated	<0.00200	0.0163	<50.0	119	119	<50.0	119	17,400
SP4	4/7/2020	3'-R	Excavated	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	6,250
WH1	4/7/2020	Surface	In-Situ	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	9.14X
WH1	4/7/2020	1'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	33.2
WH2	4/7/2020	Surface	In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	<5.04
WH2	4/7/2020	1'	In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	<5.03
SP1 @ 5'	7/16/2020	5'	Excavated	-	-	-	-	-	-	-	1,140
SP3 @ 3'	7/16/2020	3'	In-Situ	-	-	-	-	-	-	-	336
SP4 @ 5'	7/16/2020	5'	In-Situ	-	-	-	-	-	-	-	432
SP1 @ 7'	7/22/2020	7'	In-Situ	-	-	-	-	-	-	-	204
NWW	8/4/2020		Excavated	<0.00198	<0.00198	<49.9	<49.9	<49.9	<49.9	<49.9	4,050
NWHFSB @ 4'	8/4/2020	4'	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	546
WWWPJ	8/4/2020		Excavated	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	731
WW	8/4/2020		In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	114
NWH @ 3'	8/4/2020	3'	Excavated	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	922
NWA	8/4/2020		In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	181
WFS	8/4/2020		In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	444
SWWPJ	8/4/2020		In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	181
SP1FS @ 8'	8/4/2020	8'	In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	109
NWB	8/4/2020		In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	500
NW1	8/5/2020		In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	369
SW1	8/5/2020		In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	455
SW2	8/5/2020		In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	594
SW3	8/6/2020		In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	460

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL
Endeavor Energy Resources, LP
Hopi Federal #2 (4-5-2020)
NMOCD Ref. #: pending

NMOCD Closure Criteria				10	50	-	-	-	-	100	600
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)
BWHS @ 5'	8/6/2020	5'	In-Situ	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	162
SP4FS @ 5'	8/5/2020	5'	Excavated	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	623
SP4FSA @ 5'	8/5/2020	5'	In-Situ	<0.00198	<0.00198	<49.8	<49.8	<49.8	<49.8	<49.8	315
SP4FSB @ 7'	8/6/2020	7'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	62.2
SP #5 @ 2'	8/10/2020	2'	In-Situ	<0.00200	0.00257	<49.9	<49.9	<49.9	<49.9	<49.9	280
SP #6 @ 4'	8/10/2020	4'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	50.6
SP #7 @ 4'	8/10/2020	4'	In-Situ	0.00226	0.00595	<49.9	<49.9	<49.9	<49.9	<49.9	216
NW #1	8/10/2020		In-Situ	<0.00200	0.00407	<49.8	<49.8	<49.8	<49.8	<49.8	424
NW #2	8/10/2020		In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	112
EW #1	8/10/2020		In-Situ	<0.00200	0.00215	<49.9	<49.9	<49.9	<49.9	<49.9	347
SW#1	8/10/2020		In-Situ	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	171
WW #1	8/10/2020		In-Situ	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	163
NWHB @ 4'	8/10/2020	4'	In-Situ	<0.00198	0.00237	<50.0	<50.0	<50.0	<50.0	<50.0	375
BWHSB @1'	8/10/2020	1'	In-Situ	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	518
WWPJB	8/10/2020		In-Situ	<0.00201	<0.00201	<50.0	<50.0	<50.0	<50.0	<50.0	392
NWWB	8/10/2020		In-Situ	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	257
SP4F5 @6'	8/12/2020	6'	In-Situ	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	152

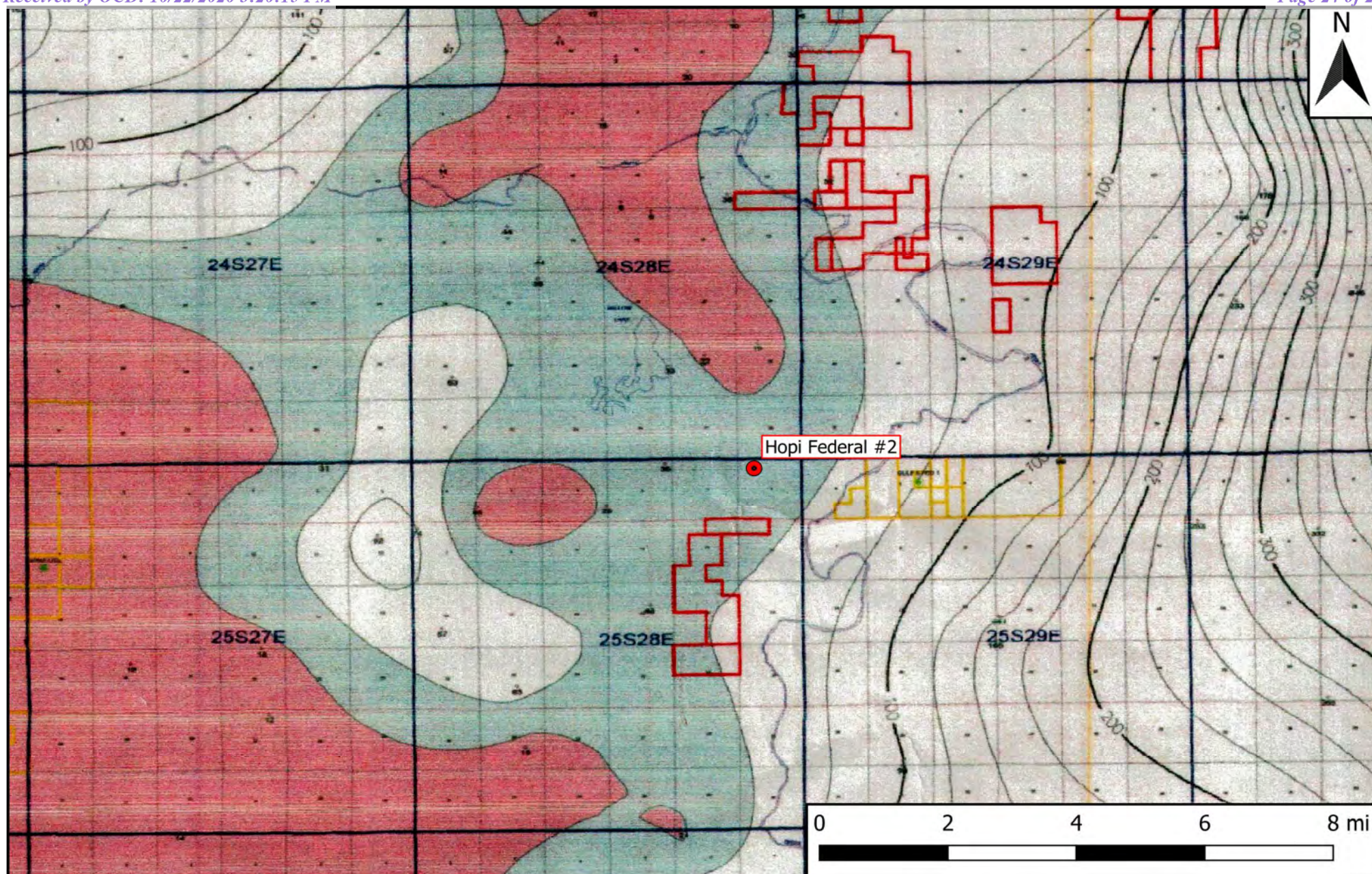
NOTES:

- = Sample not analyzed for that constituent.

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
 Hopi Federal #2 (4-5-2020)
 GPS: 32.16416, -104.04459
 Eddy County



Drafted: mag

Checked: jwl

Date: 4/13/20



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	DepthWell	DepthWater	Water Column
C 01880		C	ED	3	3	2	06	25S	29E	592161	3558605*	2120	85	40	45
C 00857		CUB	ED	3	1	4	30	24S	29E	592135	3561440*	3163	306		
C 03423		CUB	ED	2	4	1	26	24S	28E	588786	3561952	3196	126		
Average Depth to Water:														40 feet	
Minimum Depth:														40 feet	
Maximum Depth:														40 feet	

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 590084.25

Northing (Y): 3559031.68

Radius: 3220

*UTM location was derived from PLSS - see Help

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

4/13/20 1:40 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



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)

Q64	Q16	Q4	Sec	Tws	Rng	X	Y
3	1	4	30	24S	29E	592135	3561440*

Well Tag POD Number
C 00857

Driller License: 857 Driller Company: HIGH COUNTRY DRILLING & TRANSP

Driller Name: E.O. BURKE

Drill Start Date:	12/02/1958	Drill Finish Date:	12/16/1958	Plug Date:	
Log File Date:	06/29/1959	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:		Depth Well:	306 feet	Depth Water:	

*UTM location was derived from PLSS - see Help

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

4/13/20 1:41 PM

POINT OF DIVERSION SUMMARY



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
C	01880	3	3	2	06	25S	29E	592161	3558605*

x

Driller License: 46 **Driller Company:** ABBOTT BROTHERS COMPANY

Driller Name: MURRELL ABBOTT

Drill Start Date: 10/29/1979

Drill Finish Date: 10/30/1979

Plug Date:
Log File Date: 11/05/1979

PCW Rcv Date:
Source: Shallow

Pump Type:
Pipe Discharge Size:
Estimated Yield:
Casing Size: 7.00

Depth Well: 85 feet

Depth Water: 40 feet

x

Water Bearing Stratifications:
Top Bottom Description

40 85 Sandstone/Gravel/Conglomerate

x

Casing Perforations:
Top Bottom

40 60

x

*UTM location was derived from PLSS - see Help

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

4/13/20 1:41 PM

POINT OF DIVERSION SUMMARY



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
C	03423	2	4	1	26	24S	28E	588786	3561952

x

Driller License: 410 **Driller Company:** BRININSTOOL, A.M.

Driller Name: A.M. BRININSTOOL

Drill Start Date:	Drill Finish Date:	12/06/1965	Plug Date:
Log File Date:	12/07/1965	PCW Rcv Date:	Source: Shallow
Pump Type:		Pipe Discharge Size:	Estimated Yield:
Casing Size:	16.00	Depth Well:	126 feet
		Depth Water:	

x

Water Bearing Stratifications:	Top	Bottom	Description
	115	125	Limestone/Dolomite/Chalk

x

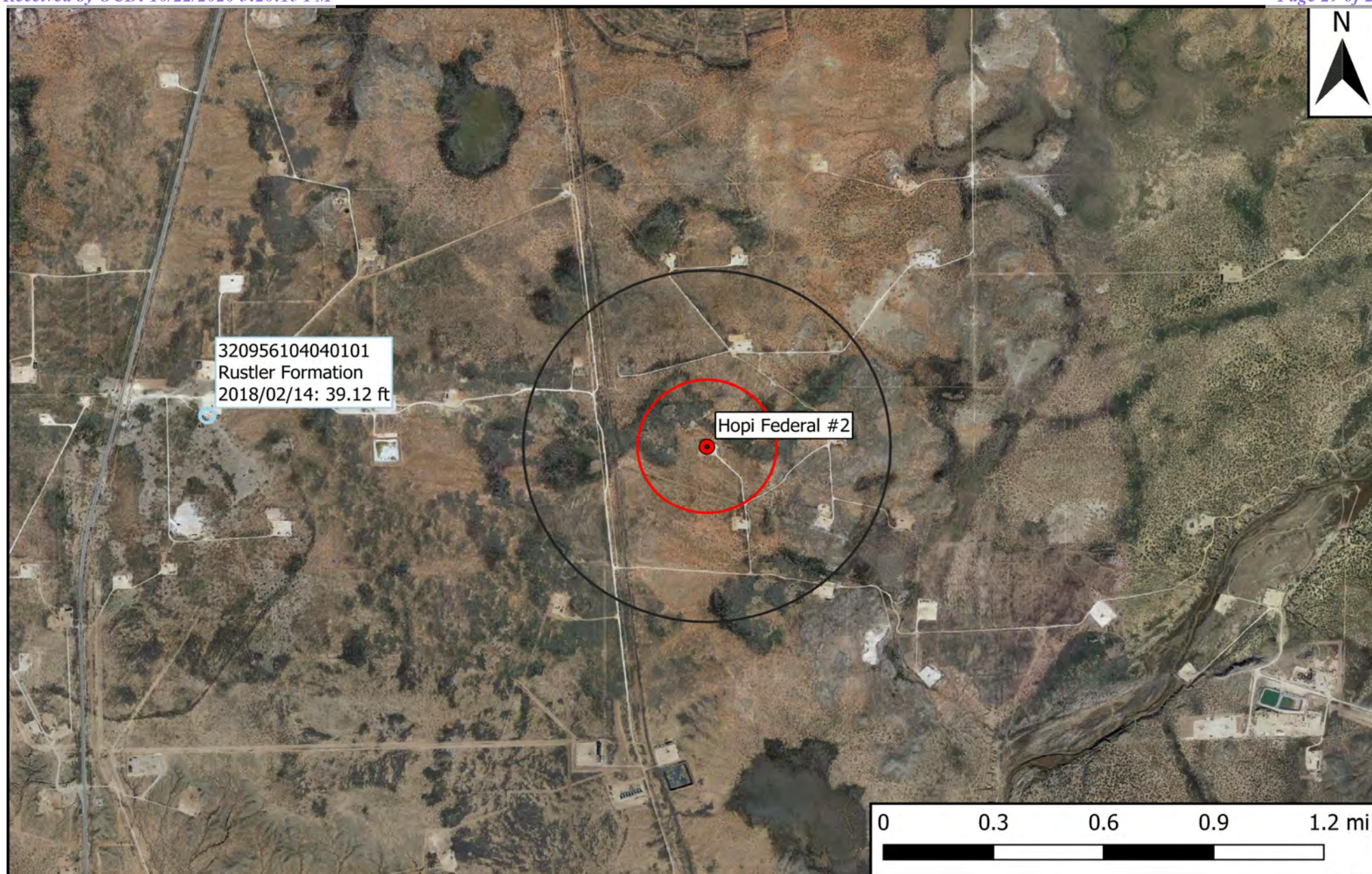
Casing Perforations:	Top	Bottom
	45	125

x

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4/13/20 1:41 PM

POINT OF DIVERSION SUMMARY

**Legend**

- Site Location
- Well - USGS
- 0.5 Mi Radius
- 1000 Ft Radius

Figure 5

USGS Well Proximity Map
Endeavor Energy Resources, LP
Hopi Federal #2 (4-5-2020)
GPS: 32.16416, -104.04459
Eddy County



Drafted: mag

Checked: jwl

Date: 4/13/20



National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hideNews Bulletins

- Notice** - The USGS Water Resources Mission Area’s priority is to maintain the safety and well-being of our communities, including providing critical situational awareness in times of flooding in all 50 U.S. states and additional territories. Our hydrologic monitoring stations continue to send data in near real-time to NWISWeb, and we are continuing critical water monitoring activities to protect life and property on a case-by-case basis. The health and safety of the public and our employees are our highest priorities, and we continue to follow guidance from the White House, the CDC, and state and local authorities.
- [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 =

- 320956104040101

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 320956104040101 25S.28E.03.22231

Eddy County, New Mexico
Latitude 32°09'56.2", Longitude 104°04'04.1" NAD83
Land-surface elevation 2,990.20 feet above NGVD29
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status	
1948-12-06			D	32.27			2		U		U	A
1978-01-03			D	32.97			2		U		U	A
1983-02-01			D	25.87			2		U		U	A
1987-10-14			D	29.27			2		U		U	A
1988-03-22			D	29.93			2		U		U	A
1992-11-04			D	35.03			2		S		U	A
1998-01-23			D	33.84			2		S		U	A
2003-01-27			D	32.08			2		S	USGS	A	A
2013-01-10	14:20 MST		m	33.56			2		S	USGS	R	A
2018-02-14	09:56 MST		m	39.12			2		V	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Method of measurement	V	Calibrated electric-tape measurement.

Section	Code	Description
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	A	Reported by another government agency (do not use "A" if reported by owner, use "O").
Source of measurement	R	Reported by person other than the owner, driller, or another government agency.
Source of measurement	S	Measured by personnel of reporting agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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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: 2020-04-13 15:35:05 EDT
0.27 0.24 nadww01

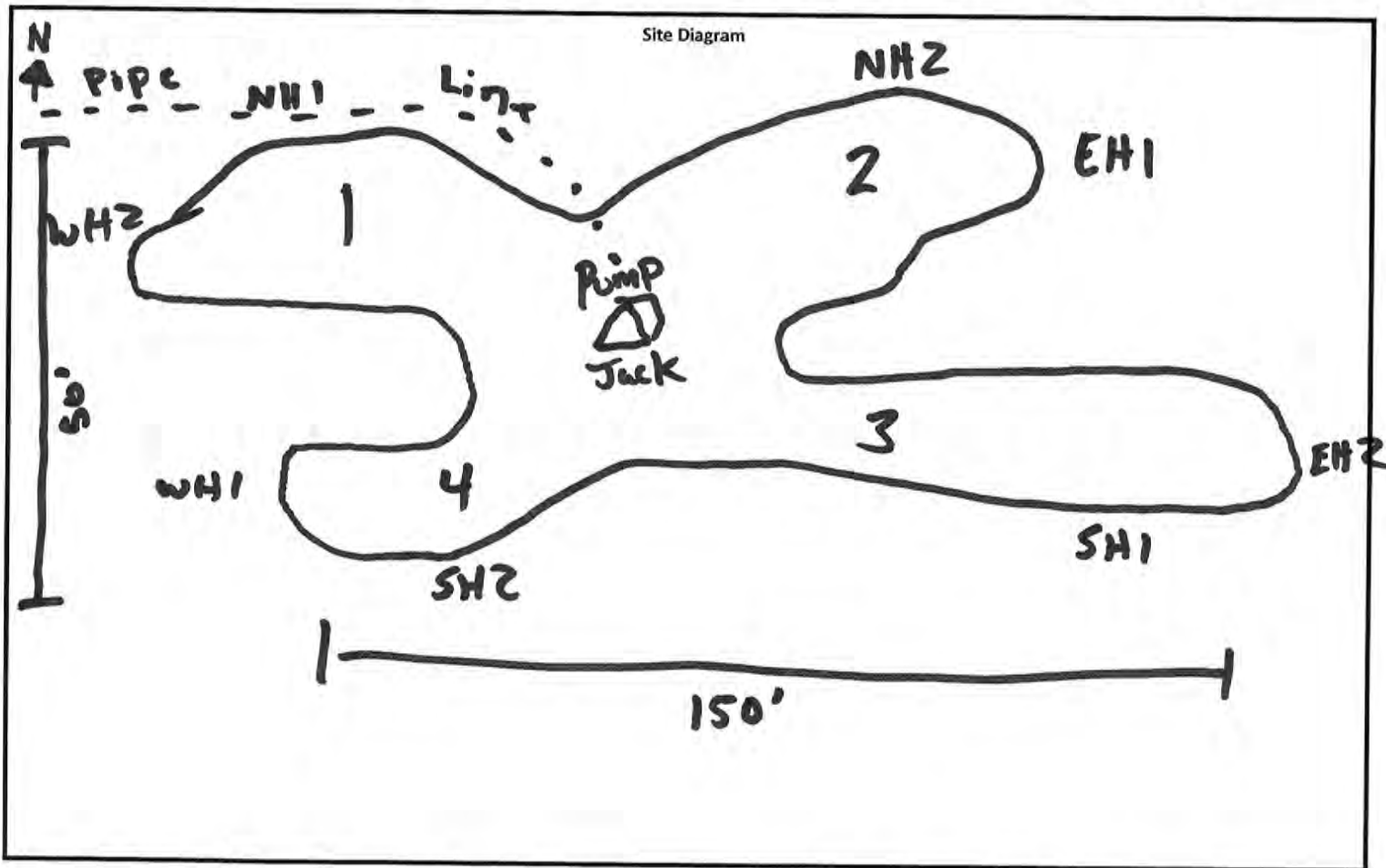
Appendix B

Field Data and Soil Profile Logs



Initial Release Assessment Form

Project: Hopi Federal #2 Date: 4.7.20
 Project Number: 12289 Latitude: 32.16416 Longitude: -104.04459
 Clean Up Level:



Notes:

~Length: 150 ~Width: 50 ~Area: ~Depth: 3'+

- 3-4 Representative Pictures of the Affected Area including sample locations?
- Necessary Samples Field Screened and on Ice?
- Sample and Field Screen Data Entered on Sample Log?
- Was horizontal and vertical delineation achieved?

Yes	No
☒	☐
☒	☐
☒	☐
☒	☐

Sample Log

Date:

4.7.20

Project: Hopi Federal #2 (4-5-2020)

Project Number: 12289

Latitude: 32.16416

Longitude: -104.04459

Sample ID	PID/Odor	Chloride Conc.	GPS
NH1@ surface	none	7124	
NH1@1'	none	7124	
NH2@ surface	none	7124	
NH2@1'	none	248	
EH1@ surface	none	148	
EH1@1'	none	556	
EH2@ surface	none	7124	
EH2@1'	none	348	
SH1@ surface	none	196	
SH1@1'	none	7124	
SH2@ surface	none	7124	
SH2@1'	none	7124	
WH1@ surface	none	7124	
WH1@1'	none	7124	
WH2@ surface	none	7124	
WH2@1'	none	7124	
SP1@ surface	strong	19368	
SP1@1'	slight	4176 *	
SP2@ surface	strong	1528	
SP2@1'	light	2156 *	
SP1@2'	none	2008 *	
SP1@3'-R	none	2504	
SP2@2'	none	1064 *	
SP2@3'	none	848	
SP2@4'-R	none	424	
SP3@ surface	strong	12320	
SP3@1'	light	2776 *	
SP4@ surface	strong	9584	
SP4@1'	light	7392 *	
SP3@2'	light	2504 *	
SP3@3'	none	1872 *	
SP4@2'	light	2504 *	
SP4@3'-R	none	4176	
SP3@4'-R	none	1744	

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

* - Did Not go to Lab!

Date:

7/16/20

Clean Up Level:

Latitude: 32.16416

Longitude: -104.04459

0

[illegible]

Refusal on SH/NPJ: 10' From base of Pump Jack

~Length: 290' ~Width: 90' ~Area: 7000 sq ft ~Depth: 8'

3-4 Representative Pictures of the Affected Area including sample locations?

Necessary Samples Field Screened and on Ice?

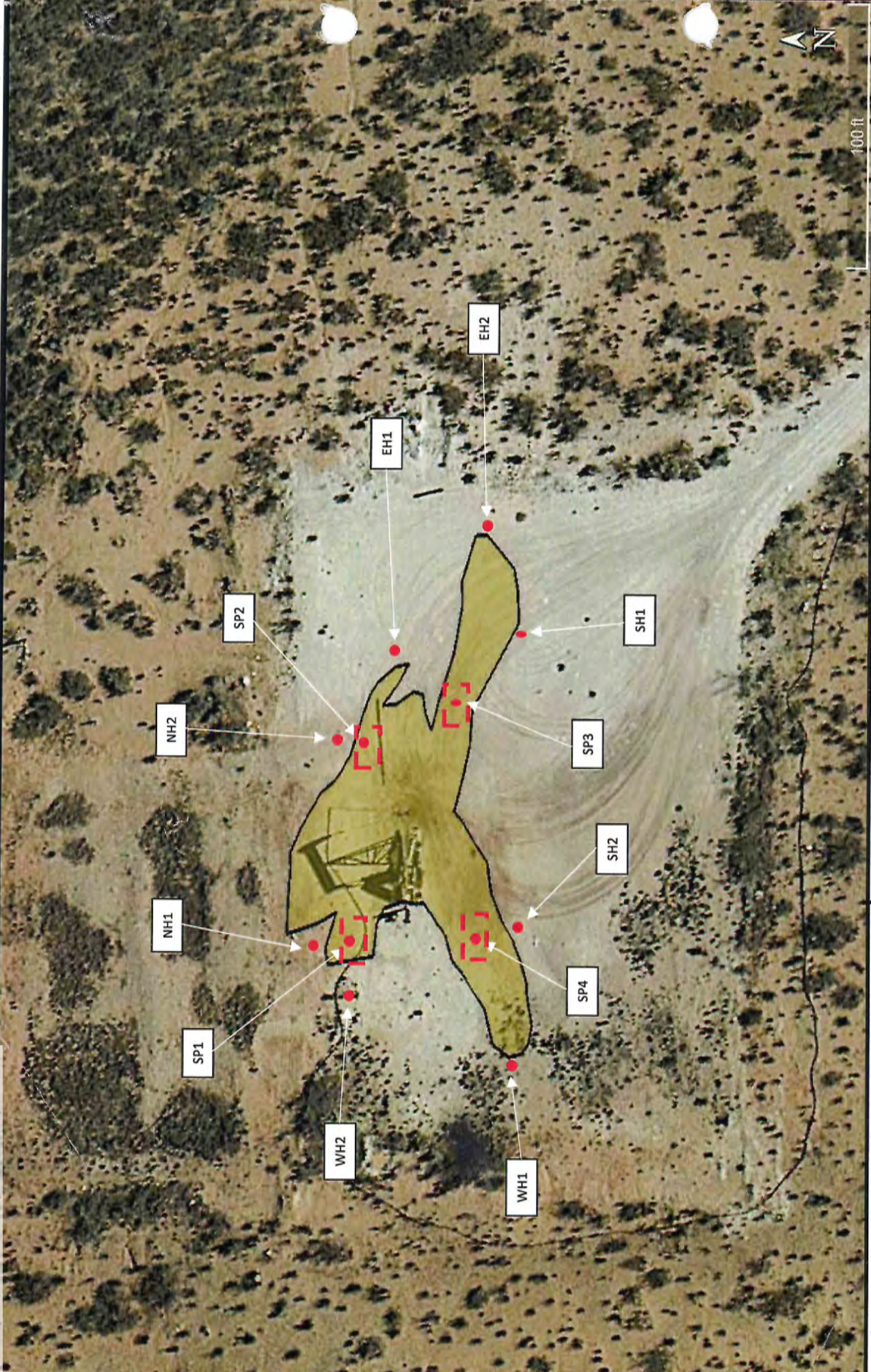
Sample and Field Screen Data Entered on Sample Log?

Was horizontal and vertical delineation achieved?

Yes No

☐☒☐☒☐☒

7



Legend:

- Pipeline
- Sample Point
- Test Trench
- Excavated Area

Figure 1

Site Diagram
Hopi Federal #2 (4-5-2020)
Endeavor Energy Resources, LP
GPS: 32.16416, -104.04459





Sample Log

Date: 7-16-20

Project: Hopi Federal #2 (4-5-2020)

Project Number: 12289

Latitude: 32.16416

Longitude: -104.04459

Sample ID	PID/Odor	Chloride Conc.	GPS
SP1@3'	no	720	
SP1@4'	no	720	
SP1@5'	no	320	
SP3@3'	no	360	
SP4@1'	no	13,484	
SP4@2	no	1692	
SP4@3	no	4148	
SP4@4	no	508	
SP4@5	no	320	
SP1@6'	no	1153	
SP1@7'	no	234	
8-3-20			
WFS1@	no	476	
WW@	no	184	
NWH@3	no	19368/2388/1244/732/796/696/520	
NWA	no	796/620/276	
NWHFSR	no	1156/568/388	
NWB	no	520	
VWW	no	276	
SP4@4'	no	476	
SWW@8' SPIFS@8'	no	244	
SWWPS	no	1336/732/388	
SWWPS	no	1000	* Return - 10' Base Pumping
WWWPS	no	520	
SWI	no	1156/476	
SP4FS@5'	no	388	
NW1	no	312	
NW2			
SW2	no	476	
SP4FS@5'	no	432	
SP4FS@7'	no	276	
SW3	no	520	
BWH@5'	no	312	

Sample Point = SP #1 @ ## etc

Floor = FL #1 etc

Sidewall = SW #1 etc

Test Trench = TT #1 @ ##

Refusal = SP #1 @ 4'-R

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

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

Stockpile = Stockpile #1

GPS Sample Points, Center of Comp Areas



Soil Profile

Date: 7/16/20

Project: Hopi Federal #2 (4-5-2020)

Project Number: 12289

Latitude: 32.16416

Longitude: -104.04459

Depth (ft. bgs)

Description

1	Caliche
2	red
3	red
4	red/caliche
5	
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Appendix C

Laboratory Analytical Reports



Certificate of Analysis Summary 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: Joel Lowry
Project Location: Eddy Co, NM

Date Received in Lab: Thu 04.09.2020 11:15
Report Date: 04.16.2020 11:42
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658394-001	658394-002	658394-003	658394-004	658394-005	658394-006
	<i>Field Id:</i>	NH1 @ Surface	NH1 @ 1'	NH2 @ Surface	NH2 @ 1'	EH1 @ Surface	EH1 @ 1'
	<i>Depth:</i>		1- ft		1- ft		1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30
	<i>Analyzed:</i>	04.14.2020 12:35	04.14.2020 12:55	04.14.2020 17:33	04.14.2020 17:54	04.14.2020 18:14	04.14.2020 18:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
m,p-Xylenes		<0.00398 0.00398	<0.00399 0.00399	<0.00397 0.00397	<0.00398 0.00398	<0.00398 0.00398	<0.00396 0.00396
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00198 0.00198	<0.00199 0.00199	<0.00199 0.00199	<0.00198 0.00198
Chloride by EPA 300	<i>Extracted:</i>	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05
	<i>Analyzed:</i>	04.10.2020 09:52	04.10.2020 09:58	04.10.2020 11:27	04.10.2020 10:08	04.10.2020 10:29	04.10.2020 10:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.00 5.00	12.5 5.03	8.13 5.03	135 25.1	118 50.4	9.26 4.99
TPH By SW8015 Mod	<i>Extracted:</i>	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00
	<i>Analyzed:</i>	04.10.2020 14:33	04.10.2020 15:29	04.10.2020 15:47	04.10.2020 16:06	04.10.2020 16:24	04.10.2020 16:43
	<i>Units/RL:</i>	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	<50.0 50.0	<49.9 49.9	<50.0 50.0
Diesel Range Organics (DRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0
Total TPH		<50.0 50.0	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0

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

Jessica Kramer
Project Manager



Certificate of Analysis Summary 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: Joel Lowry
Project Location: Eddy Co, NM

Date Received in Lab: Thu 04.09.2020 11:15
Report Date: 04.16.2020 11:42
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658394-007	658394-008	658394-009	658394-010	658394-011	658394-012
	<i>Field Id:</i>	EH2 @ Surface	EH2 @ 1'	SH1 @ Surface	SH1 @ 1'	SH2 @ Surface	SH2 @ 1'
	<i>Depth:</i>		1- ft		1- ft		1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30	04.14.2020 09:30
	<i>Analyzed:</i>	04.14.2020 18:55	04.14.2020 19:16	04.14.2020 19:36	04.14.2020 19:56	04.14.2020 20:17	04.14.2020 20:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
m,p-Xylenes		<0.00396 0.00396	<0.00402 0.00402	<0.00399 0.00399	<0.00401 0.00401	<0.00403 0.00403	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00202 0.00202	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 08:05
	<i>Analyzed:</i>	04.10.2020 11:32	04.10.2020 10:50	04.10.2020 10:56	04.10.2020 11:01	04.10.2020 13:33	04.10.2020 13:40
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		8.84 4.99	247 25.0	100 24.9	81.8 25.0	<5.04 5.04	<5.03 5.03
TPH By SW8015 Mod	<i>Extracted:</i>	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00
	<i>Analyzed:</i>	04.10.2020 17:01	04.10.2020 17:20	04.10.2020 17:39	04.10.2020 17:57	04.10.2020 18:34	04.10.2020 18:52
	<i>Units/RL:</i>	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	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0
Total TPH		<49.9 49.9	<50.0 50.0	<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: Joel Lowry
Project Location: Eddy Co, NM

Date Received in Lab: Thu 04.09.2020 11:15
Report Date: 04.16.2020 11:42
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658394-013	658394-014	658394-015	658394-016	658394-017	658394-018
	<i>Field Id:</i>	SP1 @ Surface	SP1 @ 3'-R	SP2 @ Surface	SP2 @ 4'-R	SP3 @ Surface	SP3 @ 4'R
	<i>Depth:</i>		3- ft		4- ft		4- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	04.14.2020 16:00	04.14.2020 16:00	04.14.2020 16:00	04.14.2020 16:00	04.14.2020 16:00	04.15.2020 10:00
	<i>Analyzed:</i>	04.15.2020 06:10	04.15.2020 06:31	04.15.2020 06:51	04.15.2020 07:12	04.15.2020 07:32	04.15.2020 13:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00399 0.00399	<0.00404 0.00404	<0.00400 0.00400	<0.00398 0.00398	<0.00399 0.00399	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00202 0.00202	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Chloride by EPA 300	<i>Extracted:</i>	04.10.2020 08:05	04.10.2020 08:05	04.10.2020 14:50	04.10.2020 14:50	04.10.2020 14:50	04.10.2020 14:50
	<i>Analyzed:</i>	04.10.2020 11:17	04.10.2020 11:22	04.10.2020 15:32	04.10.2020 15:38	04.10.2020 15:43	04.10.2020 15:48
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		24700 252	3440 50.1	28500 251	435 50.3	16600 248	2210 49.7
TPH By SW8015 Mod	<i>Extracted:</i>	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00	04.10.2020 12:00
	<i>Analyzed:</i>	04.10.2020 19:11	04.10.2020 19:29	04.10.2020 19:47	04.10.2020 20:05	04.10.2020 20:24	04.10.2020 20:42
	<i>Units/RL:</i>	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	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Diesel Range Organics (DRO)		123 49.9	<49.8 49.8	115 50.0	<50.0 50.0	96.3 49.9	<49.8 49.8
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.8 49.8
Total TPH		123 49.9	<49.8 49.8	115 50.0	<50.0 50.0	96.3 49.9	<49.8 49.8

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Jessica Kramer
Project Manager



Certificate of Analysis Summary 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: Joel Lowry
Project Location: Eddy Co, NM

Date Received in Lab: Thu 04.09.2020 11:15
Report Date: 04.16.2020 11:42
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	658394-019	658394-020	658394-021	658394-022	658394-023	658394-024
	<i>Field Id:</i>	SP4 @ Surface	SP4 @ 3'-R	WH1 @ Surface	WH1 @ 1'	WH2 @ Surface	WH2 @ 1'
	<i>Depth:</i>		3- ft		1- ft		1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00	04.07.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	04.11.2020 11:45	04.11.2020 11:45	04.11.2020 11:45	04.11.2020 11:45	04.11.2020 11:45	04.11.2020 11:45
	<i>Analyzed:</i>	04.13.2020 03:27	04.13.2020 03:48	04.13.2020 04:08	04.13.2020 04:28	04.13.2020 04:49	04.13.2020 05:09
	<i>Units/RL:</i>	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	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Toluene		0.00297 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		0.00237 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		0.00658 0.00401	<0.00399 0.00399	<0.00400 0.00400	<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		0.00442 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		0.0110 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		0.0163 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	04.10.2020 14:50	04.10.2020 14:50	04.13.2020 10:35	04.10.2020 14:50	04.10.2020 14:50	04.10.2020 14:50
	<i>Analyzed:</i>	04.10.2020 16:04	04.10.2020 16:09	04.13.2020 12:18	04.10.2020 16:20	04.10.2020 15:17	04.10.2020 16:30
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		17400 251	6250 49.9	9.14 X 5.03	33.2 25.1	<5.04 5.04	<5.03 5.03
TPH By SW8015 Mod	<i>Extracted:</i>	04.10.2020 12:00	04.10.2020 12:00	04.09.2020 14:00	04.09.2020 14:00	04.09.2020 14:00	04.09.2020 14:00
	<i>Analyzed:</i>	04.10.2020 21:00	04.10.2020 21:18	04.09.2020 23:00	04.09.2020 23:18	04.09.2020 23:36	04.09.2020 23:54
	<i>Units/RL:</i>	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	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		119 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9
Total TPH		119 50.0	<50.0 50.0	<49.8 49.8	<49.9 49.9	<49.9 49.9	<49.9 49.9

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Jessica Kramer
Project Manager



Analytical Report 658394

for

Etech Environmental & Safety Solution, Inc

Project Manager: Joel Lowry

Hopi Federal #2

12289

04.16.2020

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)



04.16.2020

Project Manager: **Joel Lowry**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: XENCO Report No(s): **658394**

Hopi Federal #2

Project Address: Eddy Co, NM

Joel Lowry:

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) 658394. 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. 658394 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,

A handwritten signature in black ink that reads 'Jessica Kramer'. The signature is written in a cursive, flowing style.

Jessica Kramer

Project Manager

A Small Business and Minority Company

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



Sample Cross Reference 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NH1 @ Surface	S	04.07.2020 00:00		658394-001
NH1 @ 1'	S	04.07.2020 00:00	1 ft	658394-002
NH2 @ Surface	S	04.07.2020 00:00		658394-003
NH2 @ 1'	S	04.07.2020 00:00	1 ft	658394-004
EH1 @ Surface	S	04.07.2020 00:00		658394-005
EH1 @ 1'	S	04.07.2020 00:00	1 ft	658394-006
EH2 @ Surface	S	04.07.2020 00:00		658394-007
EH2 @ 1'	S	04.07.2020 00:00	1 ft	658394-008
SH1 @ Surface	S	04.07.2020 00:00		658394-009
SH1 @ 1'	S	04.07.2020 00:00	1 ft	658394-010
SH2 @ Surface	S	04.07.2020 00:00		658394-011
SH2 @ 1'	S	04.07.2020 00:00	1 ft	658394-012
SP1 @ Surface	S	04.07.2020 00:00		658394-013
SP1 @ 3'-R	S	04.07.2020 00:00	3 ft	658394-014
SP2 @ Surface	S	04.07.2020 00:00		658394-015
SP2 @ 4'-R	S	04.07.2020 00:00	4 ft	658394-016
SP3 @ Surface	S	04.07.2020 00:00		658394-017
SP3 @ 4'R	S	04.07.2020 00:00	4 ft	658394-018
SP4 @ Surface	S	04.07.2020 00:00		658394-019
SP4 @ 3'-R	S	04.07.2020 00:00	3 ft	658394-020
WH1 @ Surface	S	04.07.2020 00:00		658394-021
WH1 @ 1'	S	04.07.2020 00:00	1 ft	658394-022
WH2 @ Surface	S	04.07.2020 00:00		658394-023
WH2 @ 1'	S	04.07.2020 00:00	1 ft	658394-024

**CASE NARRATIVE****Client Name: Etech Environmental & Safety Solution, Inc****Project Name: Hopi Federal #2**Project ID: 12289
Work Order Number(s): 658394Report Date: 04.16.2020
Date Received: 04.09.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3122828 Chloride by EPA 300

Lab Sample ID 658658-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 658394-021.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3122857 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3122998 BTEX by EPA 8021B

Lab Sample ID 658394-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene recovered below QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 658394-001, -002.

The Laboratory Control Sample for Benzene is within laboratory Control Limits, therefore the data was accepted.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 658394-001.

Batch: LBA-3123032 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3123167 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-001

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	04.10.2020 09:52	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 14:33	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 14:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 14:33	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 14:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 14:33	
o-Terphenyl	84-15-1	83	%	70-130	04.10.2020 14:33	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-001

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.14.2020 12:35	UX	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.14.2020 12:35	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.14.2020 12:35	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.14.2020 12:35	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.14.2020 12:35	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.14.2020 12:35	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.14.2020 12:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.14.2020 12:35		
4-Bromofluorobenzene	460-00-4	136	%	70-130	04.14.2020 12:35	**	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-002

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	12.5	5.03	mg/kg	04.10.2020 09:58		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.10.2020 15:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.10.2020 15:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.10.2020 15:29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.10.2020 15:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 15:29	
o-Terphenyl	84-15-1	82	%	70-130	04.10.2020 15:29	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-002

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.14.2020 12:55	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.14.2020 12:55	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.14.2020 12:55	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.14.2020 12:55	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.14.2020 12:55	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.14.2020 12:55	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.14.2020 12:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.14.2020 12:55		
4-Bromofluorobenzene	460-00-4	129	%	70-130	04.14.2020 12:55		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-003

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.13	5.03	mg/kg	04.10.2020 11:27		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 15:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 15:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 15:47	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 15:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	04.10.2020 15:47	
o-Terphenyl	84-15-1	80	%	70-130	04.10.2020 15:47	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-003

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.14.2020 17:33	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.14.2020 17:33	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.14.2020 17:33	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	04.14.2020 17:33	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.14.2020 17:33	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.14.2020 17:33	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.14.2020 17:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	04.14.2020 17:33		
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.14.2020 17:33		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: NH2 @ 1'

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-004

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	135	25.1	mg/kg	04.10.2020 10:08		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 16:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 16:06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 16:06	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 16:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 16:06	
o-Terphenyl	84-15-1	83	%	70-130	04.10.2020 16:06	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: NH2 @ 1'

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-004

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.14.2020 17:54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.14.2020 17:54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.14.2020 17:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.14.2020 17:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.14.2020 17:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.14.2020 17:54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.14.2020 17:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.14.2020 17:54	
4-Bromofluorobenzene	460-00-4	115	%	70-130	04.14.2020 17:54	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-005

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	118	50.4	mg/kg	04.10.2020 10:29		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.10.2020 16:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.10.2020 16:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.10.2020 16:24	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.10.2020 16:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 16:24	
o-Terphenyl	84-15-1	82	%	70-130	04.10.2020 16:24	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-005

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.14.2020 18:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.14.2020 18:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.14.2020 18:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.14.2020 18:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.14.2020 18:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.14.2020 18:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.14.2020 18:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	04.14.2020 18:14		
1,4-Difluorobenzene	540-36-3	114	%	70-130	04.14.2020 18:14		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-006

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.26	4.99	mg/kg	04.10.2020 10:13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 16:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 16:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 16:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 16:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	04.10.2020 16:43	
o-Terphenyl	84-15-1	82	%	70-130	04.10.2020 16:43	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-006

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.14.2020 18:35	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.14.2020 18:35	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.14.2020 18:35	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.14.2020 18:35	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.14.2020 18:35	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.14.2020 18:35	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.14.2020 18:35	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	120	%	70-130	04.14.2020 18:35		
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.14.2020 18:35		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-007

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.84	4.99	mg/kg	04.10.2020 11:32		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.10.2020 17:01	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.10.2020 17:01	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.10.2020 17:01	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.10.2020 17:01	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	77	%	70-130	04.10.2020 17:01	
o-Terphenyl	84-15-1	80	%	70-130	04.10.2020 17:01	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-007

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	04.14.2020 18:55	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	04.14.2020 18:55	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	04.14.2020 18:55	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	04.14.2020 18:55	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	04.14.2020 18:55	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	04.14.2020 18:55	U	1
Total BTEX		<0.00198	0.00198	mg/kg	04.14.2020 18:55	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	04.14.2020 18:55		
4-Bromofluorobenzene	460-00-4	123	%	70-130	04.14.2020 18:55		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: EH2 @ 1'

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-008

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	247	25.0	mg/kg	04.10.2020 10:50		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 17:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 17:20	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 17:20	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 17:20	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 17:20	
o-Terphenyl	84-15-1	83	%	70-130	04.10.2020 17:20	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EH2 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-008

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.14.2020 19:16	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.14.2020 19:16	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.14.2020 19:16	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.14.2020 19:16	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.14.2020 19:16	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.14.2020 19:16	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.14.2020 19:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.14.2020 19:16	
4-Bromofluorobenzene	460-00-4	125	%	70-130	04.14.2020 19:16	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-009

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	100	24.9	mg/kg	04.10.2020 10:56		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 17:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 17:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 17:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 17:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	75	%	70-130	04.10.2020 17:39	
o-Terphenyl	84-15-1	77	%	70-130	04.10.2020 17:39	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-009

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.14.2020 19:36	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.14.2020 19:36	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.14.2020 19:36	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.14.2020 19:36	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.14.2020 19:36	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.14.2020 19:36	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.14.2020 19:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	128	%	70-130	04.14.2020 19:36	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.14.2020 19:36	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-010

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	81.8	25.0	mg/kg	04.10.2020 11:01		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.10.2020 17:57	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.10.2020 17:57	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.10.2020 17:57	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.10.2020 17:57	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.10.2020 17:57	
o-Terphenyl	84-15-1	83	%	70-130	04.10.2020 17:57	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-010

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.14.2020 19:56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.14.2020 19:56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.14.2020 19:56	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	04.14.2020 19:56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.14.2020 19:56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.14.2020 19:56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.14.2020 19:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	04.14.2020 19:56	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.14.2020 19:56	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-011

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	04.10.2020 13:33	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 18:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 18:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 18:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 18:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.10.2020 18:34	
o-Terphenyl	84-15-1	83	%	70-130	04.10.2020 18:34	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-011

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.14.2020 20:17	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.14.2020 20:17	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.14.2020 20:17	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	04.14.2020 20:17	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.14.2020 20:17	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.14.2020 20:17	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.14.2020 20:17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.14.2020 20:17		
4-Bromofluorobenzene	460-00-4	123	%	70-130	04.14.2020 20:17		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: SH2 @ 1'

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-012

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	04.10.2020 13:40	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 18:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 18:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 18:52	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 18:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 18:52	
o-Terphenyl	84-15-1	81	%	70-130	04.10.2020 18:52	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SH2 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-012

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 09:30

Basis: Wet Weight

Seq Number: 3122998

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.14.2020 20:37	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.14.2020 20:37	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.14.2020 20:37	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.14.2020 20:37	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.14.2020 20:37	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.14.2020 20:37	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.14.2020 20:37	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	119	%	70-130	04.14.2020 20:37		
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.14.2020 20:37		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-013

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	24700	252	mg/kg	04.10.2020 11:17		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.10.2020 19:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	123	49.9	mg/kg	04.10.2020 19:11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.10.2020 19:11	U	1
Total TPH	PHC635	123	49.9	mg/kg	04.10.2020 19:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	04.10.2020 19:11	
o-Terphenyl	84-15-1	82	%	70-130	04.10.2020 19:11	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-013

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 16:00

Basis: Wet Weight

Seq Number: 3123032

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.15.2020 06:10	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.15.2020 06:10	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.15.2020 06:10	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.15.2020 06:10	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.15.2020 06:10	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.15.2020 06:10	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.15.2020 06:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	121	%	70-130	04.15.2020 06:10		
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.15.2020 06:10		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP1 @ 3'-R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-014

Date Collected: 04.07.2020 00:00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 08:05

Basis: Wet Weight

Seq Number: 3122712

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3440	50.1	mg/kg	04.10.2020 11:22		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.10.2020 19:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.10.2020 19:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.10.2020 19:29	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.10.2020 19:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.10.2020 19:29	
o-Terphenyl	84-15-1	83	%	70-130	04.10.2020 19:29	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP1 @ 3'-R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-014

Date Collected: 04.07.2020 00:00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 16:00

Basis: Wet Weight

Seq Number: 3123032

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	04.15.2020 06:31	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	04.15.2020 06:31	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	04.15.2020 06:31	U	1
m,p-Xylenes	179601-23-1	<0.00404	0.00404	mg/kg	04.15.2020 06:31	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	04.15.2020 06:31	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	04.15.2020 06:31	U	1
Total BTEX		<0.00202	0.00202	mg/kg	04.15.2020 06:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.15.2020 06:31		
4-Bromofluorobenzene	460-00-4	129	%	70-130	04.15.2020 06:31		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-015

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	28500	251	mg/kg	04.10.2020 15:32		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 19:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	115	50.0	mg/kg	04.10.2020 19:47		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 19:47	U	1
Total TPH	PHC635	115	50.0	mg/kg	04.10.2020 19:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.10.2020 19:47	
o-Terphenyl	84-15-1	87	%	70-130	04.10.2020 19:47	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-015

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 16:00

Basis: Wet Weight

Seq Number: 3123032

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.15.2020 06:51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.15.2020 06:51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.15.2020 06:51	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.15.2020 06:51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.15.2020 06:51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.15.2020 06:51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.15.2020 06:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	04.15.2020 06:51		
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.15.2020 06:51		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP2 @ 4'-R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-016

Date Collected: 04.07.2020 00:00

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	435	50.3	mg/kg	04.10.2020 15:38		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 20:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 20:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 20:05	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 20:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	81	%	70-130	04.10.2020 20:05	
o-Terphenyl	84-15-1	84	%	70-130	04.10.2020 20:05	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP2 @ 4'-R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-016

Date Collected: 04.07.2020 00:00

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 16:00

Basis: Wet Weight

Seq Number: 3123032

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.15.2020 07:12	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.15.2020 07:12	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.15.2020 07:12	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.15.2020 07:12	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.15.2020 07:12	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.15.2020 07:12	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.15.2020 07:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.15.2020 07:12		
4-Bromofluorobenzene	460-00-4	124	%	70-130	04.15.2020 07:12		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP3 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-017

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	16600	248	mg/kg	04.10.2020 15:43		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.10.2020 20:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	96.3	49.9	mg/kg	04.10.2020 20:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.10.2020 20:24	U	1
Total TPH	PHC635	96.3	49.9	mg/kg	04.10.2020 20:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.10.2020 20:24	
o-Terphenyl	84-15-1	84	%	70-130	04.10.2020 20:24	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP3 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-017

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.14.2020 16:00

Basis: Wet Weight

Seq Number: 3123032

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.15.2020 07:32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.15.2020 07:32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.15.2020 07:32	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.15.2020 07:32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.15.2020 07:32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.15.2020 07:32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.15.2020 07:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	118	%	70-130	04.15.2020 07:32		
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.15.2020 07:32		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP3 @ 4'R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-018

Date Collected: 04.07.2020 00:00

Sample Depth: 4 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2210	49.7	mg/kg	04.10.2020 15:48		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.10.2020 20:42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.10.2020 20:42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.10.2020 20:42	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.10.2020 20:42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 20:42	
o-Terphenyl	84-15-1	82	%	70-130	04.10.2020 20:42	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP3 @ 4'R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-018

Date Collected: 04.07.2020 00:00

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.15.2020 10:00

Basis: Wet Weight

Seq Number: 3123167

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.15.2020 13:53	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.15.2020 13:53	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.15.2020 13:53	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.15.2020 13:53	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.15.2020 13:53	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.15.2020 13:53	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.15.2020 13:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.15.2020 13:53		
4-Bromofluorobenzene	460-00-4	123	%	70-130	04.15.2020 13:53		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-019

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	17400	251	mg/kg	04.10.2020 16:04		50

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 21:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	119	50.0	mg/kg	04.10.2020 21:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 21:00	U	1
Total TPH	PHC635	119	50.0	mg/kg	04.10.2020 21:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	04.10.2020 21:00	
o-Terphenyl	84-15-1	84	%	70-130	04.10.2020 21:00	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-019

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.11.2020 11:45

Basis: Wet Weight

Seq Number: 3122857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.13.2020 03:27	U	1
Toluene	108-88-3	0.00297	0.00200	mg/kg	04.13.2020 03:27		1
Ethylbenzene	100-41-4	0.00237	0.00200	mg/kg	04.13.2020 03:27		1
m,p-Xylenes	179601-23-1	0.00658	0.00401	mg/kg	04.13.2020 03:27		1
o-Xylene	95-47-6	0.00442	0.00200	mg/kg	04.13.2020 03:27		1
Total Xylenes	1330-20-7	0.0110	0.00200	mg/kg	04.13.2020 03:27		1
Total BTEX		0.0163	0.00200	mg/kg	04.13.2020 03:27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.13.2020 03:27		
4-Bromofluorobenzene	460-00-4	125	%	70-130	04.13.2020 03:27		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4 @ 3'-R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-020

Date Collected: 04.07.2020 00:00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6250	49.9	mg/kg	04.10.2020 16:09		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.10.2020 12:00

Basis: Wet Weight

Seq Number: 3122730

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	04.10.2020 21:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	04.10.2020 21:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	04.10.2020 21:18	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	04.10.2020 21:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	80	%	70-130	04.10.2020 21:18	
o-Terphenyl	84-15-1	84	%	70-130	04.10.2020 21:18	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4 @ 3'-R**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-020

Date Collected: 04.07.2020 00:00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.11.2020 11:45

Basis: Wet Weight

Seq Number: 3122857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.13.2020 03:48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.13.2020 03:48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.13.2020 03:48	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	04.13.2020 03:48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.13.2020 03:48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.13.2020 03:48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.13.2020 03:48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	04.13.2020 03:48		
4-Bromofluorobenzene	460-00-4	114	%	70-130	04.13.2020 03:48		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-021

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: SPC

Date Prep: 04.13.2020 10:35

Basis: Wet Weight

Seq Number: 3122828

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9.14	5.03	mg/kg	04.13.2020 12:18	X	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.09.2020 14:00

Basis: Wet Weight

Seq Number: 3122627

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	04.09.2020 23:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	04.09.2020 23:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	04.09.2020 23:00	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	04.09.2020 23:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	73	%	70-130	04.09.2020 23:00	
o-Terphenyl	84-15-1	75	%	70-130	04.09.2020 23:00	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH1 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-021

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.11.2020 11:45

Basis: Wet Weight

Seq Number: 3122857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	04.13.2020 04:08	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	04.13.2020 04:08	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	04.13.2020 04:08	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	04.13.2020 04:08	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	04.13.2020 04:08	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	04.13.2020 04:08	U	1
Total BTEX		<0.00200	0.00200	mg/kg	04.13.2020 04:08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	04.13.2020 04:08		
4-Bromofluorobenzene	460-00-4	130	%	70-130	04.13.2020 04:08		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-022

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	33.2	25.1	mg/kg	04.10.2020 16:20		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.09.2020 14:00

Basis: Wet Weight

Seq Number: 3122627

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.09.2020 23:18	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.09.2020 23:18	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.09.2020 23:18	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.09.2020 23:18	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	04.09.2020 23:18	
o-Terphenyl	84-15-1	88	%	70-130	04.09.2020 23:18	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH1 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-022

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.11.2020 11:45

Basis: Wet Weight

Seq Number: 3122857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.13.2020 04:28	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.13.2020 04:28	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.13.2020 04:28	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.13.2020 04:28	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.13.2020 04:28	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.13.2020 04:28	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.13.2020 04:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	127	%	70-130	04.13.2020 04:28		
1,4-Difluorobenzene	540-36-3	109	%	70-130	04.13.2020 04:28		



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-023

Date Collected: 04.07.2020 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.04	5.04	mg/kg	04.10.2020 15:17	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.09.2020 14:00

Basis: Wet Weight

Seq Number: 3122627

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.09.2020 23:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.09.2020 23:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.09.2020 23:36	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.09.2020 23:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	04.09.2020 23:36	
o-Terphenyl	84-15-1	84	%	70-130	04.09.2020 23:36	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH2 @ Surface**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-023

Date Collected: 04.07.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.11.2020 11:45

Basis: Wet Weight

Seq Number: 3122857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	04.13.2020 04:49	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	04.13.2020 04:49	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	04.13.2020 04:49	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	04.13.2020 04:49	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	04.13.2020 04:49	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	04.13.2020 04:49	U	1
Total BTEX		<0.00201	0.00201	mg/kg	04.13.2020 04:49	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	125	%	70-130	04.13.2020 04:49	
1,4-Difluorobenzene	540-36-3	107	%	70-130	04.13.2020 04:49	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: WH2 @ 1'

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-024

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 04.10.2020 14:50

Basis: Wet Weight

Seq Number: 3122714

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.03	5.03	mg/kg	04.10.2020 16:30	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 04.09.2020 14:00

Basis: Wet Weight

Seq Number: 3122627

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	04.09.2020 23:54	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	04.09.2020 23:54	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	04.09.2020 23:54	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	04.09.2020 23:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	04.09.2020 23:54	
o-Terphenyl	84-15-1	72	%	70-130	04.09.2020 23:54	



Certificate of Analytical Results 658394

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WH2 @ 1'**

Matrix: Soil

Date Received: 04.09.2020 11:15

Lab Sample Id: 658394-024

Date Collected: 04.07.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 04.11.2020 11:45

Basis: Wet Weight

Seq Number: 3122857

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	04.13.2020 05:09	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	04.13.2020 05:09	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	04.13.2020 05:09	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	04.13.2020 05:09	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	04.13.2020 05:09	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	04.13.2020 05:09	U	1
Total BTEX		<0.00199	0.00199	mg/kg	04.13.2020 05:09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	125	%	70-130	04.13.2020 05:09		
1,4-Difluorobenzene	540-36-3	110	%	70-130	04.13.2020 05:09		



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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3122712

MB Sample Id: 7701012-1-BLK

Matrix: Solid

LCS Sample Id: 7701012-1-BKS

Prep Method: E300P

Date Prep: 04.10.2020

LCSD Sample Id: 7701012-1-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	254	102	253	101	90-110	0	20	mg/kg	04.10.2020 08:49	

Analytical Method: Chloride by EPA 300

Seq Number: 3122714

MB Sample Id: 7701058-1-BLK

Matrix: Solid

LCS Sample Id: 7701058-1-BKS

Prep Method: E300P

Date Prep: 04.10.2020

LCSD Sample Id: 7701058-1-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	255	102	254	102	90-110	0	20	mg/kg	04.10.2020 15:06	

Analytical Method: Chloride by EPA 300

Seq Number: 3122828

MB Sample Id: 7701132-1-BLK

Matrix: Solid

LCS Sample Id: 7701132-1-BKS

Prep Method: E300P

Date Prep: 04.13.2020

LCSD Sample Id: 7701132-1-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	265	106	265	106	90-110	0	20	mg/kg	04.13.2020 10:56	

Analytical Method: Chloride by EPA 300

Seq Number: 3122712

Parent Sample Id: 658394-006

Matrix: Soil

MS Sample Id: 658394-006 S

Prep Method: E300P

Date Prep: 04.10.2020

MSD Sample Id: 658394-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	9.26	250	263	101	263	101	90-110	0	20	mg/kg	04.10.2020 10:19	

Analytical Method: Chloride by EPA 300

Seq Number: 3122712

Parent Sample Id: 658396-003

Matrix: Soil

MS Sample Id: 658396-003 S

Prep Method: E300P

Date Prep: 04.10.2020

MSD Sample Id: 658396-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	854	249	1050	79	1080	91	90-110	3	20	mg/kg	04.10.2020 09:05	X

Analytical Method: Chloride by EPA 300

Seq Number: 3122714

Parent Sample Id: 658394-023

Matrix: Soil

MS Sample Id: 658394-023 S

Prep Method: E300P

Date Prep: 04.10.2020

MSD Sample Id: 658394-023 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.04	252	258	102	263	104	90-110	2	20	mg/kg	04.10.2020 15:22	

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3122714

Parent Sample Id: 658394-024

Matrix: Soil

MS Sample Id: 658394-024 S

Prep Method: E300P

Date Prep: 04.10.2020

MSD Sample Id: 658394-024 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.03	252	254	101	256	102	90-110	1	20	mg/kg	04.10.2020 16:36	

Analytical Method: Chloride by EPA 300

Seq Number: 3122828

Parent Sample Id: 658394-021

Matrix: Soil

MS Sample Id: 658394-021 S

Prep Method: E300P

Date Prep: 04.13.2020

MSD Sample Id: 658394-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<25.2	1260	1580	125	1580	125	90-110	0	20	mg/kg	04.13.2020 11:17	X

Analytical Method: Chloride by EPA 300

Seq Number: 3122828

Parent Sample Id: 658658-004

Matrix: Soil

MS Sample Id: 658658-004 S

Prep Method: E300P

Date Prep: 04.13.2020

MSD Sample Id: 658658-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<4.98	249	297	119	282	113	90-110	5	20	mg/kg	04.13.2020 13:15	X

Analytical Method: TPH By SW8015 Mod

Seq Number: 3122627

MB Sample Id: 7700962-1-BLK

Matrix: Solid

LCS Sample Id: 7700962-1-BKS

Prep Method: SW8015P

Date Prep: 04.09.2020

LCSD Sample Id: 7700962-1-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)	<50.0	1000	884	88	900	90	70-130	2	20	mg/kg	04.09.2020 17:21	
Diesel Range Organics (DRO)	<50.0	1000	968	97	984	98	70-130	2	20	mg/kg	04.09.2020 17:21	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	76		95		95		70-130	%	04.09.2020 17:21
o-Terphenyl	81		87		92		70-130	%	04.09.2020 17:21

Analytical Method: TPH By SW8015 Mod

Seq Number: 3122730

MB Sample Id: 7701090-1-BLK

Matrix: Solid

LCS Sample Id: 7701090-1-BKS

Prep Method: SW8015P

Date Prep: 04.10.2020

LCSD Sample Id: 7701090-1-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)	<50.0	1000	898	90	916	92	70-130	2	20	mg/kg	04.10.2020 13:57	
Diesel Range Organics (DRO)	<50.0	1000	995	100	998	100	70-130	0	20	mg/kg	04.10.2020 13:57	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	77		103		106		70-130	%	04.10.2020 13:57
o-Terphenyl	83		90		98		70-130	%	04.10.2020 13:57

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: TPH By SW8015 Mod

Seq Number: 3122627

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.09.2020

MB Sample Id: 7700962-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.09.2020 17:02	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3122730

Matrix: Solid

Prep Method: SW8015P

Date Prep: 04.10.2020

MB Sample Id: 7701090-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	04.10.2020 13:08	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3122627

Matrix: Soil

Prep Method: SW8015P

Date Prep: 04.09.2020

Parent Sample Id: 658411-001

MS Sample Id: 658411-001 S

MSD Sample Id: 658411-001 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)	<49.9	997	831	83	817	82	70-130	2	20	mg/kg	04.09.2020 18:15	
Diesel Range Organics (DRO)	<49.9	997	885	89	880	88	70-130	1	20	mg/kg	04.09.2020 18:15	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	95		91		70-130	%	04.09.2020 18:15
o-Terphenyl	91		85		70-130	%	04.09.2020 18:15

Analytical Method: TPH By SW8015 Mod

Seq Number: 3122730

Matrix: Soil

Prep Method: SW8015P

Date Prep: 04.10.2020

Parent Sample Id: 658394-001

MS Sample Id: 658394-001 S

MSD Sample Id: 658394-001 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)	<49.9	998	833	83	827	83	70-130	1	20	mg/kg	04.10.2020 14:52	
Diesel Range Organics (DRO)	<49.9	998	883	88	881	88	70-130	0	20	mg/kg	04.10.2020 14:52	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		97		70-130	%	04.10.2020 14:52
o-Terphenyl	92		91		70-130	%	04.10.2020 14:52

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



Etech Environmental & Safety Solution, Inc
Hopi Federal #2

Analytical Method: BTEX by EPA 8021B

Seq Number: 3122857

Matrix: Solid

Prep Method: SW5030B

Date Prep: 04.11.2020

MB Sample Id: 7701183-1-BLK

LCS Sample Id: 7701183-1-BKS

LCSD Sample Id: 7701183-1-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	0.0885	89	0.0920	92	70-130	4	35	mg/kg	04.12.2020 19:17	
Toluene	<0.00200	0.100	0.0956	96	0.0939	94	70-130	2	35	mg/kg	04.12.2020 19:17	
Ethylbenzene	<0.00200	0.100	0.0938	94	0.0905	91	70-130	4	35	mg/kg	04.12.2020 19:17	
m,p-Xylenes	<0.00400	0.200	0.189	95	0.181	91	70-130	4	35	mg/kg	04.12.2020 19:17	
o-Xylene	<0.00200	0.100	0.0979	98	0.0934	93	70-130	5	35	mg/kg	04.12.2020 19:17	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	107		103		106		70-130			%	04.12.2020 19:17	
4-Bromofluorobenzene	110		105		103		70-130			%	04.12.2020 19:17	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3122998

Matrix: Solid

Prep Method: SW5030B

Date Prep: 04.14.2020

MB Sample Id: 7701255-1-BLK

LCS Sample Id: 7701255-1-BKS

LCSD Sample Id: 7701255-1-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	0.0964	96	0.0926	93	70-130	4	35	mg/kg	04.14.2020 10:12	
Toluene	<0.00200	0.100	0.109	109	0.107	107	70-130	2	35	mg/kg	04.14.2020 10:12	
Ethylbenzene	<0.00200	0.100	0.112	112	0.110	110	70-130	2	35	mg/kg	04.14.2020 10:12	
m,p-Xylenes	<0.00400	0.200	0.227	114	0.226	113	70-130	0	35	mg/kg	04.14.2020 10:12	
o-Xylene	<0.00200	0.100	0.113	113	0.113	113	70-130	0	35	mg/kg	04.14.2020 10:12	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	103		103		102		70-130			%	04.14.2020 10:12	
4-Bromofluorobenzene	120		111		113		70-130			%	04.14.2020 10:12	

Analytical Method: BTEX by EPA 8021B

Seq Number: 3123032

Matrix: Solid

Prep Method: SW5030B

Date Prep: 04.14.2020

MB Sample Id: 7701290-1-BLK

LCS Sample Id: 7701290-1-BKS

LCSD Sample Id: 7701290-1-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	0.0961	96	0.0889	89	70-130	8	35	mg/kg	04.14.2020 21:39	
Toluene	<0.00200	0.100	0.109	109	0.0996	100	70-130	9	35	mg/kg	04.14.2020 21:39	
Ethylbenzene	<0.00200	0.100	0.110	110	0.0998	100	70-130	10	35	mg/kg	04.14.2020 21:39	
m,p-Xylenes	<0.00400	0.200	0.224	112	0.203	102	70-130	10	35	mg/kg	04.14.2020 21:39	
o-Xylene	<0.00200	0.100	0.114	114	0.103	103	70-130	10	35	mg/kg	04.14.2020 21:39	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits			Units	Analysis Date	
1,4-Difluorobenzene	107		105		102		70-130			%	04.14.2020 21:39	
4-Bromofluorobenzene	112		118		109		70-130			%	04.14.2020 21:39	

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: BTEX by EPA 8021B

Seq Number: 3123167

Matrix: Solid

Prep Method: SW5030B

Date Prep: 04.15.2020

MB Sample Id: 7701370-1-BLK

LCS Sample Id: 7701370-1-BKS

LCSD Sample Id: 7701370-1-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	0.0872	87	0.0859	86	70-130	2	35	mg/kg	04.15.2020 09:48	
Toluene	<0.00200	0.100	0.105	105	0.102	102	70-130	3	35	mg/kg	04.15.2020 09:48	
Ethylbenzene	<0.00200	0.100	0.109	109	0.106	106	70-130	3	35	mg/kg	04.15.2020 09:48	
m,p-Xylenes	<0.00400	0.200	0.224	112	0.217	109	70-130	3	35	mg/kg	04.15.2020 09:48	
o-Xylene	<0.00200	0.100	0.112	112	0.108	108	70-130	4	35	mg/kg	04.15.2020 09:48	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		99		99		70-130	%	04.15.2020 09:48
4-Bromofluorobenzene	117		112		109		70-130	%	04.15.2020 09:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3122857

Matrix: Soil

Prep Method: SW5030B

Date Prep: 04.11.2020

Parent Sample Id: 657958-001

MS Sample Id: 657958-001 S

MSD Sample Id: 657958-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0870	87	0.0895	90	70-130	3	35	mg/kg	04.12.2020 19:58	
Toluene	<0.00200	0.0998	0.0888	89	0.0969	97	70-130	9	35	mg/kg	04.12.2020 19:58	
Ethylbenzene	<0.00200	0.0998	0.0863	86	0.0961	96	70-130	11	35	mg/kg	04.12.2020 19:58	
m,p-Xylenes	<0.00399	0.200	0.174	87	0.197	98	70-130	12	35	mg/kg	04.12.2020 19:58	
o-Xylene	<0.00200	0.0998	0.0894	90	0.100	100	70-130	11	35	mg/kg	04.12.2020 19:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		104		70-130	%	04.12.2020 19:58
4-Bromofluorobenzene	104		112		70-130	%	04.12.2020 19:58

Analytical Method: BTEX by EPA 8021B

Seq Number: 3122998

Matrix: Soil

Prep Method: SW5030B

Date Prep: 04.14.2020

Parent Sample Id: 658394-001

MS Sample Id: 658394-001 S

MSD Sample Id: 658394-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00198	0.0992	0.0677	68	0.0860	86	70-130	24	35	mg/kg	04.14.2020 10:53	X
Toluene	<0.00198	0.0992	0.0774	78	0.0903	90	70-130	15	35	mg/kg	04.14.2020 10:53	
Ethylbenzene	<0.00198	0.0992	0.0782	79	0.0869	87	70-130	11	35	mg/kg	04.14.2020 10:53	
m,p-Xylenes	<0.00397	0.198	0.163	82	0.178	89	70-130	9	35	mg/kg	04.14.2020 10:53	
o-Xylene	<0.00198	0.0992	0.0844	85	0.0929	93	70-130	10	35	mg/kg	04.14.2020 10:53	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		104		70-130	%	04.14.2020 10:53
4-Bromofluorobenzene	115		117		70-130	%	04.14.2020 10:53

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



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Hopi Federal #2

Analytical Method: BTEX by EPA 8021B

Seq Number: 3123032

Parent Sample Id: 658719-001

Matrix: Soil

MS Sample Id: 658719-001 S

Prep Method: SW5030B

Date Prep: 04.14.2020

MSD Sample Id: 658719-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0750	75	0.0823	82	70-130	9	35	mg/kg	04.14.2020 22:20	
Toluene	<0.00200	0.0998	0.0791	79	0.0850	85	70-130	7	35	mg/kg	04.14.2020 22:20	
Ethylbenzene	<0.00200	0.0998	0.0717	72	0.0785	79	70-130	9	35	mg/kg	04.14.2020 22:20	
m,p-Xylenes	<0.00399	0.200	0.146	73	0.159	80	70-130	9	35	mg/kg	04.14.2020 22:20	
o-Xylene	<0.00200	0.0998	0.0736	74	0.0791	79	70-130	7	35	mg/kg	04.14.2020 22:20	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		108		70-130	%	04.14.2020 22:20
4-Bromofluorobenzene	106		106		70-130	%	04.14.2020 22:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3123167

Parent Sample Id: 658398-003

Matrix: Soil

MS Sample Id: 658398-003 S

Prep Method: SW5030B

Date Prep: 04.15.2020

MSD Sample Id: 658398-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.00567	6	0.00972	10	70-130	53	35	mg/kg	04.15.2020 10:28	XF
Toluene	<0.00199	0.0994	0.00660	7	0.0127	13	70-130	63	35	mg/kg	04.15.2020 10:28	XF
Ethylbenzene	<0.00199	0.0994	0.00701	7	0.0135	14	70-130	63	35	mg/kg	04.15.2020 10:28	XF
m,p-Xylenes	<0.00398	0.199	0.0155	8	0.0316	16	70-130	68	35	mg/kg	04.15.2020 10:28	XF
o-Xylene	<0.00199	0.0994	0.00887	9	0.0153	15	70-130	53	35	mg/kg	04.15.2020 10:28	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		108		70-130	%	04.15.2020 10:28
4-Bromofluorobenzene	123		125		70-130	%	04.15.2020 10:28

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



Chain of Custody

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 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No:

1058344

Project Manager:	Joel Lowry	Bill to: (if different)	
Company Name:	Elech Environmental	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Livingston, NM	City, State ZIP:	
Phone:	432-466-4450	Email:	joel@elecheny.com, lance@elecheny.com

Program: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐ State of Project:	
Reporting Level: ☐ Level I ☐ Level II ☐ Level III ☐	Reporting Level: ☐ Level I ☐ Level II ☐ Level III ☐ Deliverables: ☐ EDD ☐ ADAPT ☐ Other:

Project Name:	Hopi Federal #2	Turn Around	
Project Number:	12239	Rush:	☐
Project Location:	Eddy Co. NM	Due Date:	
Sample Name:	Mage (Pumice)		
PO #:			
SAMPLE RECEIPT Temperature (°C): 11.3 Received Intact: Yes ☒ No ☐ Cooler Custody Seals: Yes ☐ No ☒ N/A ☐ Sample Custody Seals: Yes ☐ No ☒ N/A ☐ Total Containers: 203		ANALYSIS REQUEST Number of Containers/Preservative Code: TPH, BTEX, Chloride	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST																Preservative Codes	Sample Comments
NH1 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH1 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		surface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
NH2 @ surface	Soil	4-7-20		1'	X	X	X	X	X	X	X	X	X	X	X	X	X	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 Ti 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 Ti 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
<i>[Signature]</i>	<i>[Signature]</i>	4/30/20	<i>[Signature]</i>	<i>[Signature]</i>	4/30/20



Chain of Custody

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 Atlanta, GA (770) 449-8900

Work Order No:

158394

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Page

2 of 3

Project Manager:	Joel Lowry	Bill to: (if different)	
Company Name:	Etech Environmental	Company Name:	Ender
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lovington, NM	City, State ZIP:	
Phone:	432-466-4450	Email:	joel@etechenv.com, lance@etechenv.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level I ☐ Level II ☐ PST/US ☐ TRR ☐ Level III ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Hoodi Federal #2	Turn Around	
Project Number:	12289	Routine:	☒
Project Location:	Eddy Co, NM	Rush:	☐
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:			

SAMPLE RECEIPT		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐
Temperature (°C):	1.0/1.3	Thermometer ID:	29		
Received Intact:	Yes ☒ No ☐	Correction Factor:	-0.3		
Cooler Custody Seals:	Yes ☒ No ☐	Total Containers:			
Sample Custody Seals:	Yes ☒ No ☐				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
SH2 @ Surface	Soil	4-7-20		Surface	TPH		HN
SH2 @ Surface	Soil	4-7-20		1'	BTEX		H2SO4: H2
SH2 @ Surface	Soil	4-7-20		3'	Chlorides		HCL: HL
SH2 @ Surface	Soil	4-7-20		4'			None: NO
SH2 @ Surface	Soil	4-7-20		5'			NaOH: Na
SH2 @ Surface	Soil	4-7-20		6'			MeOH: Me
SH2 @ Surface	Soil	4-7-20		7'			Zn Acetate+ NaOH: Zn
SH2 @ Surface	Soil	4-7-20		8'			
SH2 @ Surface	Soil	4-7-20		9'			
SH2 @ Surface	Soil	4-7-20		10'			
SH2 @ Surface	Soil	4-7-20		11'			
SH2 @ Surface	Soil	4-7-20		12'			
SH2 @ Surface	Soil	4-7-20		13'			
SH2 @ Surface	Soil	4-7-20		14'			
SH2 @ Surface	Soil	4-7-20		15'			
SH2 @ Surface	Soil	4-7-20		16'			
SH2 @ Surface	Soil	4-7-20		17'			
SH2 @ Surface	Soil	4-7-20		18'			
SH2 @ Surface	Soil	4-7-20		19'			
SH2 @ Surface	Soil	4-7-20		20'			

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Pb	Mn	Mo	Ni	K	Se	Ag	SiO2	Na	Si	Ti	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 Ti U																											

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Handwritten Signature	Handwritten Signature	4:39 PM	Handwritten Signature	Handwritten Signature	4:41 PM



Chain of Custody

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 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No:

1058394

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Project Manager:	Joel Lowry	Bill to: (if different)	
Company Name:	Etech Environmental	Company Name:	Endeavor
Address:	3100 Plains Hwy	Address:	
City, State ZIP:	Lowington, NM	City, State ZIP:	
Phone:	432-466-4450	Email:	joel@etechenv.com, lance@etechenv.com
Project Name:	Hopi Federal #2	Turn Around	
Project Number:	12289	Routine:	☒
Project Location:	Eddy Co, NM	Rush:	☐
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:			

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	State of Project:
Reporting Level: ☐ Level I ☐ Level II ☐ PST/UST ☐ TRR ☐ Level III ☐	Deliverables: EDD ☐ ADAPT ☐ Other: ☐

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	14.1			Thermometer ID		
Received Inact:	Yes	No				
Cooler Custody Seals:	Yes	No		Correction Factor:		
Sample Custody Seals:	Yes	No		Total Containers:		

Number of Containers/Preservative Code

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth
-----------------------	--------	--------------	--------------	-------

TPH
BTEX
Chlorides

Preservative Codes
HNO3: HN
H2SO4: H2
HCL: HL
None: NO
NaOH: Na
MeOH: Me
Zn Acetate+ NaOH: Zn

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

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST
WH1 Surface	Soil	4-7-20		Surface	X	
WH1 @ 1'	Soil	4-7-20		1'	X	
WH2 Surface	Soil	4-7-20		Surface	X	
WH2 @ 1'	Soil	4-7-20		1'	X	
WH2 @ 2'	Soil	4-7-20		2'	X	
WH2 @ 3'	Soil	4-7-20		3'	X	
WH2 @ 4'	Soil	4-7-20		4'	X	
WH2 @ 5'	Soil	4-7-20		5'	X	
WH2 @ 6'	Soil	4-7-20		6'	X	
WH2 @ 7'	Soil	4-7-20		7'	X	
WH2 @ 8'	Soil	4-7-20		8'	X	
WH2 @ 9'	Soil	4-7-20		9'	X	
WH2 @ 10'	Soil	4-7-20		10'	X	
WH2 @ 11'	Soil	4-7-20		11'	X	
WH2 @ 12'	Soil	4-7-20		12'	X	
WH2 @ 13'	Soil	4-7-20		13'	X	
WH2 @ 14'	Soil	4-7-20		14'	X	
WH2 @ 15'	Soil	4-7-20		15'	X	
WH2 @ 16'	Soil	4-7-20		16'	X	
WH2 @ 17'	Soil	4-7-20		17'	X	
WH2 @ 18'	Soil	4-7-20		18'	X	
WH2 @ 19'	Soil	4-7-20		19'	X	
WH2 @ 20'	Soil	4-7-20		20'	X	
WH2 @ 21'	Soil	4-7-20		21'	X	
WH2 @ 22'	Soil	4-7-20		22'	X	
WH2 @ 23'	Soil	4-7-20		23'	X	
WH2 @ 24'	Soil	4-7-20		24'	X	
WH2 @ 25'	Soil	4-7-20		25'	X	
WH2 @ 26'	Soil	4-7-20		26'	X	
WH2 @ 27'	Soil	4-7-20		27'	X	
WH2 @ 28'	Soil	4-7-20		28'	X	
WH2 @ 29'	Soil	4-7-20		29'	X	
WH2 @ 30'	Soil	4-7-20		30'	X	

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn

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 <i>[Signature]</i>	NP	4/30/17	2 <i>[Signature]</i>	NP	4/19
3 <i>[Signature]</i>			4 <i>[Signature]</i>		
5 <i>[Signature]</i>			6 <i>[Signature]</i>		

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 04.09.2020 11.15.00 AM

Work Order #: 658394

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R9

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	1.3
#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: 04.09.2020

Checklist reviewed by:



Jessica Kramer

Date: 04.09.2020

Certificate of Analysis Summary 667483

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289

Contact: PM

Project Location:

Date Received in Lab: Fri 07.17.2020 10:57

Report Date: 07.22.2020 14:44

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	667483-001	667483-002	667483-003			
	Field Id:	SP 1 @ 5'	SP 3 @ 3'	SP 4 @ 5'			
	Depth:	5- ft	3- ft	5- ft			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	07.16.2020 00:00	07.16.2020 00:00	07.16.2020 00:00			
Chloride by EPA 300	Extracted:	07.20.2020 11:05	07.20.2020 11:05	07.20.2020 11:05			
	Analyzed:	07.21.2020 13:51	07.21.2020 13:56	07.21.2020 14:01			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
Chloride		1140 50.0	336 49.9	432 49.9			

BRL - Below Reporting Limit

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

Jessica Kramer

Analytical Report 667483

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Hopi Federal #2

12289

07.22.2020

Collected By: Client



1211 W. Florida Ave
Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.22.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **667483**

Hopi Federal #2

Project Address:

PM :

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 Eurofins Xenco, LLC Report Number(s) 667483. 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 Eurofins Xenco, LLC. 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. 667483 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 667483****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP 1 @ 5'	S	07.16.2020 00:00	5 ft	667483-001
SP 3 @ 3'	S	07.16.2020 00:00	3 ft	667483-002
SP 4 @ 5'	S	07.16.2020 00:00	5 ft	667483-003



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Hopi Federal #2

Project ID: 12289
Work Order Number(s): 667483

Report Date: 07.22.2020
Date Received: 07.17.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 667483****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id: SP 1 @ 5'	Matrix: Soil	Date Received: 07.17.2020 10:57
Lab Sample Id: 667483-001	Date Collected: 07.16.2020 00:00	Sample Depth: 5 ft
Analytical Method: Chloride by EPA 300		Prep Method: E300P
Tech: CHE		% Moisture:
Analyst: CHE	Date Prep: 07.20.2020 11:05	Basis: Wet Weight
Seq Number: 3132247		

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1140	50.0	mg/kg	07.21.2020 13:51		10

**Certificate of Analytical Results 667483****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id: **SP 3 @ 3'**

Matrix: Soil

Date Received: 07.17.2020 10:57

Lab Sample Id: 667483-002

Date Collected: 07.16.2020 00:00

Sample Depth: 3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.20.2020 11:05

Basis: Wet Weight

Seq Number: 3132247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	336	49.9	mg/kg	07.21.2020 13:56		10

**Certificate of Analytical Results 667483****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id: **SP 4 @ 5'** Matrix: Soil Date Received: 07.17.2020 10:57
Lab Sample Id: 667483-003 Date Collected: 07.16.2020 00:00 Sample Depth: 5 ft
Analytical Method: Chloride by EPA 300 Prep Method: E300P
Tech: CHE % Moisture:
Analyst: CHE Date Prep: 07.20.2020 11:05 Basis: Wet Weight
Seq Number: 3132247

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	432	49.9	mg/kg	07.21.2020 14:01		10

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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3132247

MB Sample Id: 7707669-1-BLK

Matrix: Solid

LCS Sample Id: 7707669-1-BKS

Prep Method: E300P

Date Prep: 07.20.2020

LCSD Sample Id: 7707669-1-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	245	98	238	95	90-110	3	20	mg/kg	07.21.2020 11:10	

Analytical Method: Chloride by EPA 300

Seq Number: 3132247

Parent Sample Id: 667447-003

Matrix: Soil

MS Sample Id: 667447-003 S

Prep Method: E300P

Date Prep: 07.20.2020

MSD Sample Id: 667447-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2780	1250	3940	93	4150	110	90-110	5	20	mg/kg	07.21.2020 11:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3132247

Parent Sample Id: 667468-010

Matrix: Soil

MS Sample Id: 667468-010 S

Prep Method: E300P

Date Prep: 07.20.2020

MSD Sample Id: 667468-010 SD

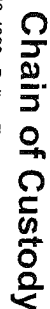
Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.1	250	277	106	276	106	90-110	0	20	mg/kg	07.21.2020 12:58	

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



Work Order No

DU 7485

www.xenco.com Page of

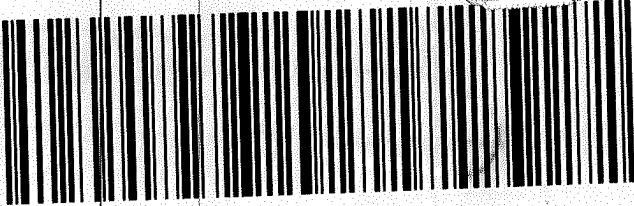
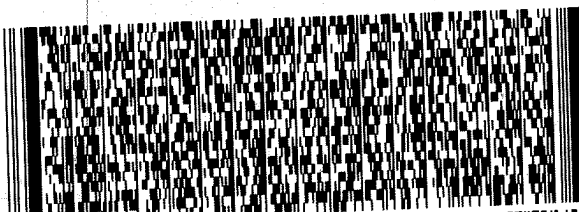
Project Name:		Hep. Federal #2		Turn Around	
Project Number:		12289		Routine: ☒	
Project Location:				Rush: ☒	
Sampler's Name:		Hector Villa		Due Date:	
PO #:					
SAMPLE RECEIPT					
Temperature (°C):		Temp Blank: ☒		Yes No Well Ice: ☒ Yes No	
Received In tact:		(Yes) No ☒		Thermometer: ☒	
Cooler Custody Seals:		Yes No ☒		Correction Factor: ☒	
Sample Custody Seals:		Yes No ☒		Total Containers: ☒	
ANALYSIS REQUEST					
Number of Containers/Preservative					
E300					
1221					
Modified Ext					
1005					
Preservative Codes					
HNO3: HN					
H2SO4: H2					
HCL: HL					
None: NO					
NaOH: Na					
MeOH: Me					
Zn Acetate+ NaOH: Zn					
TAT starts the day received by the lab, if received by 4:30pm					

Notices: 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 \$75,000 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.

Total 200.1 / 6010 200.8 / 6020:
 Circle Method(s) and Metal(s) to be analyzed
 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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

16

Revised Date 10/14/19 Rev. 2019.1

		Post Net 10/10-04/11 RT EXP 01/21
41 MAFB 9061 5134 5570 TRK# 0201 FRI - 17 JUL HOLD PRIORITY OVERNIGHT MAFB HLD TX-US LBB		
		
FedEx Express J191219082001LV		
MIDLAND TX 79711 FEDEX EXPRESS SHIP CENTER 3600 COUNTY ROAD 1276 SOUTH REF: (432) 704-5440 DEPT: INV:		
TO XENCO HOLD FOR PICKUP FEDEX EXPRESS SHIP CENTER 3600 COUNTY ROAD 1276 SOUTH MIDLAND TX 79711 REF: (432) 704-5440 DEPT: INV:		
SHIP DATE: 16JUL20 ACTWGT: 19.00 LBS CAD: 0103352/CAFE3313 DIMS: 18x17x11 IN BILL THIRD PARTY		ORIGIN ID: HOBA (b/b) 39Z-/550 MAIL SERVICES ETC 4008 N GRIMES HOBBBS, NM 88240 UNITED STATES US
555C1/5506/85A2		

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 07.17.2020 10.57.00 AM

Work Order #: 667483

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#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: 07.17.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.20.2020

Certificate of Analysis Summary 668219

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Mon 07.27.2020 11:15
Report Date: 07.28.2020 13:20
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	668219-001					
	Field Id:	SP1 @ 7'					
	Depth:	7- ft					
	Matrix:	SOIL					
	Sampled:	07.22.2020 00:00					
Chloride by EPA 300	Extracted:	07.27.2020 16:20					
	Analyzed:	07.27.2020 22:13					
	Units/RL:	mg/kg RL					
Chloride		204 49.9					

BRL - Below Reporting Limit

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

Jessica Kramer



Environment Testing
Xenco

Analytical Report 668219

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Hopi Federal #2

12289

07.28.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.28.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **668219**

Hopi Federal #2

Project Address: Eddy County, NM

PM :

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 Eurofins Xenco, LLC Report Number(s) 668219. 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 Eurofins Xenco, LLC. 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. 668219 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 668219****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP1 @ 7'	S	07.22.2020 00:00	7 ft	668219-001



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Hopi Federal #2

Project ID: 12289
Work Order Number(s): 668219

Report Date: 07.28.2020
Date Received: 07.27.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

**Certificate of Analytical Results 668219****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id: **SP1 @ 7'**
Lab Sample Id: 668219-001

Matrix: Soil
Date Collected: 07.22.2020 00:00

Date Received: 07.27.2020 11:15
Sample Depth: 7 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.27.2020 16:20

Basis: Wet Weight

Seq Number: 3132747

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	204	49.9	mg/kg	07.27.2020 22:13		10

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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3132747

MB Sample Id: 7708161-1-BLK

Matrix: Solid

LCS Sample Id: 7708161-1-BKS

Prep Method: E300P

Date Prep: 07.27.2020

LCSD Sample Id: 7708161-1-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	261	104	262	105	90-110	0	20	mg/kg	07.27.2020 20:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3132747

Parent Sample Id: 668271-001

Matrix: Soil

MS Sample Id: 668271-001 S

Prep Method: E300P

Date Prep: 07.27.2020

MSD Sample Id: 668271-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3100	1250	4410	105	4450	108	90-110	1	20	mg/kg	07.27.2020 20:31	

Analytical Method: Chloride by EPA 300

Seq Number: 3132747

Parent Sample Id: 668271-011

Matrix: Soil

MS Sample Id: 668271-011 S

Prep Method: E300P

Date Prep: 07.27.2020

MSD Sample Id: 668271-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	17.5	250	277	104	277	104	90-110	0	20	mg/kg	07.27.2020 22:00	

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



Atlanta, GA (770) 449-8800

www.xenco.com Page 1 of 1

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

Final 1.000

1631 / 245.1 / 7470 / 7471 : Hg

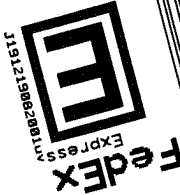
Revised Date 10/14/19 Rev. 2019.1



41 MAF

TRK# 9061 5134 6176
0201

TX-US LBB
MAFKI
HLD
PRIORITY OVERNIGHT
SATURDAY HOLD



REF: 704-5440
M IDLAND TX 79701

200 W INTERSTATE 20
FEDEX OFFICE PRINT & SHIP CENTER
FEDEX OFFICE PRINT & SHIP CENTER
XENCO HOLD FOR PICKUP

TO
HOBBS, NM 88240
UNITED STATES US
4008 N GRIMES
ALL SERVICES ETC

GIN ID: HOBBS (10/10) 327-1000

SHIP DATE: 24 JUL 20
ACTWGT: 17.00 LB MAN
DIM: 18x17x11 IN
CDD: 0103352/CAFE3313
BILL THIRD PARTY

565C3/C6A6/05R2

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 07.27.2020 11.15.00 AM

Work Order #: 668219

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.1
#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: 07.27.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.27.2020



Certificate of Analysis Summary 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Endeavor

Date Received in Lab: Thu 08.06.2020 10:53
Report Date: 08.10.2020 13:03
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669299-001	669299-002	669299-003	669299-004	669299-005	669299-006
	<i>Field Id:</i>	NWW	NWHFSB @ 4'	WWWPJ	WW	NWH @ 3'	NWA
	<i>Depth:</i>		4- ft			3- ft	
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.04.2020 00:00	08.04.2020 00:00	08.04.2020 00:00	08.04.2020 00:00	08.04.2020 00:00	08.04.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.08.2020 15:30	08.08.2020 15:30	08.08.2020 15:30	08.08.2020 15:30	08.08.2020 15:30	08.08.2020 15:30
	<i>Analyzed:</i>	08.10.2020 01:52	08.10.2020 02:12	08.10.2020 02:33	08.10.2020 02:53	08.10.2020 03:14	08.10.2020 03:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00396 0.00396	<0.00397 0.00397	<0.00399 0.00399	<0.00400 0.00400	<0.00400 0.00400	<0.00398 0.00398
o-Xylene		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00198 0.00198	<0.00198 0.00198	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	08.06.2020 14:50	08.06.2020 14:50	08.06.2020 14:50	08.06.2020 14:50	08.06.2020 14:50	08.06.2020 14:50
	<i>Analyzed:</i>	08.06.2020 17:56	08.06.2020 18:02	08.06.2020 18:09	08.06.2020 18:28	08.06.2020 18:34	08.06.2020 18:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		4050 49.8	546 50.0	731 50.5	114 49.5	922 50.4	181 49.9
TPH By SW8015 Mod	<i>Extracted:</i>	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00
	<i>Analyzed:</i>	08.07.2020 02:29	08.07.2020 02:50	08.07.2020 03:11	08.07.2020 03:32	08.07.2020 03:52	08.07.2020 04:13
	<i>Units/RL:</i>	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	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9
Total TPH		<49.9 49.9	<49.8 49.8	<50.0 50.0	<50.0 50.0	<49.9 49.9	<49.9 49.9

BRL - Below Reporting Limit

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

Jessica Kramer



Certificate of Analysis Summary 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Endeavor

Date Received in Lab: Thu 08.06.2020 10:53
Report Date: 08.10.2020 13:03
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669299-007	669299-008	669299-009	669299-010		
	<i>Field Id:</i>	WFS	SWWPJ	SP1FS @ 8'	NWB		
	<i>Depth:</i>			8- ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	08.04.2020 00:00	08.04.2020 00:00	08.04.2020 00:00	08.04.2020 00:00		
BTEX by EPA 8021B	<i>Extracted:</i>	08.08.2020 15:30	08.08.2020 15:30	08.08.2020 15:30	08.08.2020 15:00		
	<i>Analyzed:</i>	08.10.2020 03:54	08.10.2020 04:15	08.10.2020 04:36	08.09.2020 10:05		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200		
Toluene		<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200		
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200		
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398	<0.00401 0.00401		
o-Xylene		<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200		
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200		
Total BTEX		<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200		
Chloride by EPA 300	<i>Extracted:</i>	08.06.2020 14:50	08.06.2020 14:50	08.06.2020 14:50	08.06.2020 14:50		
	<i>Analyzed:</i>	08.06.2020 18:59	08.06.2020 19:06	08.06.2020 19:12	08.06.2020 19:18		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		444 49.7	181 49.5	109 49.9	500 49.5		
TPH By SW8015 Mod	<i>Extracted:</i>	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00	08.06.2020 17:00		
	<i>Analyzed:</i>	08.07.2020 04:34	08.07.2020 04:55	08.07.2020 05:15	08.07.2020 05:36		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0		

BRL - Below Reporting Limit

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

Jessica Kramer

Analytical Report 669299

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Hopi Federal #2

12289

08.10.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.10.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669299**

Hopi Federal #2

Project Address: Endeavor

PM :

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 Eurofins Xenco, LLC Report Number(s) 669299. 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 Eurofins Xenco, LLC. 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. 669299 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 669299****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NWW	S	08.04.2020 00:00		669299-001
NWHFSB @ 4'	S	08.04.2020 00:00	4 ft	669299-002
WWWPJ	S	08.04.2020 00:00		669299-003
WW	S	08.04.2020 00:00		669299-004
NWH @ 3'	S	08.04.2020 00:00	3 ft	669299-005
NWA	S	08.04.2020 00:00		669299-006
WFS	S	08.04.2020 00:00		669299-007
SWWPJ	S	08.04.2020 00:00		669299-008
SP1FS @ 8'	S	08.04.2020 00:00	8 ft	669299-009
NWB	S	08.04.2020 00:00		669299-010



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Hopi Federal #2

Project ID: 12289
Work Order Number(s): 669299

Report Date: 08.10.2020
Date Received: 08.06.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWW** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-001 Date Collected: 08.04.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4050	49.8	mg/kg	08.06.2020 17:56		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.07.2020 02:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.07.2020 02:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.07.2020 02:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.07.2020 02:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	08.07.2020 02:29	
o-Terphenyl	84-15-1	87	%	70-130	08.07.2020 02:29	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWW**
Lab Sample Id: 669299-001

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.2020 01:52	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.2020 01:52	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.2020 01:52	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.10.2020 01:52	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.2020 01:52	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.2020 01:52	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.2020 01:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.10.2020 01:52	
4-Bromofluorobenzene	460-00-4	125	%	70-130	08.10.2020 01:52	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWHFSB @ 4'** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-002 Date Collected: 08.04.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	546	50.0	mg/kg	08.06.2020 18:02		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.07.2020 02:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.07.2020 02:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.07.2020 02:50	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.07.2020 02:50	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	08.07.2020 02:50	
o-Terphenyl	84-15-1	89	%	70-130	08.07.2020 02:50	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWHFSB @ 4'**

Matrix: Soil

Date Received: 08.06.2020 10:53

Lab Sample Id: 669299-002

Date Collected: 08.04.2020 00:00

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.10.2020 02:12	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.10.2020 02:12	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.10.2020 02:12	U	1
m,p-Xylenes	179601-23-1	<0.00397	0.00397	mg/kg	08.10.2020 02:12	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.10.2020 02:12	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.10.2020 02:12	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.10.2020 02:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.10.2020 02:12	
4-Bromofluorobenzene	460-00-4	121	%	70-130	08.10.2020 02:12	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WWWPJ**
Lab Sample Id: 669299-003

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.06.2020 14:50

Basis: Wet Weight

Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	731	50.5	mg/kg	08.06.2020 18:09		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.06.2020 17:00

Basis: Wet Weight

Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 03:11	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 03:11	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 03:11	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 03:11	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	08.07.2020 03:11	
o-Terphenyl	84-15-1	88	%	70-130	08.07.2020 03:11	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WWWPJ**
Lab Sample Id: 669299-003

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 02:33	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 02:33	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 02:33	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.10.2020 02:33	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 02:33	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 02:33	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 02:33	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	119	%	70-130	08.10.2020 02:33		
1,4-Difluorobenzene	540-36-3	105	%	70-130	08.10.2020 02:33		



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WW** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-004 Date Collected: 08.04.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	114	49.5	mg/kg	08.06.2020 18:28		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 03:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 03:32	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 03:32	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 03:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	08.07.2020 03:32	
o-Terphenyl	84-15-1	86	%	70-130	08.07.2020 03:32	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WW**
Lab Sample Id: 669299-004

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 02:53	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 02:53	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 02:53	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.10.2020 02:53	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 02:53	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 02:53	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 02:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	126	%	70-130	08.10.2020 02:53	
1,4-Difluorobenzene	540-36-3	108	%	70-130	08.10.2020 02:53	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWH @ 3'** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-005 Date Collected: 08.04.2020 00:00 Sample Depth: 3 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	922	50.4	mg/kg	08.06.2020 18:34		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.07.2020 03:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.07.2020 03:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.07.2020 03:52	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.07.2020 03:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	08.07.2020 03:52	
o-Terphenyl	84-15-1	87	%	70-130	08.07.2020 03:52	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWH @ 3'**

Matrix: Soil

Date Received: 08.06.2020 10:53

Lab Sample Id: 669299-005

Date Collected: 08.04.2020 00:00

Sample Depth: 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.10.2020 03:14	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.10.2020 03:14	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.10.2020 03:14	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.10.2020 03:14	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.10.2020 03:14	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.10.2020 03:14	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.10.2020 03:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	08.10.2020 03:14	
1,4-Difluorobenzene	540-36-3	107	%	70-130	08.10.2020 03:14	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWA** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-006 Date Collected: 08.04.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	181	49.9	mg/kg	08.06.2020 18:53		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.07.2020 04:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.07.2020 04:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.07.2020 04:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.07.2020 04:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	08.07.2020 04:13	
o-Terphenyl	84-15-1	86	%	70-130	08.07.2020 04:13	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWA**
Lab Sample Id: 669299-006

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 03:34	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 03:34	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 03:34	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 03:34	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 03:34	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 03:34	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 03:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	111	%	70-130	08.10.2020 03:34	
4-Bromofluorobenzene	460-00-4	127	%	70-130	08.10.2020 03:34	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WFS** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-007 Date Collected: 08.04.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	444	49.7	mg/kg	08.06.2020 18:59		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 04:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 04:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 04:34	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 04:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	08.07.2020 04:34	
o-Terphenyl	84-15-1	90	%	70-130	08.07.2020 04:34	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WFS**
Lab Sample Id: 669299-007

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 03:54	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 03:54	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 03:54	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 03:54	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 03:54	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 03:54	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 03:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	109	%	70-130	08.10.2020 03:54		
4-Bromofluorobenzene	460-00-4	123	%	70-130	08.10.2020 03:54		



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SWWPJ** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-008 Date Collected: 08.04.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	181	49.5	mg/kg	08.06.2020 19:06		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.07.2020 04:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.07.2020 04:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.07.2020 04:55	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.07.2020 04:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	84	%	70-130	08.07.2020 04:55	
o-Terphenyl	84-15-1	89	%	70-130	08.07.2020 04:55	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SWWPJ**
Lab Sample Id: 669299-008

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.10.2020 04:15	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.10.2020 04:15	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.10.2020 04:15	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.10.2020 04:15	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.10.2020 04:15	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.10.2020 04:15	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.10.2020 04:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	08.10.2020 04:15		
4-Bromofluorobenzene	460-00-4	121	%	70-130	08.10.2020 04:15		



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP1FS @ 8'**

Matrix: Soil

Date Received: 08.06.2020 10:53

Lab Sample Id: 669299-009

Date Collected: 08.04.2020 00:00

Sample Depth: 8 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.06.2020 14:50

Basis: Wet Weight

Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	109	49.9	mg/kg	08.06.2020 19:12		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.06.2020 17:00

Basis: Wet Weight

Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 05:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 05:15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 05:15	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 05:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	08.07.2020 05:15	
o-Terphenyl	84-15-1	90	%	70-130	08.07.2020 05:15	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP1FS @ 8'**

Matrix: Soil

Date Received: 08.06.2020 10:53

Lab Sample Id: 669299-009

Date Collected: 08.04.2020 00:00

Sample Depth: 8 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:30

Basis: Wet Weight

Seq Number: 3133986

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.10.2020 04:36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.10.2020 04:36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.10.2020 04:36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.10.2020 04:36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.10.2020 04:36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.10.2020 04:36	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.10.2020 04:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	08.10.2020 04:36		
4-Bromofluorobenzene	460-00-4	116	%	70-130	08.10.2020 04:36		



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWB** Matrix: Soil Date Received: 08.06.2020 10:53
 Lab Sample Id: 669299-010 Date Collected: 08.04.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.06.2020 14:50 Basis: Wet Weight
 Seq Number: 3133831

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	500	49.5	mg/kg	08.06.2020 19:18		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.06.2020 17:00 Basis: Wet Weight
 Seq Number: 3133888

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.07.2020 05:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.07.2020 05:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.07.2020 05:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.07.2020 05:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	79	%	70-130	08.07.2020 05:36	
o-Terphenyl	84-15-1	86	%	70-130	08.07.2020 05:36	



Certificate of Analytical Results 669299

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWB**
Lab Sample Id: 669299-010

Matrix: Soil
Date Collected: 08.04.2020 00:00

Date Received: 08.06.2020 10:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.08.2020 15:00

Basis: Wet Weight

Seq Number: 3133984

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.09.2020 10:05	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.09.2020 10:05	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.09.2020 10:05	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.09.2020 10:05	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.09.2020 10:05	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.09.2020 10:05	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.09.2020 10:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	08.09.2020 10:05	
1,4-Difluorobenzene	540-36-3	110	%	70-130	08.09.2020 10:05	

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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3133831

MB Sample Id: 7708872-1-BLK

Matrix: Solid

LCS Sample Id: 7708872-1-BKS

Prep Method: E300P

Date Prep: 08.06.2020

LCSD Sample Id: 7708872-1-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	249	100	250	100	90-110	0	20	mg/kg	08.06.2020 16:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3133831

Parent Sample Id: 669268-009

Matrix: Soil

MS Sample Id: 669268-009 S

Prep Method: E300P

Date Prep: 08.06.2020

MSD Sample Id: 669268-009 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	204	252	478	109	469	105	90-110	2	20	mg/kg	08.06.2020 16:31	

Analytical Method: Chloride by EPA 300

Seq Number: 3133831

Parent Sample Id: 669299-003

Matrix: Soil

MS Sample Id: 669299-003 S

Prep Method: E300P

Date Prep: 08.06.2020

MSD Sample Id: 669299-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	731	2530	3430	107	3400	105	90-110	1	20	mg/kg	08.06.2020 18:15	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133888

MB Sample Id: 7708925-1-BLK

Matrix: Solid

LCS Sample Id: 7708925-1-BKS

Prep Method: SW8015P

Date Prep: 08.06.2020

LCSD Sample Id: 7708925-1-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)	<50.0	1000	824	82	838	84	70-130	2	20	mg/kg	08.06.2020 21:15	
Diesel Range Organics (DRO)	<50.0	1000	837	84	820	82	70-130	2	20	mg/kg	08.06.2020 21:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		89		96		70-130	%	08.06.2020 21:15
o-Terphenyl	91		89		98		70-130	%	08.06.2020 21:15

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133888

Matrix: Solid

MB Sample Id: 7708925-1-BLK

Prep Method: SW8015P

Date Prep: 08.06.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.06.2020 20:54	

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: TPH By SW8015 Mod

Seq Number: 3133888

Parent Sample Id: 669110-001

Matrix: Soil

MS Sample Id: 669110-001 S

Prep Method: SW8015P

Date Prep: 08.06.2020

MSD Sample Id: 669110-001 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)	<49.8	996	782	79	780	78	70-130	0	20	mg/kg	08.06.2020 22:18	
Diesel Range Organics (DRO)	<49.8	996	819	82	816	82	70-130	0	20	mg/kg	08.06.2020 22:18	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	90		90		70-130	%	08.06.2020 22:18
o-Terphenyl	89		88		70-130	%	08.06.2020 22:18

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133984

MB Sample Id: 7709042-1-BLK

Matrix: Solid

LCS Sample Id: 7709042-1-BKS

Prep Method: SW5035A

Date Prep: 08.08.2020

LCSD Sample Id: 7709042-1-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	0.0804	80	0.0850	85	70-130	6	35	mg/kg	08.09.2020 07:43	
Toluene	<0.00200	0.100	0.0783	78	0.0826	83	70-130	5	35	mg/kg	08.09.2020 07:43	
Ethylbenzene	<0.00200	0.100	0.0784	78	0.0824	82	70-130	5	35	mg/kg	08.09.2020 07:43	
m,p-Xylenes	<0.00400	0.200	0.154	77	0.161	81	70-130	4	35	mg/kg	08.09.2020 07:43	
o-Xylene	<0.00200	0.100	0.0789	79	0.0831	83	70-130	5	35	mg/kg	08.09.2020 07:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		99		100		70-130	%	08.09.2020 07:43
4-Bromofluorobenzene	107		99		102		70-130	%	08.09.2020 07:43

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133986

MB Sample Id: 7709044-1-BLK

Matrix: Solid

LCS Sample Id: 7709044-1-BKS

Prep Method: SW5035A

Date Prep: 08.08.2020

LCSD Sample Id: 7709044-1-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	0.110	110	0.105	105	70-130	5	35	mg/kg	08.09.2020 18:40	
Toluene	<0.00200	0.100	0.0976	98	0.0940	94	70-130	4	35	mg/kg	08.09.2020 18:40	
Ethylbenzene	<0.00200	0.100	0.0912	91	0.0884	88	70-130	3	35	mg/kg	08.09.2020 18:40	
m,p-Xylenes	<0.00400	0.200	0.180	90	0.174	87	70-130	3	35	mg/kg	08.09.2020 18:40	
o-Xylene	<0.00200	0.100	0.0896	90	0.0869	87	70-130	3	35	mg/kg	08.09.2020 18:40	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		103		101		70-130	%	08.09.2020 18:40
4-Bromofluorobenzene	106		95		93		70-130	%	08.09.2020 18:40

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133984

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.08.2020

Parent Sample Id: 669299-010

MS Sample Id: 669299-010 S

MSD Sample Id: 669299-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0759	76	0.0735	74	70-130	3	35	mg/kg	08.09.2020 08:24	
Toluene	<0.00200	0.0998	0.0740	74	0.0723	72	70-130	2	35	mg/kg	08.09.2020 08:24	
Ethylbenzene	<0.00200	0.0998	0.0746	75	0.0728	73	70-130	2	35	mg/kg	08.09.2020 08:24	
m,p-Xylenes	<0.00399	0.200	0.146	73	0.142	71	70-130	3	35	mg/kg	08.09.2020 08:24	
o-Xylene	<0.00200	0.0998	0.0746	75	0.0721	72	70-130	3	35	mg/kg	08.09.2020 08:24	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		99		70-130	%	08.09.2020 08:24
4-Bromofluorobenzene	106		102		70-130	%	08.09.2020 08:24

Analytical Method: BTEX by EPA 8021B

Seq Number: 3133986

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.08.2020

Parent Sample Id: 669480-033

MS Sample Id: 669480-033 S

MSD Sample Id: 669480-033 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0640	63	0.0600	59	70-130	6	35	mg/kg	08.09.2020 19:22	X
Toluene	<0.00202	0.101	0.0446	44	0.0419	41	70-130	6	35	mg/kg	08.09.2020 19:22	X
Ethylbenzene	<0.00202	0.101	0.0348	34	0.0333	33	70-130	4	35	mg/kg	08.09.2020 19:22	X
m,p-Xylenes	<0.00403	0.202	0.0552	27	0.0507	25	70-130	8	35	mg/kg	08.09.2020 19:22	X
o-Xylene	<0.00202	0.101	0.0382	38	0.0372	37	70-130	3	35	mg/kg	08.09.2020 19:22	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		70-130	%	08.09.2020 19:22
4-Bromofluorobenzene	106		108		70-130	%	08.09.2020 19:22

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



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) 988-3189, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No: 12289

1069294

www.xenco.com Page 1 of 1

Project Manager:	Joel Lowry	Bill to: (if different)	Endeavor
Company Name:	Elech Environmental & Safety	Company Name:	Endeavor - Tiffany Franks
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@elecheny.com + Client

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level: ☐ Level I ☐ - PST/US ☐ TRR ☐ Level II ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Hop: Federal #2	Turn Around	
Project Number:	12289	Routine:	☒
Project Location:	Endeavor	Rush:	☐
Sampler's Name:	Eric Mojica	Due Date:	
PO #:			

SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒	Well Ice:	Yes ☐ No ☒
Temperature (°C):	0410.5	Thermometer ID:	123		
Received In tact:	Yes ☒ No ☐	Correction Factor:			
Cooler Custody Seals:	Yes ☐ No ☒ N/A	Total Containers:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	Chloride E300	BTEX 8021	TPH Modified Ext	TPH TX1005	ANALYSIS REQUEST	Preservative Codes	Sample Comments
NW1W	S	8-4-20			1	☒	☒	☒	☒		HN03: HN H2SO4: H2 HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate+ NaOH: Zn	
NW1FS Be4	S	8-4-20		4'	1	☒	☒	☒	☒			
NW1W P J	S	8-4-20			1	☒	☒	☒	☒			
NW1W	S	8-3-20			1	☒	☒	☒	☒			
NW1He3	S	8-3-20		3'	1	☒	☒	☒	☒			
NW1A	S	8-4-20			1	☒	☒	☒	☒			
NW1FS	S	8-3-20			1	☒	☒	☒	☒			
NW1P5	S	8-4-20			1	☒	☒	☒	☒			
SP1FS e8	S	8-4-20		8'	1	☒	☒	☒	☒			
NW1B	S	8-4-20			1	☒	☒	☒	☒			

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245, 17470 / 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
Eric Mojica	Tiffany Franks	8/5/20	Tiffany Franks	10/19/20	8/14/20
					1053

41 MAFR 9061 5134 6901

TX-US LBB
MAFR
HLD
PRIORITY OVERNIGHT
THU - 06 AUG HOLD

TRK# 0201

FedEx Express

DEPT: REF: PO: INV: (432) 704-6440

MIDLAND TX 79711

3600 COUNTY ROAD 1276 SOUTH

FEDEX EXPRESS SHIP CENTER

FEDEX EXPRESS SHIP CENTER

TO XENCO HOLD FOR PICKUP

MAIL SERVICES ETC
4008 N GRIMES
HOBBS, NM 88240
UNITED STATES US

ORIGIN ID: H08A (079) 552-7000

BILL THIRD PARTY

ACTWGT: 26.00 LB MAN
GWD: 0103352/CAFE3313
DIMS: 25x15x15 IN

565C2/7789/85R2

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.06.2020 10.53.00 AM

Work Order #: 669299

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.4
#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

BTEX was in bulk container

* 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: 08.06.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.06.2020



Certificate of Analysis Summary 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Mon 08.10.2020 10:01
Report Date: 08.11.2020 15:31
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669581-001	669581-002	669581-003	669581-004	669581-005	669581-006
	<i>Field Id:</i>	NW1	SW1	SW2	SW3	BWHS @ 5'	SP4FS @ 5'
	<i>Depth:</i>					5- ft	5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.05.2020 00:00	08.05.2020 00:00	08.05.2020 00:00	08.06.2020 00:00	08.06.2020 00:00	08.05.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.10.2020 13:00	08.10.2020 13:00	08.10.2020 13:00	08.10.2020 13:00	08.10.2020 13:00	08.10.2020 13:00
	<i>Analyzed:</i>	08.11.2020 04:54	08.11.2020 05:14	08.11.2020 05:34	08.11.2020 05:55	08.11.2020 06:15	08.11.2020 06:36
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00399 0.00399	<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398	<0.00399 0.00399	<0.00398 0.00398
o-Xylene		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00200 0.00200	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	08.10.2020 12:50	08.10.2020 12:50	08.10.2020 12:50	08.10.2020 12:50	08.10.2020 12:50	08.10.2020 12:50
	<i>Analyzed:</i>	08.10.2020 13:39	08.10.2020 13:46	08.10.2020 13:52	08.10.2020 13:58	08.10.2020 14:17	08.10.2020 14:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		369 25.1	455 49.6	594 50.0	460 49.8	162 25.0	623 25.0
TPH By SW8015 Mod	<i>Extracted:</i>	08.10.2020 12:00	08.10.2020 12:00	08.10.2020 12:00	08.10.2020 12:00	08.10.2020 12:00	08.10.2020 12:00
	<i>Analyzed:</i>	08.10.2020 17:51	08.10.2020 18:46	08.10.2020 19:13	08.10.2020 19:39	08.10.2020 20:04	08.10.2020 20:29
	<i>Units/RL:</i>	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	<49.9 49.9	<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	<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	<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	<50.0 50.0	<49.9 49.9	<49.9 49.9

BRL - Below Reporting Limit

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

Jessica Kramer

Certificate of Analysis Summary 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Mon 08.10.2020 10:01
Report Date: 08.11.2020 15:31
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 669581-007 Field Id: SP4FSA @ 5' Depth: 5- ft Matrix: SOIL Sampled: 08.05.2020 00:00	669581-008 SP4FSB @ 7' 7- ft SOIL 08.06.2020 00:00				
BTEX by EPA 8021B	Extracted: 08.10.2020 13:00 Analyzed: 08.11.2020 06:56 Units/RL: mg/kg RL	08.10.2020 13:00 08.11.2020 07:16 mg/kg RL				
Benzene	<0.00198	0.00198	<0.00200	0.00200		
Toluene	<0.00198	0.00198	<0.00200	0.00200		
Ethylbenzene	<0.00198	0.00198	<0.00200	0.00200		
m,p-Xylenes	<0.00396	0.00396	<0.00401	0.00401		
o-Xylene	<0.00198	0.00198	<0.00200	0.00200		
Total Xylenes	<0.00198	0.00198	<0.00200	0.00200		
Total BTEX	<0.00198	0.00198	<0.00200	0.00200		
Chloride by EPA 300	Extracted: 08.10.2020 12:50 Analyzed: 08.10.2020 14:30 Units/RL: mg/kg RL	08.10.2020 12:50 08.10.2020 14:36 mg/kg RL				
Chloride	315	50.4	62.2	49.9		
TPH By SW8015 Mod	Extracted: 08.10.2020 12:00 Analyzed: 08.10.2020 20:55 Units/RL: mg/kg RL	08.10.2020 12:00 08.10.2020 21:19 mg/kg RL				
Gasoline Range Hydrocarbons (GRO)	<49.8	49.8	<50.0	50.0		
Diesel Range Organics (DRO)	<49.8	49.8	<50.0	50.0		
Motor Oil Range Hydrocarbons (MRO)	<49.8	49.8	<50.0	50.0		
Total TPH	<49.8	49.8	<50.0	50.0		

BRL - Below Reporting Limit

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



Analytical Report 669581

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Hopi Federal #2

12289

08.11.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.11.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669581**

Hopi Federal #2

Project Address: Eddy County, NM

PM :

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 Eurofins Xenco, LLC Report Number(s) 669581. 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 Eurofins Xenco, LLC. 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. 669581 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 669581****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NW1	S	08.05.2020 00:00		669581-001
SW1	S	08.05.2020 00:00		669581-002
SW2	S	08.05.2020 00:00		669581-003
SW3	S	08.06.2020 00:00		669581-004
BWHS @ 5'	S	08.06.2020 00:00	5 ft	669581-005
SP4FS @ 5'	S	08.05.2020 00:00	5 ft	669581-006
SP4FSA @ 5'	S	08.05.2020 00:00	5 ft	669581-007
SP4FSB @ 7'	S	08.06.2020 00:00	7 ft	669581-008



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Hopi Federal #2

Project ID: 12289
Work Order Number(s): 669581

Report Date: 08.11.2020
Date Received: 08.10.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NW1** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-001 Date Collected: 08.05.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	369	25.1	mg/kg	08.10.2020 13:39		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 17:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 17:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 17:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 17:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	08.10.2020 17:51	
o-Terphenyl	84-15-1	76	%	70-130	08.10.2020 17:51	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NW1**
Lab Sample Id: 669581-001

Matrix: Soil
Date Collected: 08.05.2020 00:00

Date Received: 08.10.2020 10:01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 04:54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 04:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	100	%	70-130	08.11.2020 04:54	
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.11.2020 04:54	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW1** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-002 Date Collected: 08.05.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	455	49.6	mg/kg	08.10.2020 13:46		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 18:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 18:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 18:46	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 18:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	08.10.2020 18:46	
o-Terphenyl	84-15-1	71	%	70-130	08.10.2020 18:46	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW1**
Lab Sample Id: 669581-002

Matrix: Soil
Date Collected: 08.05.2020 00:00

Date Received: 08.10.2020 10:01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 05:14	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 05:14	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 05:14	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 05:14	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 05:14	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 05:14	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 05:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.11.2020 05:14		
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.11.2020 05:14		



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW2** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-003 Date Collected: 08.05.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	594	50.0	mg/kg	08.10.2020 13:52		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 19:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 19:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 19:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 19:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	08.10.2020 19:13	
o-Terphenyl	84-15-1	94	%	70-130	08.10.2020 19:13	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW2**
Lab Sample Id: 669581-003

Matrix: Soil
Date Collected: 08.05.2020 00:00

Date Received: 08.10.2020 10:01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.11.2020 05:34	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.11.2020 05:34	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.11.2020 05:34	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.11.2020 05:34	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.11.2020 05:34	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.11.2020 05:34	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.11.2020 05:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.11.2020 05:34	
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.11.2020 05:34	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW3** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-004 Date Collected: 08.06.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	460	49.8	mg/kg	08.10.2020 13:58		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 19:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 19:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 19:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 19:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	85	%	70-130	08.10.2020 19:39	
o-Terphenyl	84-15-1	83	%	70-130	08.10.2020 19:39	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW3**
Lab Sample Id: 669581-004

Matrix: Soil
Date Collected: 08.06.2020 00:00

Date Received: 08.10.2020 10:01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 05:55	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 05:55	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 05:55	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 05:55	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 05:55	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 05:55	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 05:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.11.2020 05:55	
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.11.2020 05:55	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **BWHS @ 5'** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-005 Date Collected: 08.06.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	162	25.0	mg/kg	08.10.2020 14:17		5

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 20:04	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 20:04	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 20:04	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 20:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-130	08.10.2020 20:04	
o-Terphenyl	84-15-1	92	%	70-130	08.10.2020 20:04	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **BWHS @ 5'**

Matrix: Soil

Date Received: 08.10.2020 10:01

Lab Sample Id: 669581-005

Date Collected: 08.06.2020 00:00

Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 06:15	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 06:15	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 06:15	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.11.2020 06:15	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 06:15	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 06:15	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 06:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	08.11.2020 06:15	
1,4-Difluorobenzene	540-36-3	117	%	70-130	08.11.2020 06:15	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4FS @ 5'**

Matrix: Soil

Date Received: 08.10.2020 10:01

Lab Sample Id: 669581-006

Date Collected: 08.05.2020 00:00

Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 08.10.2020 12:50

Basis: Wet Weight

Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	623	25.0	mg/kg	08.10.2020 14:24		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.10.2020 12:00

Basis: Wet Weight

Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.10.2020 20:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.10.2020 20:29	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.10.2020 20:29	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.10.2020 20:29	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	08.10.2020 20:29	
o-Terphenyl	84-15-1	104	%	70-130	08.10.2020 20:29	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4FS @ 5'**

Matrix: Soil

Date Received: 08.10.2020 10:01

Lab Sample Id: 669581-006

Date Collected: 08.05.2020 00:00

Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.11.2020 06:36	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.11.2020 06:36	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.11.2020 06:36	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.11.2020 06:36	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.11.2020 06:36	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.11.2020 06:36	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.11.2020 06:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 06:36		
1,4-Difluorobenzene	540-36-3	113	%	70-130	08.11.2020 06:36		



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4FSA @ 5'** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-007 Date Collected: 08.05.2020 00:00 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	315	50.4	mg/kg	08.10.2020 14:30		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.10.2020 20:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.10.2020 20:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.10.2020 20:55	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.10.2020 20:55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	08.10.2020 20:55	
o-Terphenyl	84-15-1	104	%	70-130	08.10.2020 20:55	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4FSA @ 5'**

Matrix: Soil

Date Received: 08.10.2020 10:01

Lab Sample Id: 669581-007

Date Collected: 08.05.2020 00:00

Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.11.2020 06:56	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.11.2020 06:56	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.11.2020 06:56	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.11.2020 06:56	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.11.2020 06:56	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.11.2020 06:56	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.11.2020 06:56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	102	%	70-130	08.11.2020 06:56		
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.11.2020 06:56		



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4FSB @ 7'** Matrix: Soil Date Received: 08.10.2020 10:01
 Lab Sample Id: 669581-008 Date Collected: 08.06.2020 00:00 Sample Depth: 7 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 08.10.2020 12:50 Basis: Wet Weight
 Seq Number: 3134090

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	62.2	49.9	mg/kg	08.10.2020 14:36		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.10.2020 12:00 Basis: Wet Weight
 Seq Number: 3134154

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.10.2020 21:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.10.2020 21:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.10.2020 21:19	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.10.2020 21:19	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	08.10.2020 21:19	
o-Terphenyl	84-15-1	97	%	70-130	08.10.2020 21:19	



Certificate of Analytical Results 669581

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP4FSB @ 7'**

Matrix: Soil

Date Received: 08.10.2020 10:01

Lab Sample Id: 669581-008

Date Collected: 08.06.2020 00:00

Sample Depth: 7 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.10.2020 13:00

Basis: Wet Weight

Seq Number: 3134108

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.11.2020 07:16	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.11.2020 07:16	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.11.2020 07:16	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	08.11.2020 07:16	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.11.2020 07:16	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.11.2020 07:16	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.11.2020 07:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.11.2020 07:16	
4-Bromofluorobenzene	460-00-4	109	%	70-130	08.11.2020 07:16	

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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3134090

MB Sample Id: 7709073-1-BLK

Matrix: Solid

LCS Sample Id: 7709073-1-BKS

Prep Method: E300P

Date Prep: 08.10.2020

LCSD Sample Id: 7709073-1-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	264	106	264	106	90-110	0	20	mg/kg	08.10.2020 13:08	

Analytical Method: Chloride by EPA 300

Seq Number: 3134090

Parent Sample Id: 669580-018

Matrix: Soil

MS Sample Id: 669580-018 S

Prep Method: E300P

Date Prep: 08.10.2020

MSD Sample Id: 669580-018 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2160	1250	3480	106	3460	104	90-110	1	20	mg/kg	08.10.2020 13:27	

Analytical Method: Chloride by EPA 300

Seq Number: 3134090

Parent Sample Id: 669583-002

Matrix: Soil

MS Sample Id: 669583-002 S

Prep Method: E300P

Date Prep: 08.10.2020

MSD Sample Id: 669583-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	10.3	248	271	105	268	104	90-110	1	20	mg/kg	08.10.2020 14:56	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134154

MB Sample Id: 7709123-1-BLK

Matrix: Solid

LCS Sample Id: 7709123-1-BKS

Prep Method: SW8015P

Date Prep: 08.10.2020

LCSD Sample Id: 7709123-1-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)	<50.0	1000	866	87	865	87	70-130	0	20	mg/kg	08.10.2020 12:18	
Diesel Range Organics (DRO)	<50.0	1000	927	93	849	85	70-130	9	20	mg/kg	08.10.2020 12:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		104		97		70-130	%	08.10.2020 12:18
o-Terphenyl	96		96		89		70-130	%	08.10.2020 12:18

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134154

Matrix: Solid

MB Sample Id: 7709123-1-BLK

Prep Method: SW8015P

Date Prep: 08.10.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.10.2020 11:54	

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134154

Parent Sample Id: 669576-001

Matrix: Soil

MS Sample Id: 669576-001 S

Prep Method: SW8015P

Date Prep: 08.10.2020

MSD Sample Id: 669576-001 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)	<50.0	999	811	81	792	79	70-130	2	20	mg/kg	08.10.2020 13:28	
Diesel Range Organics (DRO)	<50.0	999	838	84	779	78	70-130	7	20	mg/kg	08.10.2020 13:28	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	82		81		70-130	%	08.10.2020 13:28
o-Terphenyl	75		72		70-130	%	08.10.2020 13:28

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134108

MB Sample Id: 7709136-1-BLK

Matrix: Solid

LCS Sample Id: 7709136-1-BKS

Prep Method: SW5035A

Date Prep: 08.10.2020

LCSD Sample Id: 7709136-1-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	0.0795	80	0.0805	81	70-130	1	35	mg/kg	08.10.2020 21:46	
Toluene	<0.00200	0.100	0.0754	75	0.0790	79	70-130	5	35	mg/kg	08.10.2020 21:46	
Ethylbenzene	<0.00200	0.100	0.0757	76	0.0791	79	70-130	4	35	mg/kg	08.10.2020 21:46	
m,p-Xylenes	<0.00400	0.200	0.150	75	0.157	79	70-130	5	35	mg/kg	08.10.2020 21:46	
o-Xylene	<0.00200	0.100	0.0770	77	0.0807	81	70-130	5	35	mg/kg	08.10.2020 21:46	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	110		100		99		70-130	%	08.10.2020 21:46
4-Bromofluorobenzene	88		93		96		70-130	%	08.10.2020 21:46

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134108

Parent Sample Id: 669577-001

Matrix: Soil

MS Sample Id: 669577-001 S

Prep Method: SW5035A

Date Prep: 08.10.2020

MSD Sample Id: 669577-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0590	59	0.0543	55	70-130	8	35	mg/kg	08.10.2020 22:27	X
Toluene	0.00301	0.0994	0.0601	57	0.0558	53	70-130	7	35	mg/kg	08.10.2020 22:27	X
Ethylbenzene	<0.00199	0.0994	0.0584	59	0.0535	54	70-130	9	35	mg/kg	08.10.2020 22:27	X
m,p-Xylenes	<0.00398	0.199	0.117	59	0.107	54	70-130	9	35	mg/kg	08.10.2020 22:27	X
o-Xylene	<0.00199	0.0994	0.0600	60	0.0550	55	70-130	9	35	mg/kg	08.10.2020 22:27	X

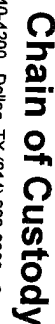
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	08.10.2020 22:27
4-Bromofluorobenzene	100		98		70-130	%	08.10.2020 22:27

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



Work Order No:

0009581

Work Order Comments

Program : UST/PST ☐ PRF ☐ Brownfield ☐ RRd ☐ Superfund ☐

State of Project:

Reporting Level ☐ Level ☐ PST/UG ☐ TRF ☐ Level ☐

Deliverables: EDD ☐ ADAPT ☐ Other:

Project Location	Eddy County, NM	Rush: ☒	HN03: HN
Sampler's Name:	Eric Mojica	Due Date: ASAP	H2SO4: H2
PO #:			HCl: HL

[illegible][illegible][illegible]

	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1				
2				
3				
4				
5				

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.10.2020 10.01.00 AM

Work Order #: 669581

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.2
#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

BTEX was in bulk container

*** 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: 08.10.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.10.2020



Certificate of Analysis Summary 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Wed 08.12.2020 11:20
Report Date: 08.13.2020 15:27
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669772-001	669772-002	669772-003	669772-004	669772-005	669772-006
	<i>Field Id:</i>	SP #5 @ 2'	SP #6 @ 4'	SP #7 @ 4'	NW #1	NW #2	EW #1
	<i>Depth:</i>	2- ft	4- ft	4- ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.12.2020 12:00	08.12.2020 12:00	08.12.2020 12:00	08.12.2020 12:00	08.12.2020 13:00	08.12.2020 12:00
	<i>Analyzed:</i>	08.12.2020 14:39	08.12.2020 15:00	08.12.2020 15:21	08.12.2020 15:41	08.12.2020 20:50	08.12.2020 17:24
	<i>Units/RL:</i>	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	0.00226 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Toluene		0.00257 0.00200	<0.00200 0.00200	0.00369 0.00200	0.00407 0.00200	<0.00199 0.00199	0.00215 0.00200
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
m,p-Xylenes		<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00400 0.00400	<0.00398 0.00398	<0.00400 0.00400
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200
Total BTEX		0.00257 0.00200	<0.00200 0.00200	0.00595 0.00200	0.00407 0.00200	<0.00199 0.00199	0.00215 0.00200
Chloride by EPA 300	<i>Extracted:</i>	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10
	<i>Analyzed:</i>	08.12.2020 15:36	08.12.2020 15:41	08.12.2020 15:47	08.12.2020 15:52	08.12.2020 16:08	08.12.2020 16:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		280 49.9	50.6 49.6	216 50.5	424 4.97	112 50.3	347 49.8
TPH By SW8015 Mod	<i>Extracted:</i>	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00
	<i>Analyzed:</i>	08.12.2020 22:47	08.12.2020 23:51	08.13.2020 00:13	08.13.2020 00:34	08.13.2020 00:56	08.13.2020 01:17
	<i>Units/RL:</i>	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	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9
Total TPH		<49.9 49.9	<50.0 50.0	<49.9 49.9	<49.8 49.8	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Jessica Kramer



Certificate of Analysis Summary 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi Federal #2

Project Id: 12289
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Wed 08.12.2020 11:20
Report Date: 08.13.2020 15:27
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	669772-007	669772-008	669772-009	669772-010	669772-011	669772-012
	<i>Field Id:</i>	SW#1	WW #1	NWHB @ 4'	BWHSB @1'	WWPJB	NWWB
	<i>Depth:</i>			4- ft	1- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00	08.10.2020 00:00
BTEX by EPA 8021B	<i>Extracted:</i>	08.12.2020 13:00	08.12.2020 13:00	08.12.2020 13:00	08.12.2020 13:00	08.12.2020 13:00	08.12.2020 13:00
	<i>Analyzed:</i>	08.12.2020 21:10	08.12.2020 21:31	08.12.2020 21:51	08.12.2020 22:12	08.12.2020 22:32	08.12.2020 22:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Toluene		<0.00199 0.00199	<0.00201 0.00201	0.00237 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402	<0.00396 0.00396	<0.00399 0.00399	<0.00402 0.00402	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201	<0.00198 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Total BTEX		<0.00199 0.00199	<0.00201 0.00201	0.00237 0.00198	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199
Chloride by EPA 300	<i>Extracted:</i>	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10	08.12.2020 14:10
	<i>Analyzed:</i>	08.12.2020 16:29	08.12.2020 16:34	08.12.2020 16:39	08.12.2020 16:45	08.12.2020 16:50	08.12.2020 16:55
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		171 49.6	163 50.0	375 49.5	518 50.2	392 49.8	257 50.0
TPH By SW8015 Mod	<i>Extracted:</i>	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00	08.12.2020 17:00
	<i>Analyzed:</i>	08.13.2020 01:39	08.13.2020 02:00	08.13.2020 02:22	08.13.2020 02:43	08.13.2020 03:26	08.13.2020 03:47
	<i>Units/RL:</i>	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	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Diesel Range Organics (DRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Motor Oil Range Hydrocarbons (MRO)		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9
Total TPH		<50.0 50.0	<49.9 49.9	<50.0 50.0	<50.0 50.0	<50.0 50.0	<49.9 49.9

BRL - Below Reporting Limit

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

Jessica Kramer

Analytical Report 669772

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Hopi Federal #2

12289

08.13.2020

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.13.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669772**

Hopi Federal #2

Project Address: Eddy County, NM

PM :

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 Eurofins Xenco, LLC Report Number(s) 669772. 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 Eurofins Xenco, LLC. 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. 669772 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 669772****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP #5 @ 2'	S	08.10.2020 00:00	2 ft	669772-001
SP #6 @ 4'	S	08.10.2020 00:00	4 ft	669772-002
SP #7 @ 4'	S	08.10.2020 00:00	4 ft	669772-003
NW #1	S	08.10.2020 00:00		669772-004
NW #2	S	08.10.2020 00:00		669772-005
EW #1	S	08.10.2020 00:00		669772-006
SW#1	S	08.10.2020 00:00		669772-007
WW #1	S	08.10.2020 00:00		669772-008
NWHB @ 4'	S	08.10.2020 00:00	4 ft	669772-009
BWHSB @1'	S	08.10.2020 00:00	1 ft	669772-010
WWPJB	S	08.10.2020 00:00		669772-011
NWWB	S	08.10.2020 00:00		669772-012



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Hopi Federal #2

Project ID: 12289
Work Order Number(s): 669772

Report Date: 08.13.2020
Date Received: 08.12.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP #5 @ 2'**

Matrix: Soil

Date Received: 08.12.2020 11:20

Lab Sample Id: 669772-001

Date Collected: 08.10.2020 00:00

Sample Depth: 2 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

% Moisture:

Analyst: SPC

Date Prep: 08.12.2020 14:10

Basis: Wet Weight

Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	280	49.9	mg/kg	08.12.2020 15:36		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 08.12.2020 17:00

Basis: Wet Weight

Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.12.2020 22:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.12.2020 22:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.12.2020 22:47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.12.2020 22:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	08.12.2020 22:47	
o-Terphenyl	84-15-1	104	%	70-130	08.12.2020 22:47	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP #5 @ 2'**

Matrix: Soil

Date Received: 08.12.2020 11:20

Lab Sample Id: 669772-001

Date Collected: 08.10.2020 00:00

Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.12.2020 12:00

Basis: Wet Weight

Seq Number: 3134344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 14:39	U	1
Toluene	108-88-3	0.00257	0.00200	mg/kg	08.12.2020 14:39		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 14:39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.12.2020 14:39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 14:39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 14:39	U	1
Total BTEX		0.00257	0.00200	mg/kg	08.12.2020 14:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	98	%	70-130	08.12.2020 14:39	
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.12.2020 14:39	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP #6 @ 4'** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-002 Date Collected: 08.10.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.6	49.6	mg/kg	08.12.2020 15:41		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.12.2020 23:51	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.12.2020 23:51	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.12.2020 23:51	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.12.2020 23:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	08.12.2020 23:51	
o-Terphenyl	84-15-1	109	%	70-130	08.12.2020 23:51	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP #6 @ 4'**

Matrix: Soil

Date Received: 08.12.2020 11:20

Lab Sample Id: 669772-002

Date Collected: 08.10.2020 00:00

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.12.2020 12:00

Basis: Wet Weight

Seq Number: 3134344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 15:00	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 15:00	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 15:00	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.12.2020 15:00	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 15:00	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 15:00	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 15:00	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	08.12.2020 15:00		
1,4-Difluorobenzene	540-36-3	118	%	70-130	08.12.2020 15:00		



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP #7 @ 4'** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-003 Date Collected: 08.10.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	216	50.5	mg/kg	08.12.2020 15:47		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.13.2020 00:13	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.13.2020 00:13	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.13.2020 00:13	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.13.2020 00:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	08.13.2020 00:13	
o-Terphenyl	84-15-1	112	%	70-130	08.13.2020 00:13	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SP #7 @ 4'**

Matrix: Soil

Date Received: 08.12.2020 11:20

Lab Sample Id: 669772-003

Date Collected: 08.10.2020 00:00

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.12.2020 12:00

Basis: Wet Weight

Seq Number: 3134344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00226	0.00200	mg/kg	08.12.2020 15:21		1
Toluene	108-88-3	0.00369	0.00200	mg/kg	08.12.2020 15:21		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 15:21	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.12.2020 15:21	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 15:21	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 15:21	U	1
Total BTEX		0.00595	0.00200	mg/kg	08.12.2020 15:21		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	119	%	70-130	08.12.2020 15:21		
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.12.2020 15:21		



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NW #1** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-004 Date Collected: 08.10.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	424	4.97	mg/kg	08.12.2020 15:52		1

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	08.13.2020 00:34	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	08.13.2020 00:34	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	08.13.2020 00:34	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	08.13.2020 00:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	08.13.2020 00:34	
o-Terphenyl	84-15-1	110	%	70-130	08.13.2020 00:34	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NW #1**
Lab Sample Id: 669772-004

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.12.2020 12:00

Basis: Wet Weight

Seq Number: 3134344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 15:41	U	1
Toluene	108-88-3	0.00407	0.00200	mg/kg	08.12.2020 15:41		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 15:41	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.12.2020 15:41	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 15:41	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 15:41	U	1
Total BTEX		0.00407	0.00200	mg/kg	08.12.2020 15:41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	118	%	70-130	08.12.2020 15:41	
4-Bromofluorobenzene	460-00-4	105	%	70-130	08.12.2020 15:41	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NW #2**
Lab Sample Id: 669772-005

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: SPC

Seq Number: 3134375

Prep Method: E300P

% Moisture:

Date Prep: 08.12.2020 14:10

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	112	50.3	mg/kg	08.12.2020 16:08		10

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3134439

Prep Method: SW8015P

% Moisture:

Date Prep: 08.12.2020 17:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 00:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 00:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 00:56	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 00:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	08.13.2020 00:56	
o-Terphenyl	84-15-1	111	%	70-130	08.13.2020 00:56	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: NW #2
Lab Sample Id: 669772-005

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 20:50	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 20:50	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 20:50	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 20:50	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 20:50	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 20:50	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 20:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	115	%	70-130	08.12.2020 20:50		
4-Bromofluorobenzene	460-00-4	120	%	70-130	08.12.2020 20:50		



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EW #1** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-006 Date Collected: 08.10.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	347	49.8	mg/kg	08.12.2020 16:13		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.13.2020 01:17	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.13.2020 01:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.13.2020 01:17	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.13.2020 01:17	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	08.13.2020 01:17	
o-Terphenyl	84-15-1	110	%	70-130	08.13.2020 01:17	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **EW #1**
Lab Sample Id: 669772-006

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 08.12.2020 12:00

Basis: Wet Weight

Seq Number: 3134344

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 17:24	U	1
Toluene	108-88-3	0.00215	0.00200	mg/kg	08.12.2020 17:24		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 17:24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	08.12.2020 17:24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 17:24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 17:24	U	1
Total BTEX		0.00215	0.00200	mg/kg	08.12.2020 17:24		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 17:24		
1,4-Difluorobenzene	540-36-3	115	%	70-130	08.12.2020 17:24		



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Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW#1** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-007 Date Collected: 08.10.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	171	49.6	mg/kg	08.12.2020 16:29		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 01:39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 01:39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 01:39	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 01:39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	08.13.2020 01:39	
o-Terphenyl	84-15-1	107	%	70-130	08.13.2020 01:39	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **SW#1**
Lab Sample Id: 669772-007

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 21:10	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 21:10	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 21:10	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 21:10	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 21:10	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 21:10	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 21:10	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	08.12.2020 21:10		
1,4-Difluorobenzene	540-36-3	117	%	70-130	08.12.2020 21:10		



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WW #1** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-008 Date Collected: 08.10.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	163	50.0	mg/kg	08.12.2020 16:34		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.13.2020 02:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.13.2020 02:00	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.13.2020 02:00	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.13.2020 02:00	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	08.13.2020 02:00	
o-Terphenyl	84-15-1	107	%	70-130	08.13.2020 02:00	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WW #1**
Lab Sample Id: 669772-008

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.12.2020 21:31	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.12.2020 21:31	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.12.2020 21:31	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.12.2020 21:31	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.12.2020 21:31	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.12.2020 21:31	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.12.2020 21:31	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	08.12.2020 21:31	
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.12.2020 21:31	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWHB @ 4'** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-009 Date Collected: 08.10.2020 00:00 Sample Depth: 4 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	375	49.5	mg/kg	08.12.2020 16:39		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 02:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 02:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 02:22	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 02:22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	08.13.2020 02:22	
o-Terphenyl	84-15-1	104	%	70-130	08.13.2020 02:22	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWHB @ 4'**

Matrix: Soil

Date Received: 08.12.2020 11:20

Lab Sample Id: 669772-009

Date Collected: 08.10.2020 00:00

Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.12.2020 21:51	U	1
Toluene	108-88-3	0.00237	0.00198	mg/kg	08.12.2020 21:51		1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.12.2020 21:51	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.12.2020 21:51	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.12.2020 21:51	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.12.2020 21:51	U	1
Total BTEX		0.00237	0.00198	mg/kg	08.12.2020 21:51		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	120	%	70-130	08.12.2020 21:51		
1,4-Difluorobenzene	540-36-3	113	%	70-130	08.12.2020 21:51		



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **BWHSB @1'** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-010 Date Collected: 08.10.2020 00:00 Sample Depth: 1 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	518	50.2	mg/kg	08.12.2020 16:45		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 02:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 02:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 02:43	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 02:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	08.13.2020 02:43	
o-Terphenyl	84-15-1	110	%	70-130	08.13.2020 02:43	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **BWHSB @1'**

Matrix: Soil

Date Received: 08.12.2020 11:20

Lab Sample Id: 669772-010

Date Collected: 08.10.2020 00:00

Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	08.12.2020 22:12	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	08.12.2020 22:12	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	08.12.2020 22:12	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	08.12.2020 22:12	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	08.12.2020 22:12	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	08.12.2020 22:12	U	1
Total BTEX		<0.00200	0.00200	mg/kg	08.12.2020 22:12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	106	%	70-130	08.12.2020 22:12		
1,4-Difluorobenzene	540-36-3	115	%	70-130	08.12.2020 22:12		



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WWPJB**
Lab Sample Id: 669772-011

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: Chloride by EPA 300

Tech: SPC

Analyst: SPC

Seq Number: 3134375

Prep Method: E300P

% Moisture:

Date Prep: 08.12.2020 14:10

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	392	49.8	mg/kg	08.12.2020 16:50		10

Analytical Method: TPH By SW8015 Mod

Tech: DVM

Analyst: ARM

Seq Number: 3134439

Prep Method: SW8015P

% Moisture:

Date Prep: 08.12.2020 17:00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 03:26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 03:26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 03:26	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 03:26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	08.13.2020 03:26	
o-Terphenyl	84-15-1	105	%	70-130	08.13.2020 03:26	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **WWPJB**
Lab Sample Id: 669772-011

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	08.12.2020 22:32	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	08.12.2020 22:32	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	08.12.2020 22:32	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	08.12.2020 22:32	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	08.12.2020 22:32	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	08.12.2020 22:32	U	1
Total BTEX		<0.00201	0.00201	mg/kg	08.12.2020 22:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	116	%	70-130	08.12.2020 22:32	
4-Bromofluorobenzene	460-00-4	101	%	70-130	08.12.2020 22:32	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWWB** Matrix: Soil Date Received: 08.12.2020 11:20
 Lab Sample Id: 669772-012 Date Collected: 08.10.2020 00:00
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: SPC % Moisture:
 Analyst: SPC Date Prep: 08.12.2020 14:10 Basis: Wet Weight
 Seq Number: 3134375

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	257	50.0	mg/kg	08.12.2020 16:55		10

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P
 Tech: DVM % Moisture:
 Analyst: ARM Date Prep: 08.12.2020 17:00 Basis: Wet Weight
 Seq Number: 3134439

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.9	49.9	mg/kg	08.13.2020 03:47	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.9	49.9	mg/kg	08.13.2020 03:47	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.9	49.9	mg/kg	08.13.2020 03:47	U	1
Total TPH	PHC635	<49.9	49.9	mg/kg	08.13.2020 03:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	08.13.2020 03:47	
o-Terphenyl	84-15-1	106	%	70-130	08.13.2020 03:47	



Certificate of Analytical Results 669772

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi Federal #2

Sample Id: **NWWB**
Lab Sample Id: 669772-012

Matrix: Soil
Date Collected: 08.10.2020 00:00

Date Received: 08.12.2020 11:20

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 08.12.2020 13:00

Basis: Wet Weight

Seq Number: 3134385

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	08.12.2020 22:53	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	08.12.2020 22:53	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	08.12.2020 22:53	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	08.12.2020 22:53	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	08.12.2020 22:53	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	08.12.2020 22:53	U	1
Total BTEX		<0.00199	0.00199	mg/kg	08.12.2020 22:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	08.12.2020 22:53		
4-Bromofluorobenzene	460-00-4	114	%	70-130	08.12.2020 22:53		

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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3134375

MB Sample Id: 7709276-1-BLK

Matrix: Solid

LCS Sample Id: 7709276-1-BKS

Prep Method: E300P

Date Prep: 08.12.2020

LCSD Sample Id: 7709276-1-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	264	106	264	106	90-110	0	20	mg/kg	08.12.2020 14:28	

Analytical Method: Chloride by EPA 300

Seq Number: 3134375

Parent Sample Id: 669772-004

Matrix: Soil

MS Sample Id: 669772-004 S

Prep Method: E300P

Date Prep: 08.12.2020

MSD Sample Id: 669772-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	424	249	670	99	673	100	90-110	0	20	mg/kg	08.12.2020 15:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3134375

Parent Sample Id: 669781-021

Matrix: Soil

MS Sample Id: 669781-021 S

Prep Method: E300P

Date Prep: 08.12.2020

MSD Sample Id: 669781-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	219	250	475	102	479	104	90-110	1	20	mg/kg	08.12.2020 14:43	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134439

MB Sample Id: 7709338-1-BLK

Matrix: Solid

LCS Sample Id: 7709338-1-BKS

Prep Method: SW8015P

Date Prep: 08.12.2020

LCSD Sample Id: 7709338-1-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)	<50.0	1000	997	100	939	94	70-130	6	20	mg/kg	08.12.2020 22:03	
Diesel Range Organics (DRO)	<50.0	1000	997	100	955	96	70-130	4	20	mg/kg	08.12.2020 22:03	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		127		121		70-130	%	08.12.2020 22:03
o-Terphenyl	116		120		115		70-130	%	08.12.2020 22:03

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134439

Matrix: Solid

MB Sample Id: 7709338-1-BLK

Prep Method: SW8015P

Date Prep: 08.12.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.12.2020 21:42	

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134439

Parent Sample Id: 669772-001

Matrix: Soil

MS Sample Id: 669772-001 S

Prep Method: SW8015P

Date Prep: 08.12.2020

MSD Sample Id: 669772-001 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)	<50.0	999	935	94	981	98	70-130	5	20	mg/kg	08.12.2020 23:08	
Diesel Range Organics (DRO)	<50.0	999	941	94	978	98	70-130	4	20	mg/kg	08.12.2020 23:08	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	114		120		70-130	%	08.12.2020 23:08
o-Terphenyl	106		110		70-130	%	08.12.2020 23:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134344

MB Sample Id: 7709298-1-BLK

Matrix: Solid

LCS Sample Id: 7709298-1-BKS

Prep Method: SW5035A

Date Prep: 08.11.2020

LCSD Sample Id: 7709298-1-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	0.106	106	0.0990	99	70-130	7	35	mg/kg	08.12.2020 07:29	
Toluene	<0.00200	0.100	0.104	104	0.0938	94	70-130	10	35	mg/kg	08.12.2020 07:29	
Ethylbenzene	<0.00200	0.100	0.103	103	0.0909	91	70-130	12	35	mg/kg	08.12.2020 07:29	
m,p-Xylenes	<0.00400	0.200	0.208	104	0.181	91	70-130	14	35	mg/kg	08.12.2020 07:29	
o-Xylene	<0.00200	0.100	0.104	104	0.0912	91	70-130	13	35	mg/kg	08.12.2020 07:29	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	107		99		100		70-130	%	08.12.2020 07:29
4-Bromofluorobenzene	98		106		98		70-130	%	08.12.2020 07:29

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134385

MB Sample Id: 7709350-1-BLK

Matrix: Solid

LCS Sample Id: 7709350-1-BKS

Prep Method: SW5035A

Date Prep: 08.12.2020

LCSD Sample Id: 7709350-1-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	0.106	106	0.109	109	70-130	3	35	mg/kg	08.12.2020 18:26	
Toluene	<0.00200	0.100	0.0970	97	0.0984	98	70-130	1	35	mg/kg	08.12.2020 18:26	
Ethylbenzene	<0.00200	0.100	0.0939	94	0.0960	96	70-130	2	35	mg/kg	08.12.2020 18:26	
m,p-Xylenes	<0.00400	0.200	0.185	93	0.190	95	70-130	3	35	mg/kg	08.12.2020 18:26	
o-Xylene	<0.00200	0.100	0.0907	91	0.0944	94	70-130	4	35	mg/kg	08.12.2020 18:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	106		100		102		70-130	%	08.12.2020 18:26
4-Bromofluorobenzene	105		94		99		70-130	%	08.12.2020 18:26

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



Etech Environmental & Safety Solution, Inc

Hopi Federal #2

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134344

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.11.2020

Parent Sample Id: 669583-008

MS Sample Id: 669583-008 S

MSD Sample Id: 669583-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0844	84	0.0898	90	70-130	6	35	mg/kg	08.12.2020 08:10	
Toluene	<0.00200	0.100	0.0784	78	0.0844	84	70-130	7	35	mg/kg	08.12.2020 08:10	
Ethylbenzene	<0.00200	0.100	0.0742	74	0.0803	80	70-130	8	35	mg/kg	08.12.2020 08:10	
m,p-Xylenes	<0.00400	0.200	0.147	74	0.158	79	70-130	7	35	mg/kg	08.12.2020 08:10	
o-Xylene	<0.00200	0.100	0.0728	73	0.0781	78	70-130	7	35	mg/kg	08.12.2020 08:10	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		103		70-130	%	08.12.2020 08:10
4-Bromofluorobenzene	105		103		70-130	%	08.12.2020 08:10

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134385

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.12.2020

Parent Sample Id: 669772-005

MS Sample Id: 669772-005 S

MSD Sample Id: 669772-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0912	91	0.0846	85	70-130	8	35	mg/kg	08.12.2020 19:08	
Toluene	<0.00200	0.100	0.0855	86	0.0774	78	70-130	10	35	mg/kg	08.12.2020 19:08	
Ethylbenzene	<0.00200	0.100	0.0835	84	0.0743	75	70-130	12	35	mg/kg	08.12.2020 19:08	
m,p-Xylenes	<0.00400	0.200	0.167	84	0.146	73	70-130	13	35	mg/kg	08.12.2020 19:08	
o-Xylene	<0.00200	0.100	0.0818	82	0.0718	72	70-130	13	35	mg/kg	08.12.2020 19:08	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		101		70-130	%	08.12.2020 19:08
4-Bromofluorobenzene	102		95		70-130	%	08.12.2020 19:08

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



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) 908-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0147, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-9800

Work Order No:

10109772

Project Manager:	Joel Lowry	Bill to: (if different)	
Company Name:	Elect Environmental & Safety	Company Name:	Endeavor
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lovington, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@electenv.com + Client

ANALYSIS REQUEST

Preservative Codes

Program: UST/PT	☐ PRP	☐ Brownfields	☐ RRC	☐ Superfund
State of Project:				
Reporting Level:	☐ Level 1	☐ PST/US	☐ TRR	☐ Level 1
Deliverables:	EDD	☐ ADAPT	☐ Other:	

Project Name:	Hopi Federal #2	Turn Around	
Project Number:	12289	Route:	☒
Project Location:	Feddy Gophy, NM	Rush:	☐
Sampler's Name:	Nigel Hammett	Due Date:	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	0.00			Thermometer ID		
Received intact:	Yes	No				
Cooler Custody Seals:	Yes	No		Correction Factor:		
Sample Custody Seals:	Yes	No		Total Containers:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number Code	Chloride	BTEX 802	TPH Mod	TPH TX10	
SP#5 @ 2'	Soil	8-10-20		2'	1	X	X	X	X	X
SP#6 @ 4'	Soil	8-10-20		4'	1	X	X	X	X	X
SP#7 @ 4'	Soil	8-10-20		4'	1	X	X	X	X	X
NW#1	Soil	8-10-20		-	1	X	X	X	X	X
NW#2	Soil	8-10-20		-	1	X	X	X	X	X
EW#1	Soil	8-10-20		-	1	X	X	X	X	X
SW#1	Soil	9-10-20		-	1	X	X	X	X	X
NW#1	Soil	8-10-20		-	1	X	X	X	X	X
NW#2 @ 4'	Soil	8-10-20		4'	1	X	X	X	X	X
SW#5 @ 2'	Soil	9-10-20		2'	1	X	X	X	X	X

lab. if received by 4:30pm

Sample Comments

XENCO**Chain of Custody**

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0300, 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) 980-3199, Phoenix, AZ (480) 355-0900
 Tampa, FL (813) 620-2000, Tallahassee, FL (904) 756-0747, Delray Beach, FL (561) 689-6701
 Atlanta, GA (770) 449-8800

Work Order No:

W09772

www.xenco.com

Page 2 of 2

Project Manager:	Joel Lowry	Bill to: (if different)	
Company Name:	Elect Environmental & Safety	Company Name:	Envelope 1
Address:	3100 Plains Highway	Address:	
City, State ZIP:	Lawton, NM, 88260	City, State ZIP:	
Phone:	575-396-2378	Email:	Email Results to PM@electenv.com + Client
Project Name:	Hopi Federal #12	Turn Around	
Project Number:	1229	Routine:	☒
Project Location:	Eddy County, NM	Rush:	☐
Sampler's Name:	Miguel Ramirez	Due Date:	
PO #:			

ANALYSIS REQUEST

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level: ☐ Level I ☐ PST/UST ☐ TRR ☐ Level II ☐
Deliverables: EDD ☐ ADAPT ☐ Other:

SAMPLE RECEIPT Temperature (°C): <u>60.0</u> Yes ☒ No ☐ Received Inlet: <u>60.0</u> Yes ☒ No ☐ Cooler Custody Seals: Yes ☒ No ☐ Sample Custody Seals: Yes ☒ No ☐ Total Containers: <u>1</u>		Turn Around Routine: ☒ Rush: ☐ Due Date:	
Sample Identification Matrix: <u>Soil</u> Date Sampled: <u>8/10/20</u> Time Sampled: <u>11:00</u> Depth: <u>1</u>		Number of Containers/Preservative Code Chloride E300 BTEX 8021 TPH Modified Ext TPH TX1005 <u>1</u> <u>RUSH!</u>	
Preservative Codes HNO3: HN H2SO4: HZ HCL: HL None: NO NaOH: Na MeOH: Me Zn Acetate: NaOH: Zn		Sample Comments TAT starts the day received by the lab, if received by 4:30pm	

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.12.2020 11.20.00 AM

Work Order #: 669772

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.2
#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: 08.12.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.12.2020

Certificate of Analysis Summary 669861

Etech Environmental & Safety Solution, Inc, Midland, TX

Project Name: Hopi #2 Federal #2

Project Id: 12289
Contact: PM
Project Location: Eddy County, NM

Date Received in Lab: Wed 08.12.2020 13:53
Report Date: 08.13.2020 15:26
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 669861-001 Field Id: SP4F5 @6' Depth: 6- ft Matrix: SOIL Sampled: 08.12.2020 00:00					
BTEX by EPA 8021B	Extracted: 08.12.2020 16:19 Analyzed: 08.12.2020 21:28 Units/RL: mg/kg RL					
Benzene	<0.00198 0.00198					
Toluene	<0.00198 0.00198					
Ethylbenzene	<0.00198 0.00198					
m,p-Xylenes	<0.00396 0.00396					
o-Xylene	<0.00198 0.00198					
Total Xylenes	<0.00198 0.00198					
Total BTEX	<0.00198 0.00198					
Chloride by EPA 300	Extracted: 08.12.2020 17:41 Analyzed: 08.12.2020 21:59 Units/RL: mg/kg RL					
Chloride	152 50.2					
TPH By SW8015 Mod	Extracted: 08.12.2020 17:30 Analyzed: 08.13.2020 09:46 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	<50.0 50.0					
Diesel Range Organics (DRO)	<50.0 50.0					
Motor Oil Range Hydrocarbons (MRO)	<50.0 50.0					
Total TPH	<50.0 50.0					

BRL - Below Reporting Limit

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





Analytical Report 669861

for

Etech Environmental & Safety Solution, Inc

Project Manager: PM

Hopi #2 Federal #2

12289

08.13.2020

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-7)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.13.2020

Project Manager: **PM**

Etech Environmental & Safety Solution, Inc

P.O. Box 62228

Midland, TX 79711

Reference: Eurofins Xenco, LLC Report No(s): **669861**

Hopi #2 Federal #2

Project Address: Eddy County, NM

PM :

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 Eurofins Xenco, LLC Report Number(s) 669861. 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 Eurofins Xenco, LLC. 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. 669861 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 Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

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

**Sample Cross Reference 669861****Etech Environmental & Safety Solution, Inc, Midland, TX**

Hopi #2 Federal #2

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP4F5 @6'	S	08.12.2020 00:00	6 ft	669861-001



CASE NARRATIVE

Client Name: Etech Environmental & Safety Solution, Inc

Project Name: Hopi #2 Federal #2

Project ID: 12289
Work Order Number(s): 669861

Report Date: 08.13.2020
Date Received: 08.12.2020

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None



Certificate of Analytical Results 669861

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi #2 Federal #2

Sample Id: **SP4F5 @6'**

Matrix: Soil

Date Received: 08.12.2020 13:53

Lab Sample Id: 669861-001

Date Collected: 08.12.2020 00:00

Sample Depth: 6 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 17:41

Basis: Wet Weight

Seq Number: 3134401

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	152	50.2	mg/kg	08.12.2020 21:59		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DTH

% Moisture:

Analyst: DTH

Date Prep: 08.12.2020 17:30

Basis: Wet Weight

Seq Number: 3134417

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	08.13.2020 09:46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	08.13.2020 09:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	08.13.2020 09:46	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	08.13.2020 09:46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	08.13.2020 09:46	
o-Terphenyl	84-15-1	111	%	70-135	08.13.2020 09:46	



Certificate of Analytical Results 669861

Etech Environmental & Safety Solution, Inc, Midland, TX

Hopi #2 Federal #2

Sample Id: **SP4F5 @6'**

Matrix: Soil

Date Received: 08.12.2020 13:53

Lab Sample Id: 669861-001

Date Collected: 08.12.2020 00:00

Sample Depth: 6 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: CAC

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 16:19

Basis: Wet Weight

Seq Number: 3134380

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00198	0.00198	mg/kg	08.12.2020 21:28	U	1
Toluene	108-88-3	<0.00198	0.00198	mg/kg	08.12.2020 21:28	U	1
Ethylbenzene	100-41-4	<0.00198	0.00198	mg/kg	08.12.2020 21:28	U	1
m,p-Xylenes	179601-23-1	<0.00396	0.00396	mg/kg	08.12.2020 21:28	U	1
o-Xylene	95-47-6	<0.00198	0.00198	mg/kg	08.12.2020 21:28	U	1
Total Xylenes	1330-20-7	<0.00198	0.00198	mg/kg	08.12.2020 21:28	U	1
Total BTEX		<0.00198	0.00198	mg/kg	08.12.2020 21:28	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	98	%	70-130	08.12.2020 21:28		
4-Bromofluorobenzene	460-00-4	103	%	70-130	08.12.2020 21:28		

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. **ND** Not Detected.

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



Etech Environmental & Safety Solution, Inc

Hopi #2 Federal #2

Analytical Method: Chloride by EPA 300

Seq Number: 3134401

MB Sample Id: 7709320-1-BLK

Matrix: Solid

LCS Sample Id: 7709320-1-BKS

Prep Method: E300P

Date Prep: 08.12.2020

LCSD Sample Id: 7709320-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	267	107	267	107	90-110	0	20	mg/kg	08.12.2020 20:35	

Analytical Method: Chloride by EPA 300

Seq Number: 3134401

Parent Sample Id: 669856-011

Matrix: Soil

MS Sample Id: 669856-011 S

Prep Method: E300P

Date Prep: 08.12.2020

MSD Sample Id: 669856-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	210	105	210	105	90-110	0	20	mg/kg	08.12.2020 20:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3134401

Parent Sample Id: 669856-021

Matrix: Soil

MS Sample Id: 669856-021 S

Prep Method: E300P

Date Prep: 08.12.2020

MSD Sample Id: 669856-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	26.8	200	234	104	234	104	90-110	0	20	mg/kg	08.12.2020 22:16	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134417

MB Sample Id: 7709357-1-BLK

Matrix: Solid

LCS Sample Id: 7709357-1-BKS

Prep Method: SW8015P

Date Prep: 08.12.2020

LCSD Sample Id: 7709357-1-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)	<50.0	1000	1000	100	988	99	70-135	1	35	mg/kg	08.13.2020 09:05	
Diesel Range Organics (DRO)	<50.0	1000	1050	105	1020	102	70-135	3	35	mg/kg	08.13.2020 09:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	117		129		125		70-135	%	08.13.2020 09:05
o-Terphenyl	114		116		112		70-135	%	08.13.2020 09:05

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134417

Matrix: Solid

MB Sample Id: 7709357-1-BLK

Prep Method: SW8015P

Date Prep: 08.12.2020

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	08.13.2020 11:47	

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



Etech Environmental & Safety Solution, Inc

Hopi #2 Federal #2

Analytical Method: TPH By SW8015 Mod

Seq Number: 3134417

Parent Sample Id: 669861-001

Matrix: Soil

MS Sample Id: 669861-001 S

Prep Method: SW8015P

Date Prep: 08.12.2020

MSD Sample Id: 669861-001 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)	<50.1	1000	998	100	983	98	70-135	2	35	mg/kg	08.13.2020 10:06	
Diesel Range Organics (DRO)	<50.1	1000	1020	102	1000	100	70-135	2	35	mg/kg	08.13.2020 10:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	131		128		70-135	%	08.13.2020 10:06
o-Terphenyl	123		119		70-135	%	08.13.2020 10:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134380

MB Sample Id: 7709314-1-BLK

Matrix: Solid

LCS Sample Id: 7709314-1-BKS

Prep Method: SW5035A

Date Prep: 08.12.2020

LCSD Sample Id: 7709314-1-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	0.0980	98	0.0997	100	70-130	2	35	mg/kg	08.12.2020 14:37	
Toluene	<0.00200	0.100	0.0936	94	0.0950	95	70-130	1	35	mg/kg	08.12.2020 14:37	
Ethylbenzene	<0.00200	0.100	0.100	100	0.0990	99	71-129	1	35	mg/kg	08.12.2020 14:37	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.202	101	70-135	0	35	mg/kg	08.12.2020 14:37	
o-Xylene	<0.00200	0.100	0.101	101	0.0996	100	71-133	1	35	mg/kg	08.12.2020 14:37	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		95		100		70-130	%	08.12.2020 14:37
4-Bromofluorobenzene	106		98		97		70-130	%	08.12.2020 14:37

Analytical Method: BTEX by EPA 8021B

Seq Number: 3134380

Parent Sample Id: 669618-001

Matrix: Soil

MS Sample Id: 669618-001 S

Prep Method: SW5035A

Date Prep: 08.12.2020

MSD Sample Id: 669618-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.107	106	0.108	108	70-130	1	35	mg/kg	08.12.2020 15:17	
Toluene	<0.00202	0.101	0.102	101	0.104	104	70-130	2	35	mg/kg	08.12.2020 15:17	
Ethylbenzene	<0.00202	0.101	0.105	104	0.108	108	71-129	3	35	mg/kg	08.12.2020 15:17	
m,p-Xylenes	<0.00403	0.202	0.213	105	0.218	109	70-135	2	35	mg/kg	08.12.2020 15:17	
o-Xylene	<0.00202	0.101	0.105	104	0.108	108	71-133	3	35	mg/kg	08.12.2020 15:17	

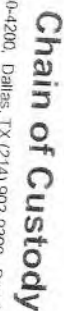
Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		97		70-130	%	08.12.2020 15:17
4-Bromofluorobenzene	100		100		70-130	%	08.12.2020 15:17

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



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Midland, TX (432) 704-5440, El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1266
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3159, Phoenix, AZ (480) 355-0900
Tampa, FL (813) 620-2000, Tallahassee, FL (850) 756-0747, Delray Beach, FL (561) 689-6700
Atlanta, GA (770) 419-8800

122986

Final 1,000

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Etech Environmental & Safety Solution, I

Date/ Time Received: 08.12.2020 01.53.00 PM

Work Order #: 669861

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T-NM-007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	4.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#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)?	No
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

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

Analyst:

PH Device/Lot#:

Checklist completed by:



Elizabeth McClellan

Date: 08.12.2020

Checklist reviewed by:



Jessica Kramer

Date: 08.12.2020

Appendix D

Photographic Log

Photographic Log

Photo Number: 1	 April 6, 2020 at 1:03 PM +32.164142,-104.044562
Photo Direction: West	
Photo Description: Spill area south of pumpjack.	

Photo Number: 2	 April 6, 2020 at 1:04 PM +32.164142,-104.044562
Photo Direction: North	
Photo Description: Spill area northeast of pumpjack.	

Photographic Log

Photo Number: 3	 April-6, 2020 at 1:04 PM +32.164142,-104.044562
Photo Direction: North	
Photo Description: Spill area south and east of pumpjack.	

Photo Number: 4	 April-6, 2020 at 1:04 PM +32.164142,-104.044562
Photo Direction: Northeast	
Photo Description: Spill area east of pumpjack.	

Photographic Log

Photo Number: 5	
Photo Direction: East	
Photo Description: Excavation around north side of pumpjack.	

Photo Number: 6	
Photo Direction: East	
Photo Description: Excavation and spoils pile.	

Photographic Log

Photo Number: 7	
Photo Direction: Northeast	
Photo Description: Excavation and spoils pile.	

Photo Number: 8	
Photo Direction: West	
Photo Description: Excavation edge.	

Photographic Log

Photo Number: 9	
Photo Direction: Northeast	
Photo Description: Excavation area after backfill and grading.	

Photo Number: 10	
Photo Direction: North	
Photo Description: Excavation area after backfill and grading.	

Photographic Log

Photo Number:	11
Photo Direction:	Northwest
Photo Description:	Excavation area after backfill and grading. 