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Oil Conservation Division

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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?	(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
- \checkmark Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- Boring or excavation logs
- ✓ Photographs including date and GIS information
- ✓ Topographic/Aerial maps
- ✓ Laboratory data including chain of custody

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

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			Facility ID				
			Application ID				
regulations all operators public health or the envi failed to adequately invo addition, OCD acceptan and/or regulations. Printed Name: <u>Conn</u> Signature: <u>Conn</u> email: <u>cwalker@me</u>	Avalh	ifications and perform co DCD does not relieve the eat to groundwater, surfa	prrective actions for rele operator of liability sho ce water, human health iance with any other feo	ases which may endanger ould their operations have or the environment. In			
OCD Only Received by: Joce	alyn Harimon	Date: <u>10/</u>	06/2022				

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Oil Conservation Division

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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 Depart Attachment Checklists Each of the following items must be	adudad in the closure report
<u>Closure Report Attachment Checklist</u> : Each of the following items must be in	aciuaea 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 int must be notified 2 days prior to liner inspection)	egrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC District office	e 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 o and regulations all operators are required to report and/or file certain release notifi may endanger public health or the environment. The acceptance of a C-141 report should their operations have failed to adequately investigate and remediate contain human health or the environment. In addition, OCD acceptance of a C-141 report compliance with any other federal, state, or local laws and/or regulations. The resp restore, reclaim, and re-vegetate the impacted surface area to the conditions that ex- accordance with 19.15.29.13 NMAC including notification to the OCD when recla Printed Name: Connor Walker Title: Sr. E Signature: Date: Date: Date: Date: Date: Date:	cations and perform corrective actions for releases which by the OCD does not relieve the operator of liability ination that pose a threat to groundwater, surface water, does not relieve the operator of responsibility for ponsible party acknowledges they must substantially isted prior to the release or their final land use in mation and re-vegetation are complete.
OCD Only	
Received by: Jocelyn Harimon Date:	10/06/2022
Closure approval by the OCD does not relieve the responsible party of liability sho remediate contamination that poses a threat to groundwater, surface water, human h party of compliance with any other federal, state, or local laws and/or regulations.	ealth, or the environment nor does not relieve the responsible
Closure Approved by: <u>Jennifer Nobui</u> Date	e: <u>10/25/2022</u>
	e: Environmental Specialist A
<u> </u>	

Remediation Summary & Soil Closure Request

Mewbourne Oil Company NGL Paduca SWD Tie In

Lea County, New Mexico Unit Letter "L", Section 6, Township 26 South, Range 32 East Latitude 32.0721440 North, Longitude 103.718881 West NMOCD Reference No. nAPP2213957876

Prepared By:

Etech Environmental & Safety Solutions, Inc. 6309 Indiana Ave, Ste. D Lubbock, Texas 79413

en J. Arguijo

Lance Crenshaw



Midland • San Antonio • Lubbock • Hobbs • Lafayette

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- Appendix B Field Data & Soil Profile Logs
- Appendix C Photographic Log
- Appendix D Laboratory Analytical Reports
- Appendix E Regulatory Correspondence

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Mewbourne Oil Company, has prepared this *Remediation Summary & Soil Closure Request* for the release site known as the NGL Paduca SWD Tie In (henceforth, "Paduca"). Details of the release are summarized below:

	Locatio	on of Release Sou	rce						
Latitude:	32.0721440	-103.718881							
Provided GPS are in WGS84 format.									
	Site Name: NGL Paduca SWD Tie In Site Type: Pipeline								
Date Release Discovere	ed: 5/6/2022	API # (if applical	ble): N/A						
Unit Letter Sec	ction Township	Range	County						
"L"	6 26S	32E	Lea						
Surface Owner: Sta	ate Federal Tribal	X Private (Name	e Jesse T. Baker)						
	Nature a	nd Volume of R	elease						
Crude Oil	Volume Released (bbls)		Volume Recovered (bbls)						
X Produced Water	Volume Released (bbls)	546	Volume Recovered (bbls) 160						
Is the concentration of total dissolved solids (TDS) in the produced water > 10,000 mg/L?									
Condensate	Volume Released (bbls)		Volume Recovered (bbls)						
Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)						
Other (describe)	Volume/Weight Released		Volume/Weight Recovered						
Cause of Release: A poly pipeline failed	and developed a split.								
	Iı	nitial Response							
X The impacted area X Release materials h	elease has been stopped. has been secured to protect hun have been contained via the use I recoverable materials have be	of berms or dikes, abs	orbent pad, or other containment devices						
	recoverable materials have be								

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

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a halfmile radius of the Paduca 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?	350'			
Did the release impact groundwater or surface water?	Yes X No			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X No			
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark?	Yes X No			
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	Yes X No			
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Yes X No			
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X No			
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes X No			
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No			
Are the lateral extents of the release overlying a subsurface mine?	Yes X No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes X No			
Are the lateral extents of the release within a 100-year floodplain?	Yes X No			
Did the release impact areas not on an exploration, development, production or storage site?	X Yes No			

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) and Fish & Wildlife Services (FWS) shapefiles, topographic maps, NMOSE and USGS databases, and aerial imagery. The results are depicted in Figures 1, 2, 4, and 5.

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 and NMOCD Reclamation Standards for the Paduca release site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
	Chloride (Cl-)	EPA 300.0 or SM4500 Cl B	20,000	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	2,500	100
350'	Gas Range Organics + Diesel Range Organics (GRO + DRO)	EPA SW-846 Method 8015M	1,000	N/A
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

* Measured in milligrams per kilogram (mg/kg)

† Table I, Section 19.15.29.12 of the New Mexico Administrative Code (NMAC).

‡ The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas. Section 19.15.29.13 D.(1) NMAC.

4.0 **REMEDIATION ACTIVITIES SUMMARY**

On May 31, 2022, remediation activities commenced at the release site. Due to the size and nature of the release, the affected area was divided into two (2) sections: the Main Excavation, which includes portions of the pasture and access road to the east and south of the Paduca Salt Water Disposal (SWD) facility; and the Pad Excavation, which includes portions of the SWD production pad. In accordance with NMOCD regulatory guidelines, impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standards was excavated and stockpiled on-site, pending transfer to an NMOCD-permitted surface waste facility for disposal. Olfactory/visual senses and/or a chloride test kit were utilized to field-screen the horizontal extent of impacted soil and to guide the excavation. The sidewalls and floors of the excavations were advanced until field tests and field observations suggested BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards. Representative five-point composite confirmation soil samples were collected every 200 square feet from the sidewalls and floors of the excavations to be submitted for laboratory analysis.

On June 3, 2022, Etech collected 16 confirmation soil samples (NWS 1, EWS 1, EWS 2, EWS 3, and FS 1 @ 1' through FS 12 @ 1') from the sidewalls and floor of the Main Excavation. The soil samples were submitted to a certified, commercial laboratory (henceforth, "the laboratory") for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory method detection limit (MDL). Chloride concentrations ranged from 32.0 mg/kg in soil samples EWS 3 and FS 3 @ 0-6" to 496 mg/kg in soil sample FS 12 @ 1'.

On June 8, 2022, Etech advanced a series of test trenches (TT 1 through TT 4) within the release margins in an effort to determine the vertical extent of impacted soil. The trenches were advanced to the extent practicable. During the advancement of the trenches, soil samples were collected and field-screened for concentrations of chloride utilizing a Hach Quantab® chloride test kit and/or the presence of Volatile Organic Compounds (VOCs) utilizing olfactory/visual senses.

Based on laboratory analytical results and field test data, a total of 12 delineation soil samples (TT 1 @ 0', TT 1 @ 4', TT 1 @ 7', TT 2 @ 0', TT 2 @ 4', TT 2 @ 8' - R, TT 3 @ 0', TT 3 @ 5', TT 3 @ 11', TT 3 @ 18', TT 4 @ 0', and TT 4 @ 2') were submitted to the laboratory for analysis of BTEX, TPH, and chloride. In addition, five (5) delineation soil samples (PS 1 @ 0' through PS 5 @ 0') were collected from the affected area on the SWD production pad and submitted to the laboratory for analysis of BTEX, TPH, and chloride results indicated the vertical extent of impacted soil was adequately defined in the areas characterized by test trenches TT 1, TT 3, and TT 4. However, additional delineation and/or excavation was required in the areas characterized by test trenches TT 2 and soil samples PS 1 @ 0' through PS 5 @ 0'.

On June 8, 2022, Etech also collected five (5) confirmation soil samples (WWS 1 and FS 13 @ 2' through FS 16 @ 2') from the sidewalls and floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria, NMOCD Reclamation Standards, and laboratory MDL in each of the submitted soil samples. Chloride concentrations ranged from 928 mg/kg in soil sample WWS 1 to 6,080 mg/kg in soil sample FS 13 @ 2'. Chloride concentrations in soil samples FS 13 @ 2' through FS 16 @ 2' exceeded the NMOCD Reclamation Standard.

On June 10, 2022, Etech collected 20 confirmation soil samples (EWS 4, EWS 5, SW1 1, WWS 1, and FS 18 @ 4' through FS 33 @ 4') from the sidewalls and floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria, NMOCD Reclamation Standards, and laboratory MDL in each of the submitted soil samples, with the exceptions of samples FS 28 @ 4' (30.5 mg/kg TPH), FS 30 @ 4' (11.7 mg/kg TPH), FS 31 @ 4' (13.6 mg/kg TPH), and FS 33 @ 4' (12.0 mg/kg TPH). Chloride concentrations ranged from 208 mg/kg in soil sample SWS 1 to 6,800 mg/kg in soil sample FS 28 @ 4'. The chloride concentration in soil sample EWS 5 exceeded the NMOCD Reclamation Standard.

On June 14, 2022, Etech collected nine (9) confirmation soil samples (FS 34 @ 4' through FS 42 @ 4') from the floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 800 mg/kg in soil sample FS 38 @ 4' to 4,000 mg/kg in soil sample FS 34 @ 4'.

On June 15, 2022, Etech collected 10 confirmation soil samples (FS 43 @ 4' through FS 52 @ 4') from the floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 1,440 mg/kg in soil sample FS 43 @ 4' to 4,160 mg/kg in soil sample FS 48 @ 4'.

On June 17, 2022, based on laboratory analytical results, the Main Excavation was further advanced in the areas characterized by soil samples FS 10 @ 10" through FS 16 @ 2'. Etech collected 10 confirmation soil samples (FS 10 @ 2' through FS 17 @ 2', FS 53 @ 4', and FS 54 @ 4') from the floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 208 mg/kg in soil sample FS 15 @ 4' to 3,600 mg/kg in soil sample FS 54 @ 4'.

On June 20, 2022, based on laboratory analytical results, the Main Excavation was further advanced in the area characterized by soil sample EWS 5. Etech collected eight (8) confirmation soil samples (EWS 5, EWS 6, WWS 2, WWS 3, WWS 4, 56 @ 5", 57 @ 5", and 58 @ 5") from the sidewalls and floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 80.0 mg/kg in soil samples EWS 5 and EWS 6 to 2,760 mg/kg in soil sample WWS 2.

On June 21, 2022, Etech collected 10 confirmation soil samples (ESW 7, ESW 8, and FS 59 @ 4' through FS 66 @ 4') from the sidewalls and floor of the Main Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX and TPH concentrations were also below the applicable laboratory MDL. Chloride concentrations ranged from 128 mg/kg in soil sample FS 64 @ 4' to 640 mg/kg in soil sample FS 66 @ 4'.

On June 23, 2022, Etech collected 11 confirmation soil samples (NWS 2, EWS 9, EWS 10, WWS 5 through WWS 8, and FS 67 @ 4' through FS 70 @ 4') from the sidewalls and floor of the Main Excavation and five (5) confirmation soil samples (PS 1, PS 2, PS 3, PS 4, and PS 5) from the floor of the Pad Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria, NMOCD Reclamation Standards, and laboratory MDL in each of the submitted soil samples, with the exceptions of samples PS 1 (61.1 mg/kg TPH), PS 3 (95.5 mg/kg TPH), and PS 4 (14.0 mg/kg TPH). Chloride concentrations ranged from 32.0 mg/kg in soil sample WWS 6 to 22,000 mg/kg in soil sample PS 3, which exceeded the NMOCD Closure Criterion.

On June 24, 2022, Etech further advanced test trench TT 2 in an effort to determine the vertical extent of impacted soil in the affected area. The trench was advanced in one (1) to two (2) foot increments to a total depth of approximately 12 feet below ground surface. During the advancement of the test trench, soil samples were collected and field-screened for concentrations of chloride utilizing a chloride test kit and/or the presence of VOCs utilizing olfactory/visual senses.

Based on field observations and field test data, one (1) delineation soil sample (TT 2 @ 12') was submitted to the laboratory for analysis of chloride. Laboratory analytical results indicated the chloride concentration was 256 mg/kg, and the vertical extent of impacted soil was adequately defined.

On June 24, 2022, Etech also collected one (1) confirmation soil sample (FS 55 @ 5") from the floor of the Main Excavation. The soil sample was submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and NMOCD Reclamation Standards. BTEX and TPH concentrations were also below the applicable laboratory MDL. The chloride concentration was 432 mg/kg.

On June 27, 2022, Etech collected six (6) confirmation soil samples (PS 6, PS 7, NWS 3, WWS 9, WWS 10, and WWS 11) from the sidewalls and floor of the Pad Excavation. The soil samples were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were below the applicable NMOCD Closure Criteria and/or NMOCD Reclamation Standards in each of the submitted soil samples. BTEX concentrations were also below the laboratory MDL. TPH concentrations ranged from less than the laboratory MDL in soil samples NWS 3 and WWS 9 to 172 mg/kg in soil sample WWS 11. Chloride concentrations ranged from 48.0 mg/kg in soil sample WWS 9 to 18,400 mg/kg in soil sample PS 6.

On June 28, 2022, based on laboratory analytical results, the Pad Excavation was further advanced in the area characterized by soil sample PS 3. Etech collected one (1) confirmation soil sample (PS 3 @ 1') from the floor of the newly excavated area. The soil sample was submitted to the laboratory for analysis of chloride. Laboratory analytical results indicated the chloride concentration was 3,760 mg/kg, which was below the NMOCD Closure Criterion.

On June 30, 2022, based on laboratory analytical results, the Pad Excavation was further advanced in the area characterized by soil sample WWS 11. Etech collected one (1) confirmation soil sample (WWS B #11) from the sidewall of the newly excavated area. The soil sample was submitted to the laboratory for analysis of TPH. Laboratory analytical results indicated the TPH concentration was 3,760 mg/kg, which was below the NMOCD Closure Criterion, the NMOCD Reclamation Standard, and the laboratory MDL.

The final dimensions of the Main Excavation were approximately 612 feet in length, 26 to 154 feet in width, and five (5) inches to four (4) feet in depth. The final dimensions of the Pad Excavation were approximately 160 feet in length, 28 to 134 feet in width, and six (6) inches to one (1) foot in depth. During the course of remediation activities, Etech transported approximately 3,220 cubic yards of impacted soil to an NMOCD-permitted surface waste facility for disposal and imported approximately 2,700 cubic yards of locally sourced, non-impacted material to the site for use as backfill.

The extent of the affected area and the locations of the test trenches are depicted in Figure 3A, "Site & Sample Location Map (Delineation)". The extents of the Main and Pad Excavations and the locations of the confirmation soil samples are depicted in Figure 3B, "Site & Sample Location Map (Excavation)". Soil chemistry data is summarized in Table 1. Field data and soil profile logs are provided in Appendix B. General photographs of the site are provided in Appendix C. Laboratory analytical reports are provided in Appendix D. Copies of all regulatory correspondence are provided in Appendix E.

5.0 **RESTORATION, RECLAMATION & 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 compacted and contoured to achieve erosion control, stability, and preservation of surface water flow, to the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with an agency and/or landowner-approved seed mixture during the first favorable growing season following closure of the site.

6.0 SOIL CLOSURE REQUEST

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

Based on laboratory analytical results and field activities conducted to date, Etech recommends Mewbourne Oil Company, provide copies of this *Remediation Summary & Soil Closure Request* to the appropriate agencies and request closure be granted to the Paduca release site.

7.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Remediation Summary & 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 referenced 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 Mewbourne Oil Company. Use of the information contained in this report is prohibited without the consent of Etech and/or Mewbourne Oil Company.

8.0 **DISTRIBUTION**

Mewbourne Oil Company

4801 Business Park Blvd. Hobbs, NM 88240

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 1 1220 South St. Francis Drive Santa Fe, NM 87505

(Electronic Submission)

Figure 1 Topographic Map

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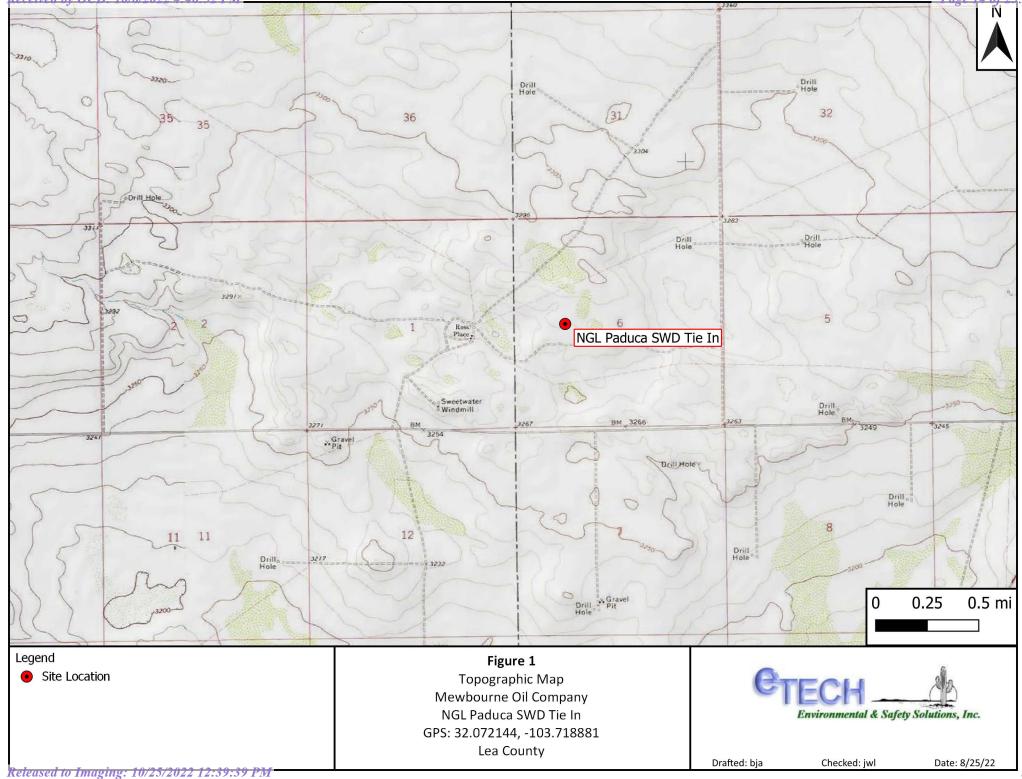
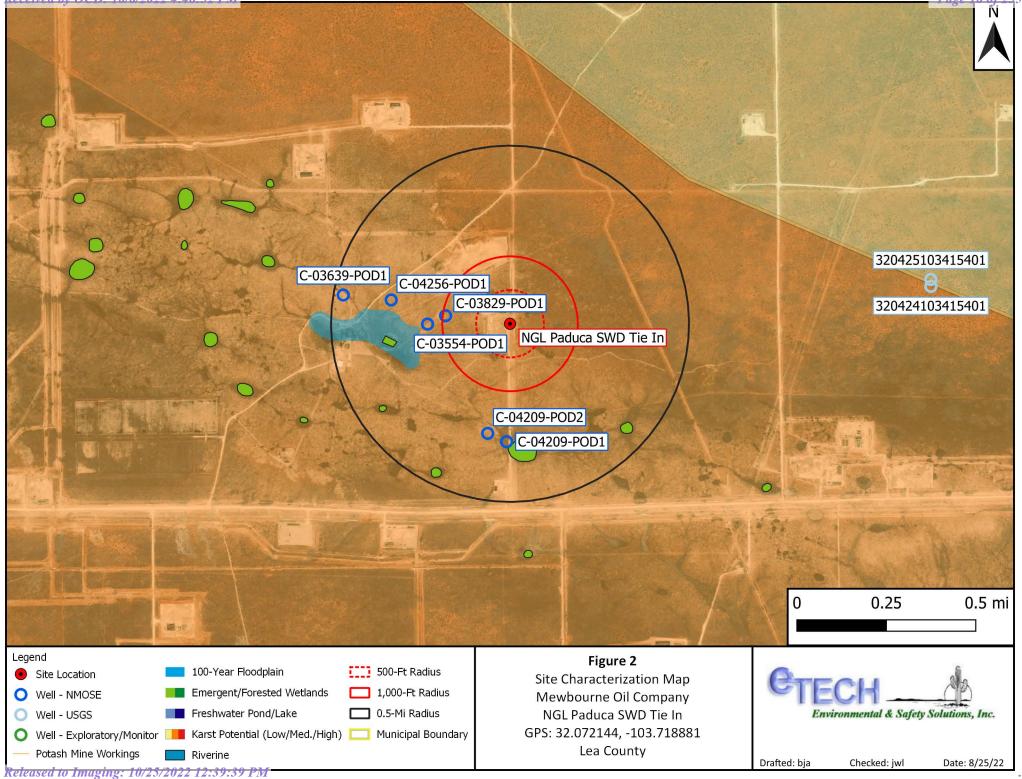
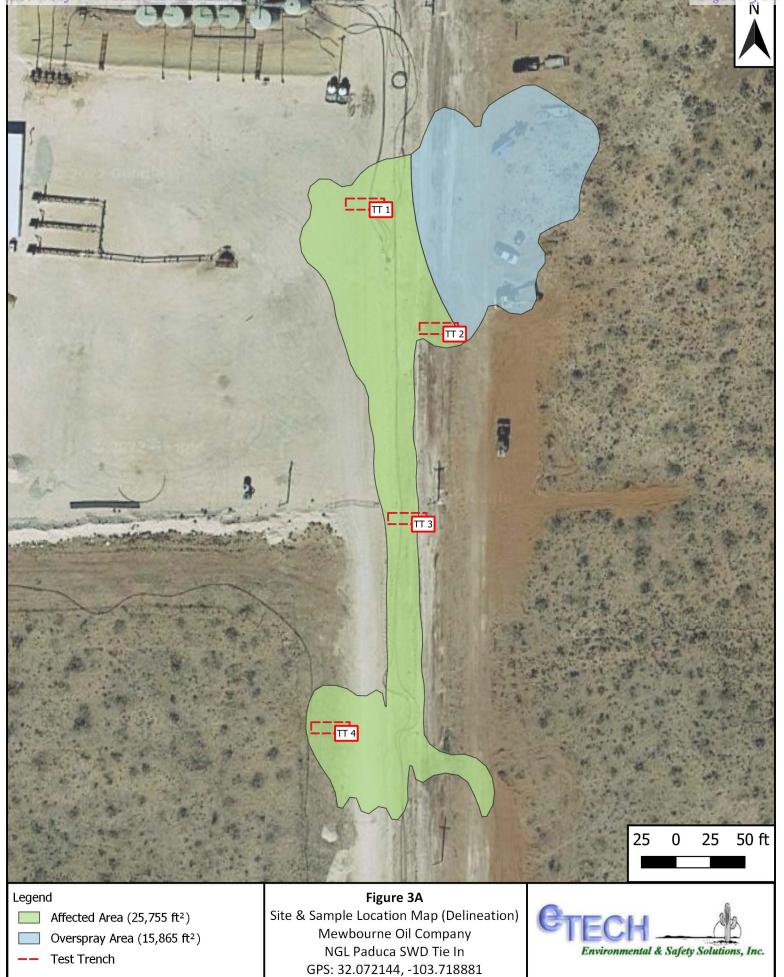


Figure 2 Site Characterization Map

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Figures 3A & 3B Site & Sample Location Maps



Lea County

Drafted: bja

Checked: lc

Date: 9/29/22

Released to Imaging: 10/25/2022 12:39:39 PM





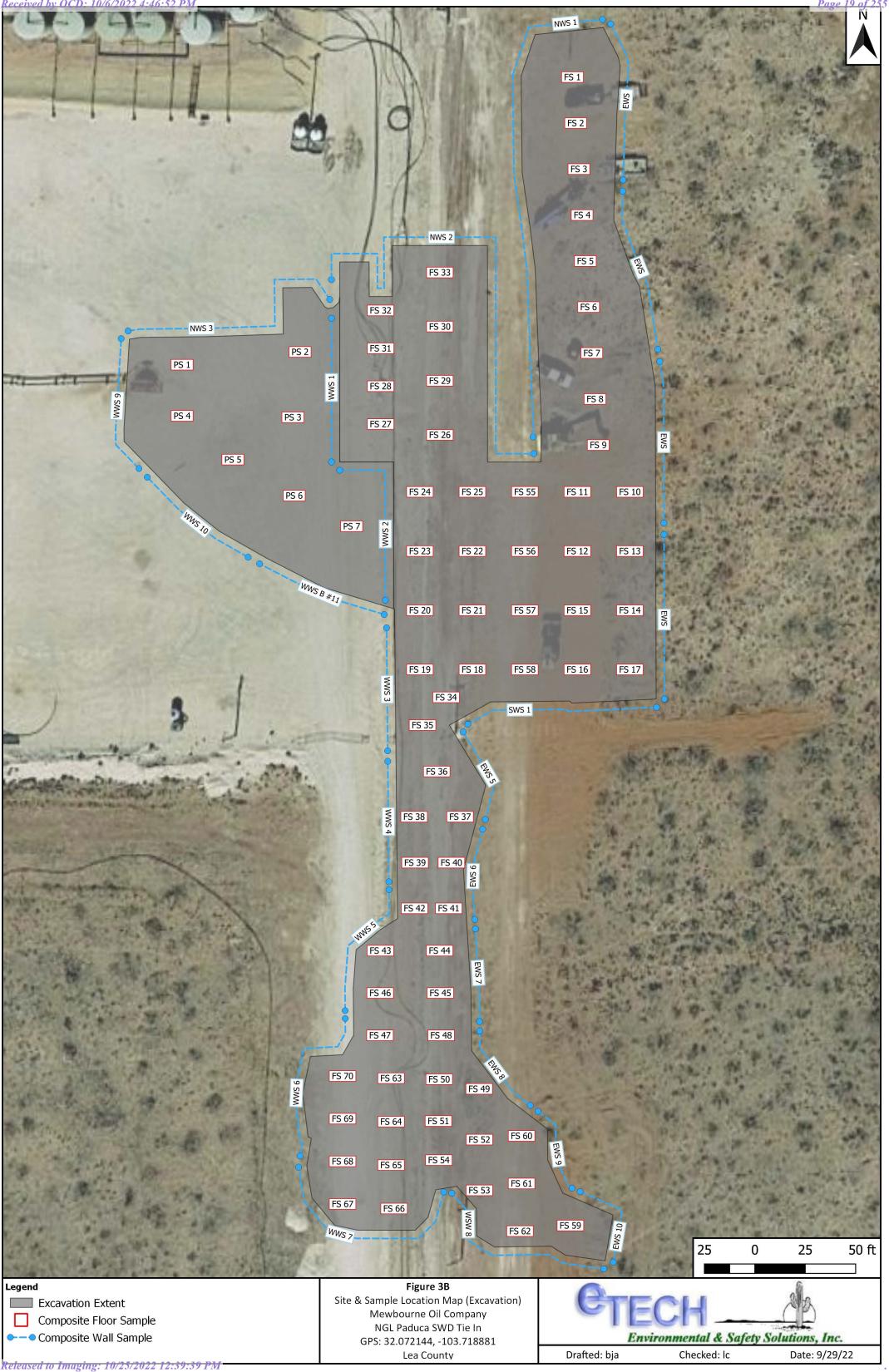


Table 1Concentrations of BTEX, TPH & Chloride in Soil

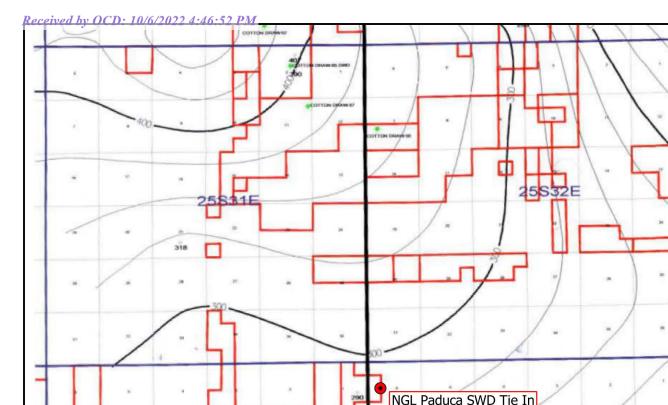
					Table							
	Concentrations of BTEX, TPH & Chloride in Soil											
	Mewbourne Oil Company											
NGL Paduca SWD Tie In NMOCD Ref. #: nAPP2213957876												
N	MOCD Closur	e Criteria		10	50	N/A	N/A	1,000	N/A	2,500	20,000	
	CD Reclamati			10	50	N/A N/A	N/A	N/A	N/A	100	600	
					6 8021B	10/1		846 8015M		100	4500 Cl	
		Depth				GRO	DRO	GRO +	ORO	ТРН		
Sample ID	Date	(Feet)	Soil Status	Benzene	BTEX	C_6-C_{10}	C ₁₀ -C ₂₈	DRO	C ₂₈ -C ₃₆	C ₆ -C ₃₆	Chloride	
				(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	C ₆ -C ₂₈ (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
	Delineation Samples											
TT 1 @ 0'	6/8/2022	0	Excavated	< 0.200	<1.20	<10.0	32.2	32.2	21.8	54.0	39,600	
TT 1 @ 4'	6/8/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	720	
TT 1 @ 7'	6/8/2022	7	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16.0	
TT 2 @ 0'	6/8/2022	0	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	8,000	
TT 2 @ 4'	6/8/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	848	
TT 2 @ 8' - R	6/8/2022	8	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,800	
TT-2 @ 12'	6/24/2022	12	-	_	-	-		-	-	-	256	
TT 3 @ 0'	6/8/2022	0	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,460	
TT 3 @ 5'	6/8/2022	5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	6,000	
TT 3 @ 11'	6/8/2022	11	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,040	
TT 3 @ 18'	6/8/2022	18	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0	
TT 4 @ 0'	6/8/2022	0	Excavated	< 0.050	< 0.300	<10.0	140	140	34.6	175	5,440	
TT 4 @ 2'	6/8/2022	2	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	208	
		-			ain Excavatio	on Samples						
NWS 1	6/3/2022	0-1	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	96.0	
NWS 2	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128	
EWS 1	6/3/2022	0-1	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	96.0	
EWS 2	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0	
EWS 3	6/3/2022	0-0.83	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0	
EWS 4	6/10/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	432	
EWS 5	6/10/2022			< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,040	
EWS 5	6/20/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0	
EWS 6	6/20/2022			< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0	
ESW 7	6/21/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	240	
ESW 8	6/21/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	336	
EWS 9	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0	
EWS 10	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0	
SWS 1	6/10/2022	0-3.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	208	
WWS 1	6/10/2022			< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	6,000	
WWS 1	6/8/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	928	
WWS 2	6/20/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,760	
WWS 3	6/20/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160	
WWS 4	6/20/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112	
WWS 5	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0	
WWS 6	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0	
WWS 7	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	336	
WWS 8	6/23/2022		In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	320	
FS 1 @ 1'	6/3/2022	1	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128	
FS 2 @ 1'	6/3/2022	1	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160	
FS 3 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	32.0	
FS 4 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160	

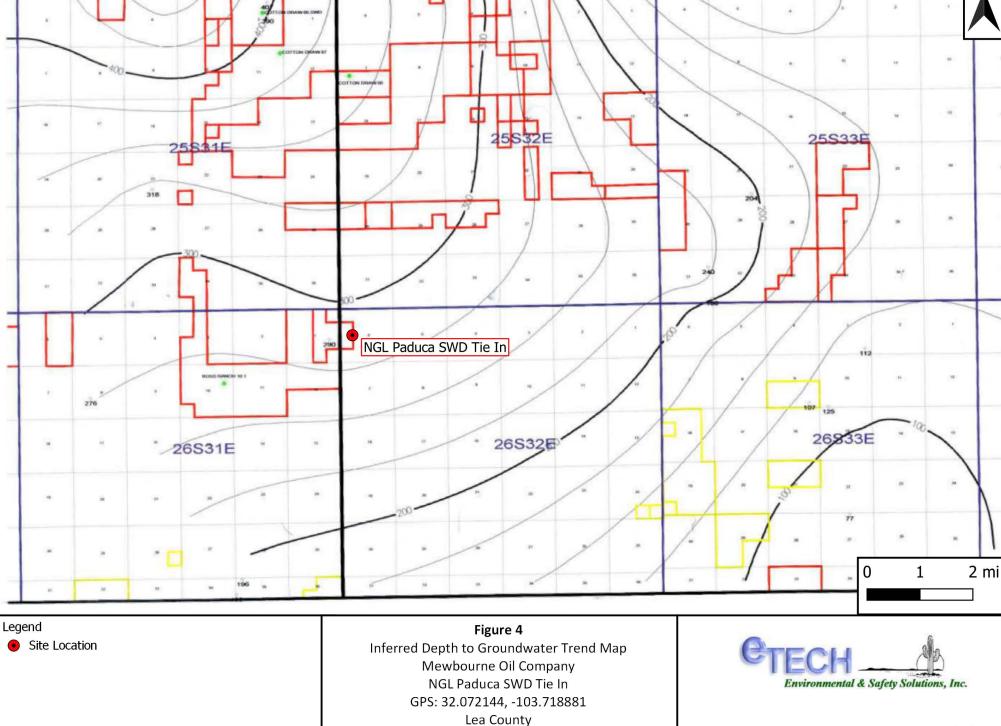
Table 1 Concentrations of DTEX_TDU_8_Chlorids in Sail												
	Concentrations of BTEX, TPH & Chloride in Soil Mewbourne Oil Company											
	NGL Paduca SWD Tie In											
					Ref. #: nA							
N	MOCD Closur	e Criteria		10	50	N/A	N/A	1,000	N/A	2,500	20,000	
	CD Reclamati			10	50	N/A	N/A	N/A	N/A	100	600	
					6 8021B			846 8015M		100	4500 Cl	
		Depth		511 04	000210	CDO	DRO	GRO +		TDU	4300 CI	
Sample ID	Date	(Feet)	Soil Status	Benzene	BTEX	GRO C ₆ -C ₁₀	C ₁₀ -C ₂₈	DRO	ORO C ₂₈ -C ₃₆	ТРН С ₆ -С ₃₆	Chloride	
				(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	$C_6 - C_{28}$	(mg/kg)	(mg/kg)	(mg/kg)	
FS 5 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	(mg/kg) <20.0	<10.0	<30.0	112	
FS 6 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128	
FS 7 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	64.0	
FS 8 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112	
FS 9 @ 0-6"	6/3/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112	
FS 10 @ 10"	6/3/2022	0.83	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	272	
FS 10 @ 2'	6/17/2022	2	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	496	
FS 11 @ 1'	6/3/2022	1	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	480	
FS 11 @ 2'	6/17/2022	2	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	320	
FS 12 @ 1'	6/3/2022	1	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	496	
FS 12 @ 2'	6/17/2022	2	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	592	
FS 13 @ 2'	6/8/2022	2	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	6,080	
FS 13 @ 4'	6/17/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	336	
FS 14 @ 2'	6/8/2022	2	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,080	
FS 14 @ 4'	6/17/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	592	
FS 15 @ 2'	6/8/2022	2	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,000	
FS 15 @ 4'	6/17/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	208	
FS 16 @ 2'	6/8/2022	2	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,720	
FS 16 @ 4'	6/17/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	560	
FS 17 @ 2'	6/17/2022	2	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	384	
FS 18 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,960	
FS 19 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	5,120	
FS 20 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,040	
FS 21 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,240	
FS 22 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,440	
FS 23 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,680	
FS 24 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,640	
FS 25 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,080	
FS 26 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,200	
FS 27 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,680	
FS 28 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	30.5	30.5	<10.0	30.5	6,800	
FS 29 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,480	
FS 30 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	11.7	11.7	<10.0	11.7	1,600	
FS 31 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	13.6	13.6	<10.0	13.6	3,400	
FS 32 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,150	
FS 33 @ 4'	6/10/2022	4	In-Situ	< 0.050	< 0.300	<10.0	12.0	12.0	<10.0	12.0	2,960	
FS 34 @ 4'	6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,000	
FS 35 @ 4'	6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,760	
FS 36 @ 4'	6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,080	
FS 37 @ 4'	6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,800	
FS 38 @ 4'	6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	800	
FS 39 @ 4'	6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,120	

NMOCD Closure (NMOCD Reclamation			Mew NGL		il Compan		5011									
			NGL		-	y										
				r auuca S	Mewbourne Oil Company NGL Paduca SWD Tie In											
			NMOCD Ref. #: nAPP2213957876													
			10	50	N/A	N/A	1,000	N/A	2,500	20,000						
			10	50	N/A	N/A	N/A	N/A N/A	100	600						
	n Standt			5 8021B	11//A		846 8015M		100	4500 Cl						
	Depth		511 010	00210	GRO	DRO	GRO +	ORO	ТРН	1500 61						
Sample ID Date	(Feet)	Soil Status	Benzene	BTEX	GRO C ₆ -C ₁₀	C ₁₀ -C ₂₈	DRO	C ₂₈ -C ₃₆	С ₆ -С ₃₆	Chloride						
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	C ₆ -C ₂₈ (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)						
FS 40 @ 4' 6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,000						
FS 41 @ 4' 6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,320						
FS 42 @ 4' 6/14/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,200						
FS 43 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,440						
FS 44 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,040						
FS 45 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,320						
FS 46 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,880						
FS 47 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,000						
FS 48 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,160						
FS 49 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,000						
FS 50 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	2,640						
FS 51 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,480						
FS 52 @ 4' 6/15/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	1,520						
FS 53 @ 4' 6/17/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,160						
FS 54 @ 4' 6/17/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	3,600						
55 @ 5" 6/24/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	432						
56 @ 5" 6/20/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	416						
57 @ 5" 6/20/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	448						
58 @ 5" 6/20/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	528						
FS 59 @ 4' 6/21/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	144						
FS 60 @ 5" 6/21/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	288						
FS 61 @ 5" 6/21/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	240						
FS 62 @ 5" 6/21/2022	0.42	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	208						
FS 63 @ 4' 6/21/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	176						
FS 64 @ 4' 6/21/2022	4	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	128						
FS 65 @ 4' 6/21/2022	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	336						
FS 66 @ 4' 6/21/2022	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	640						
FS 67 @ 4' 6/23/2022	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	400						
FS 68 @ 4' 6/23/2022	4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	400						
FS 69 @ 4' 6/23/2022	4	In-Situ In Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	400						
FS 70 @ 4' 6/23/2022	4	In-Situ	< 0.050	<0.300 ad Excavatio	<10.0	<10.0	<20.0	<10.0	<30.0	368						
PS 1 @ 0' 6/8/2022	0	Excavated	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	33,600						
Ŭ	0-0.5	In-Situ	<0.050	< 0.300	<10.0	46.4	46.4	14.7	61.1	9,200						
PS 2 @ 0' 6/8/2022	0 0.5	Excavated	< 0.050	< 0.300	<10.0	148	148	186	334	25,600						
	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	4,080						
PS 3 @ 0' 6/8/2022	0	Excavated	< 0.050	< 0.300	<10.0	24.9	24.9	36.1	61.0	6,260						
	0-0.5	Excavated	< 0.050	< 0.300	<10.0	74.3	74.3	21.2	95.5	22,000						
PS 3 @ 1' 6/28/2022	1	In-Situ	-	-	-	-	-	-	-	3,760						
PS 4 @ 0' 6/8/2022	0	Excavated	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	16,800						
	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	14.0	14.0	<10.0	14.0	13,200						
PS 5 @ 0' 6/8/2022	0	Excavated	< 0.050	< 0.300	<10.0	91.8	91.8	89.3	181	33,600						

	Table 1 Concentrations of BTEX, TPH & Chloride in Soil										
	Mewbourne Oil Company										
	NGL Paduca SWD Tie In										
				NMOCD	Ref. #: n A	APP22139	57876				
NI	AOCD Closur	e Criteria		10	50	N/A	N/A	1,000	N/A	2,500	20,000
NMO	CD Reclamati	on Stand	ard	10	50	N/A	N/A	N/A	N/A	100	600
					6 8021B		SW	846 8015M	Ext.		4500 Cl
Sample ID	Date	Depth (Feet)	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
PS 5	6/23/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	11,000
PS 6	6/27/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	74.2	74.2	25.4	99.6	18,400
PS 7	6/27/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	63.8	63.8	28.7	92.5	11,600
NWS 3	6/27/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	112
WWS 9	6/27/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
WWS 10	6/27/2022	0-0.5	In-Situ	< 0.050	< 0.300	<10.0	61.8	61.8	35.6	97.4	80.0
WWS 11	6/27/2022	0-0.5	Excavated	< 0.050	< 0.300	<10.0	118	118	53.9	172	80.0
WWS B #11	6/30/2022	0-0.5	In-Situ	-	-	<10.0	<10.0	<20.0	<10.0	<30.0	-

Appendix A Depth to Groundwater Information





Drafted: bja

Checked: jwl

Date: 8/25/22

Page 26 of 255 ĪN.



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	(R=POD replaced, O=orpha	ned,	1					1_100	/ 2 _NE	2-034 4-01	7)				
water right file.)	C=the fil closed)	e is							st to la	3=SW 4=SE rgest) (N	2) IAD83 UTM in m	eters)	(In fee	t)	
		POD													
	~ .	Sub-	. .	-	Q	-	~	-	-						Vater
POD Number	Code		County						0	X	Y	-	thWellDepth		
<u>C 03829 POD1</u>		CUB	LE	3	3	1	06	26S	32E	620628	3549186 🌍	291	646	350	296
<u>C 03554 POD1</u>		CUB	ED	2	1	4	01	26S	31E	620547	3549148 🌍	370	630	300	330
<u>C 04209 POD2</u>		С	LE	2	3	3	06	26S	32E	620818	3548657 🌍	503	340	155	185
<u>C 04209 POD1</u>		CUB	LE	2	3	3	06	26S	32E	620903	3548619 🌍	530	360	155	205
C 04256 POD1		С	ED	4	4	2	01	26S	31E	620384	3549257 🌍	544	666	340	326
<u>C 03639 POD1</u>		CUB	ED	3	4	2	01	26S	31E	620168	3549279 🌍	761	700	365	335
											Averag	ge Depth to Wate	r:	277 fee	et
												Minimum Dep	oth:	155 fee	et
												Maximum Dep	th:	365 fee	et
Record Count: 6															
UTMNAD83 Radius	<u>s Search (ir</u>	<u>meters</u>) <u>:</u>												
Easting (X): 620	0918.11		North	ing	(Y)):	3549	150.24	ł		Radius: 804.67				
The data is furnished by the laccuracy, completeness, reliable										derstanding th	nat the OSE/ISC ma	ke no warranties,	expressed or impl	ied, concern	ning the
9/20/22 1:37 PM		•										WATER COL	UMN/ AVERA	GE DEPTH	H TO

WATER



				· •				NE 3=S to larges		<i>,</i>	23 UTM ;	n meters)	
Well Tag	POD	Number						Tws			X	Y	
iten rug		3829 POE		3				26S	-			549186 🦲	
Driller Lic	ense:	1607		Dril	ler Co	mpan	v:	DU	RAN	DRILLIN	IG	-	
Driller Nai		DURAN	LUIS (1			pa		200		DIULLI			
				ŕ		L D . 4		07	- 11-2 //	2015	DI 1	Deter	
Drill Start		02/11/2				h Dat		02	2/12/2	2015	Plug l		C1 11
Log File Da		02/23/2	015			Date:					Sourc		Shallow
Pump Type				_		narge	Size					ated Yield:	
Casing Siz	e:	7.00		Dep	th We	11:		64	46 fee	et	Depth	Water:	350 feet
	Wate	r Bearing	g Stratifi	cations	:	Тор) E	Bottom	De	scription			
						33()	337	Saı	ndstone/Gr	avel/Co	onglomerate	;
						390)	470	Sai	ndstone/Gr	avel/Co	onglomerate	;
						580)	610	Saı	ndstone/Gr	avel/Co	onglomerate	
		Cas	ing Perfo	orations	5:	Tor) E	Bottom					
			8			341		645					
		r Numbe		16581				Meter				TERMETE	R
		r Serial N		32531	561			Meter		-	100.0		
		ber of Di		6				Meter '			Dive	rsion	
	Unit	of Measu	re:	Gallor	ıs]	Return	Flov	v Percent:	:		
	Usag	e Multipl	ier:]	Readin	g Fr	equency:			
Meter l	Readin	gs (in Ac	re-Feet)										
Read	l Date	Year	Mtr R	eading	Flag	Ro	lr (Comm	ent			Mtr	Amount Onlin
03/03	3/2015	2015		0	А	RF	РТ						0
04/02	2/2015	2015		4343	А	RF	ΡT						1.333
04/30)/2015	2015		4343	А	RF	ΡT						0
05/31	/2015	2015		4343	А	RF	ΡT						0
07/01	/2015	2015		4343	А	RF	РТ						0
08/01	/2015	2015		4343	А	RF	ΡT						0
	/2015	2015		4616	А	RF							0.084
10/01	/2015	2015		4616	А	RF	ΡT						0
**Y]	TD Me	ter Amou	ints: Ye	ar		Amou	nt						
			20	15		1.4	17						

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				· •				NE 3=SV to largest			3 UTM	(in meters)		
ell Tag	POD	Number		••				Tws			X	Ŷ		
8	C 0.	3554 POI	D1	2	-	4	01		0	62054	7	3549148	9	
riller Lic	ense:	1654		Drill	er Coi	npar	ıy:				OR H	HRESIR	MAN D	RILLING
riller Na	me:							ANI	D CON	ISTRUC				
rill Start	Date:	10/22/2	012	Drill	Finisl	n Dat	te:	10	/26/20	12	Plug	Date:		
og File D	ate:	10/29/2	012	PCW	Rev	Date	:				Sour	·ce:	Shal	low
ump Typ	e:			Pipe	Disch	arge	Size	:			Estiı	nated Yie	ld:	
asing Siz	e:	10.00		Dept	h Wel	l:		63	0 feet		Dept	th Water:	300	feet
	Wate	er Bearin	g Stratific	cations:		To	рB	ottom	Desci	ription				
						35	0	360	Sands	stone/Gra	wel/C	Conglomer	ate	
						55	0					Conglomer		
		Cas	sing Perfo	rations	:	То	рB	ottom						
			0			57	0	630						
	Mete	er Numbe	· · ·	16569				Aeter I	Make.		ΜΔ	STERME	TER	
		er Serial N		81498	88			Meter I		lier:		.0000	I LIX	
		ber of Di		6				Meter 1	-			ersion		
		of Measu		Gallon	s					Percent:				
		e Multipl								uency:				
M		(k -	E 4)											
	l Date	ıgs (in Ac Year		ading	Flao	R	dr (Comme	nt			м	fr Amo	unt Onlir
	1/2014			73841	A		en v PT	John	int .			101	iti / tino	0
	1/2014				A		PT						7.6	583
12/3	1/2014	2014	1	31292	А	R	РТ						9.9	948
02/01	1/2015	2015	1	35717	А	R	РТ						1.3	358
03/02	2/2015	2015	1	41038	А	R	РТ						1.6	533
04/01	1/2015	2015	1	47017	А	R	РТ						1.8	335
04/30	0/2015	2015	1	54655	А	R	РТ						2.3	344
	1/2015	2015		61539	А		РТ						2.1	113
07/01	1/2015	2015		68829	А	R	РТ						2.2	237
08/01	1/2015	2015		73843	А		РТ						1.5	539
08/3	1/2015	2015	1	80421	А	R	РТ						2.0)19
10/01	1/2015	2015		87448	А	R	РТ						2.1	157
**Y]	ГD Ме	ter Amou	unts: Yea	ar	A	mou	ınt							
			201			176	21							
			20.	14		17.6	51							

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9/20/22 1:34 PM



		(quarters a (quarters					(NAD83 UT		
g) Number)4209 POD2	Q64 Q1 2 3	-	Sec 06	Tws 26S	0	X 620818	Y 3548657 🦲	
Driller License: Driller Name:	1706 BRYCE WALLAC	Driller Co	ompa	ny:	ELI	TE DRII	LLERS CO	RPORATION	
Drill Start Date: Log File Date:	05/07/2018 05/21/2018	Drill Fini PCW Rev			05	5/09/2018		g Date: 1rce:	Shallow
Pump Type: Casing Size:	6.00	Pipe Disc Depth We	0	Size		0 feet		imated Yield: oth Water:	5 GPM 155 feet
	er Bearing Stratific	•	To	р В .8	Sottom 320	Descri Sandst	ption	Conglomerate	
	Casing Perfo	rations:	To 20	•	Bottom 340				

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9/20/22 1:21 PM

POINT OF DIVERSION SUMMARY



		(quarters a (quarters					(NAD83 UT		
and ang	Number 4209 POD1	Q64 Q1	-	Sec 06	Tws 26S	0	X 620903	Y 3548619 🥌	
Driller License: Driller Name:	1706 BRYCE WALLAC	Driller C	-					RPORATION	
Drill Start Date: Log File Date:	04/28/2018 05/21/2018	Drill Fini PCW Re			05	5/01/2018		g Date: 1rce:	Shallow
Pump Type: Casing Size:	6.00	Pipe Disc Depth W	0	Size		0 feet		imated Yield: pth Water:	25 GPM 155 feet
	er Bearing Stratific	•	То	р В 5		Descri	ption	Conglomerate	
	Casing Perfo	rations:	To 20	•	Bottom 360				

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POINT OF DIVERSION SUMMARY



			•	s are 1=1 ers are sn			W 4=SE)	(NAD83 U)		
Well Tag	POD	Number	(1			Tws Rng		(NAD83 U	Y	
NA	C 0	4256 POD1	4	4 2	01		31E	620384	3549257 🌍	
Driller Lice	ense:	1706	Driller	Compa	ny:	EL	TE DR	ILLERS CO	RPORATION	
Driller Nar	ne:	BRYCE WALLAC	ΈE							
Drill Start	Date:	06/28/2018	Drill Fi	nish Da	ate:	0	7/04/201	18 Pl u	ıg Date:	
Log File Da	ate:	07/18/2018	PCW R	cv Dat	e:			So	urce:	Artesian
Pump Type:			Pipe Di	scharg	e Size	:		Est	timated Yield:	40 GPM
Casing Size	e:	5.80	Depth V	Vell:		6	66 feet	De	pth Water:	340 feet
	Wate	er Bearing Stratific	ations:	Т	op I	Bottom	Desci	ription		
				3	30	390	Sands	stone/Gravel	Conglomerate	
				3	90	430	Sands	stone/Gravel	/Conglomerate	
				4	30	480	Sands	stone/Gravel	/Conglomerate	
				4	80	610	Sands	stone/Gravel	Conglomerate	
		Casing Perfo	rations:	Т	op H	Bottom	1			
				3	26	666				

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9/20/22 1:25 PM

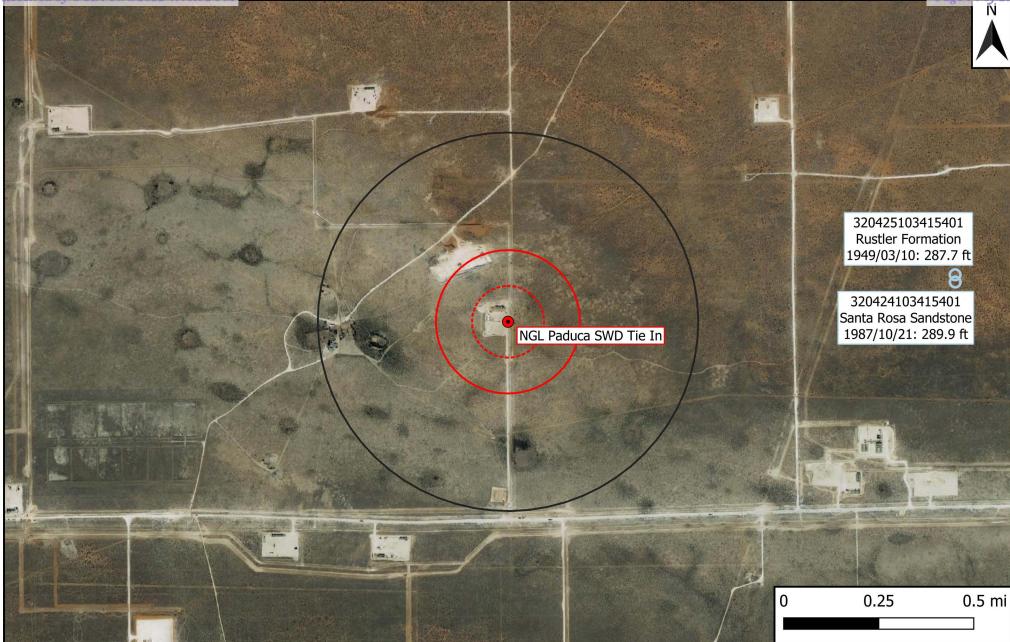
POINT OF DIVERSION SUMMARY



				· •	s are 1=N rs are sm				,	33 UTN	1 in meters)	
Well Tag	POD	Number		Q64 Q	16 Q4	Sec	Tws	Rng		X	Y	
0	C 03	3639 POD	01	3	4 2	01	26S	31E	6201	68	3549279 🧲)
Driller Lic Driller Naı		1654	D	riller(Compa	ny:			ORKING I ONSTRUC		HIRESIRM	AN DRILLING
Drill Start	Date:	09/23/20	D13 D	rill Fi	າish Da	ate:	0	9/25/2	2013	Plug	g Date:	
Log File D	ate:	10/25/20)13 P	CW R	cv Dat	e:				Sou	-	Shallow
Pump Type			P	pe Dis	scharge	e Sizo	e:			Esti	mated Yield	:
Casing Size		6.00		- epth V	-			00 fee	et	Dep	th Water:	365 feet
										.1		
	Wate	r Bearing	g Stratificatio	ns:	Т	op H			scription			
					5	60	600) Sar	ndstone/Gi	avel/	Conglomerate	e
		Cas	ing Perforation	ons:	Т	op I	Bottom	ı				
					6	00	660)				
	Mete	r Numbe	r: 165	75		l	Meter	Make	e:	MA	STERMETH	ER
	Mete	r Serial N	umber: 882	7642		I	Meter	Mult	iplier:	100	0.0000	
	Num	ber of Dia	als: 6			l	Meter	Туре	:	Div	version	
	Unit	of Measu	re: Gal	lons]	Returr	ı Flov	v Percent:	:		
	Usag	e Multipl	ier:]	Readir	ng Fro	equency:			
Meter 1	Readin	gs (in Ac										
Read	l Date	Year	Mtr Readir	g Fl	ag F	Rdr (Comm	ent			Mtr	· Amount Onlir
12/26	6/2013	2013	448	87 A	F	RPT						0
04/01	1/2014	2014	1559	93 A	F	RPT						3.408
07/01	1/2014	2014	2765	64 A	F	RPT						3.701
10/01	1/2014	2014	4311	4 A	F	RPT						4.744
12/31	1/2014	2014	5404	7 A	F	RPT						3.355
	1/2015	2015		87 A	F	RPT						0.381
03/02	2/2015	2015	5667	'0 A	F	RPT						0.424
	2/2015	2015	6034	1 A	F	RPT						1.127
	0/2015	2015		00 A		RPT						1.611
	1/2015	2015		52 A		RPT						1.738
	1/2015	2015	7445			RPT						0.982
	1/2015	2015	7797			RPT						1.081
	1/2015	2015	8225			RPT						1.313
10/01	1/2015	2015	8636	69 A	F	RPT						1.263
**Y]	ГD Ме	ter Amou	nts: Year		Amo	unt						
			2013			0						
			2014		15.	208						
			2015		9.	920						

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9/20/22 1:25 PM



Legend

- Site Location
- O Well USGS
- 🗰 500-Ft Radius
- □ 1,000-Ft Radius
- 🗖 0.5-Mi Radius

Released to Imaging: 10/25/2022 12:39:39 PM

Figure 5 USGS Well Proximity Map Mewbourne Oil Company NGL Paduca SWD Tie In GPS: 32.072144, -103.718881 Lea County



Drafted: bja

Checked: jwl

Date: 8/25/22



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Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

• 320424103415401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320424103415401 26S.31E.01.421322

Eddy County, New Mexico Latitude 32°04'24", Longitude 103°41'54" NAD27 Land-surface elevation 3,294 feet above NAVD88 This well is completed in the Other aquifers (N9999OTHER) national aquifer. This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data		
Tab-separated data		
<u>Graph of data</u>		
Reselect period		

Date \$	Time \$? Water- level date-time accuracy	? Parameter ^{\$} code	Water level, feet below land surface	Water level, feet above \$ specific vertical datum	Referenced vertical \$ datum	? ≎ Status	? Method of measurement	? Measuring ^{\$} agency	? Source of the source of the	? Water- level approval status
1983-01-26		D	72019	290.12			1	Z			А
1983-02-14		D	72019	289.42			1	Z			А
1987-10-21		D	72019	289.90			1	Z			А

Received by OCD: 10/6/2022 4:46:52 PM

Explanation									
Section \$	Code \$	Description							
Water-level date-time accuracy	D	Date is accurate to the Day							
Parameter code	62610	Groundwater level above NGVD 1929, feet							
Parameter code	62611	Groundwater level above NAVD 1988, feet							
Parameter code	72019	Depth to water level, feet below land surface							
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988							
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929							
Status	1	Static							
Method of measurement	Z	Other.							
Measuring agency		Not determined							
Source of measurement		Not determined							
Water-level approval status	А	Approved for publication Processing and review completed.							

Questions about sites/data? Feedback on this web site Automated retrievals Help Data Tips Explanation of terms Subscribe for system changes News

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team Page Last Modified: 2022-09-20 13:14:53 EDT 0.34 0.26 nadww01 USA.gov



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Groundwater levels for the Nation

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Search Results -- 1 sites found

Agency code = usgs

site_no list =

• 320425103415401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320425103415401 26S.31E.01.42110

Eddy County, New Mexico Latitude 32°04'25", Longitude 103°41'54" NAD27 Land-surface elevation 3,295 feet above NAVD88 The depth of the well is 340 feet below land surface. This well is completed in the Other aquifers (N9999OTHER) national aquifer. 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	? Parameter ^{\$} code	Water level, feet below land surface	Water level, feet above \$ specific vertical datum	Referenced vertical ≎ datum	? ≎ Status	? Method of measurement	? Measuring ^{\$} agency	? Source of measurement	? Water- level approval status
			72019								
1949-03-10		D	72019	287.70			1	Z			А

Received by OCD: 10/6/2022 4:46:52 PM

Explanation					
Section \$	Code \$	Description			
Water-level date-time accuracy	D	Date is accurate to the Day			
Parameter code	62610	Groundwater level above NGVD 1929, feet			
Parameter code	62611	Groundwater level above NAVD 1988, feet			
Parameter code 72019 Depth to water level, feet below land surface		Depth to water level, feet below land surface			
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988			
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929			
Status	1	Static			
Method of measurement	Z	Other.			
Measuring agency		Not determined			
Source of measurement		Not determined			
Water-level approval status	А	Approved for publication Processing and review completed.			

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

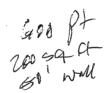
Page Contact Information: USGS Water Data Support Team Page Last Modified: 2022-09-20 13:16:28 EDT 0.35 0.28 nadww01



USA.gov

Appendix B Field Data & Soil Profile Logs





Latitude:

Sample Log

Date:

Longitude:

Paduca 6 SWD #1 Project:

Project Number:

Pending

32.072194

-103.718847

Sample ID	PID/Odor	Chloride Conc.	GPS
ALCE NWS I		184	
FS #1. @ IFt	-	136	
EWS #1	-	432	
FS # a. A) IFt	-		
TT-1	-	2,608	
TT-2	-	396	
TT-3	~	1.376	
TT-4	-	2,608	
TT-5	~	320	
TT-6	-		
17-7	-	2,608	
TT-8	-	2,608	
ΤΤ -9	-	488	
17-10	-	284	
Γτ-11	-	1,940	
FS # 3. @ 0-6 inches	-	184	
FS #4. @	-	320	
<u>FS #5. @</u>	-	536	
FS #6. @	-	440	
EWS # 2. @	~	320	
FS # 17. @	-	440	
FS # 8. B	-	320	
$LWS \neq 3.$ (A)	-	252	
FS # 9. 6 0-6 inches	-	700	
FS # 9. (A) lo inches	-	687	
FS # 10. 10 10 inch.s	-	440	
FS # 11. A 10 inches		700	
FS # 11. @ 1Ft	-	568	
FS _# 12: 10 1Ft	-	644	
	+	· · · · · · · · · · · · · · · · · · ·	
Sample Point = SP #1 @ ## etc		Test Trench = TT #1 @ ##	Resamples= SP #1 @ 5b or SW #1b
Floor = FL #1 etc		Refusal = SP #1 @ 4'-R	Stockpile = Stockpile #1
Sidewall = SW #1 etc		Soil Intended to be Deferred = SP #1 @ 4' In-Situ	GPS Sample Points, Center of Comp Areas

Page 41 of 255 & Safety Solut

Sample Log Date: 6/7/22 37,072199 Longitude: -103,718877

Project: Jadaca Project Number:

6 5ml 1 16039

Latitude:

Sample ID	PID/Odor	Chloride Conc.	GPS
ZWS4		7.2 1896	
WWSI		3.4 1220 On Pad - DOK	
FS 13 @ 4'		8.8 > 2552 5.0 4192	
FS19 @4'		8:6 72552 5:0 4192	
FS15@4'		8,4 > 2552 4,6 3592	
E516 E4		8.6 7 2552 4.8 3050	
FS 12 (B) IFF		1,196	
FS 13 C 1FF		260	
FS 14 B 1Ft		536	
FS 15 A IFT		824	
FS 16 A IFT		824	
FS 17 O IFF		588	
FS 18 @ 4Ft		4,332	
FS 19 05 4FF		5,060 2,856 2,856	
FS JO & YFt		2,956	
FS 21 Q 4Ff		2,856	
FS J2 @ 4Ff		3,392	
FS 23 D UFF		2,856	
F5 24 & 4 FF		4,332	
FS 25 0 4Ft		3,392	
WWS I		6.356	
SWS I EWS 4		538	
Ews 4		352	
EWSS		892	
FS 26 (A) 4 Ft		2,376	
FS 26 @ 4 Ft FS 27 @ 4 Ft		5060	
FS 27 @ 4 Ft FS 28 @ 4 Ft		7,472	
		1,932	
FS 30 QD 4 FF		2.1.56	
FS 31 A 4FF		5,464	
FS 32 @ 4Ft FS 33 @ 4Ft		1,56\$	· · _ · · · · · · · · · · · · · ·
FS 33 (A) 4 FF		2.609	
<u>EWS 6</u> FWS 7		2,030	
EWS 7		1,309	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		2,609 2,030 (,303 4,840 3,180	
FS 35 A 4FF		3,180	
N		•	

Sample Point = SP #1 @ ## etc

Test Trench = TT #1 @ ## Refusal = SP #1 @ 4'-R

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

Floor = FL #1 etc

Sidewall = SW #1 etc

Soil Intended to be Deferred = 5P #1 @ 4' In-Situ

Stockpile = Stockpile #1

Released to Imaging: 10/25/2022 12:39:39 PM GPS Sample Points, Center of Comp Areas



D)a	t	ρ	•
-	u	۰.	-	٠

Project:	Paduca	6
Proiect Num	ber:	

SWD#/ Latitude:

Longitude:

Sample ID	PID/Odor	Chloride Conc.	GPS
GRAGE EWS 8		644	
WWS 2		2648 Pad	
wws 3		220	
wws y		220	
FS 36 M YFt		2,412	
TT - 1		1036	
		2,608	
		1376	
		1,2,84	
V		892	
TT-6		4349 536	
WWS Test		12.84	
F3 37 @ 4A		31472	
5 38 6 4H		969	
5 39 Q 4A		4572	
F5 40 @ 4Ft		2904	
-S 41 @ 4F4		3/50	
-5 42 @ 4F+		3472	i.
-5 43 @ 4Ft		1,969	
FS 44 6 4Ft		4.540	
Cars in us 5		2608	
EWS 9		2,236	
EWS 10		356	
FS 45 @ 4F1		4,112	
FS 46 @ YFA		3,472	
FS 47 @ 4Ft		1,969	
FS 48 694H		4/12	
EWS U		2648	
FS 49 @ 4F1	1	3,1%	
-5 #50 @ 4F4		3,180	
FS 51 64Ff		31180	
=5 52 @ 4Ft		19/4	
TT-2 Co @ 9Ft		700	
FS 53 @ 4A		2,904	
=5 54 <u>6</u> 4FP		4/17	
77-2 @ 8Ff		700	<u> </u>
Sample Point = SP #1 @ ## etc		Test Trench = TT #1 @ ##	Resamples= SP #1 @ 5b or SW #1b
Floor = FL #1 etc		Refusal = SP #1 @ 4'-R	Stockpile = Stockpile #1
Sidewall = SW #1 etc		Soil Intended to be Deferred = SP #1 @ 4' In-Situ	GPS Sample Points, Center of Comp Area

Test Trench = TT #1 @ ##

43				
e				
age	-		d	
400	11-0	CH _		5
	Environ	mental & Sa	fety Solution	s, Inc.
		0		

6/6/22

Project: Project Number:

of 255

Paduca 6 SWD #1 mber: 16039

Date:

Latitude: <u>32,072199</u> Longitude: <u>703,718847</u>

Sample ID	PID/Odor	Chloride Conc.	GPS
211/54 /	-	8.0 2584	
19435	-	10.0 > 2584	
NWS2/	~	9,2 72584 8,6 72584	
FS13/	-	8,6 72584	
FS14/	-	9.0 72584	
FSVS	-	8,2 > 2584	
F/S16	-	8.0 2584	
AS17	-	8.8 22584	
18ST	_	8.4 72584	
ZW1	_	6.0 1292 • TTZE 6.6 1584	01
WWT	~	6.6 1584 9.0 22584	
TT3C 5'	-	9,0 72584	
7.73C 7'	-	8.0 2584	
772C 9'		7.0 1812	
7780 11'	-	7.0 1812	
130 14	\checkmark	6.4 1480	
1732 18'		1,9 219	
TTI Co'	-	10.0 77584	
TT1 CZ'	-	7.0 1812	
ITI eyi		4.4 704	
7TI @5.5'	~	5.0 900	
TIC 6'	~	1.6 768	6/7/22
			11/00
TTI CTI		2.8 3/6	
TTZEO		9.2 72584	
TTZ CO' TTZ CZ	\frown	9.2 72584 7.8 2396	- Aew Jr
TTZ RY'		50 440	
TTZ 66'		8.6 > 7552	
TT2 C8'-R	~	74 2036	
TTY E OI	~	9.2 > 2552	
Tiy e z'	~	3.6 488	
PSI C 0'		10.0 >2552 8.4 18212	
P52 e 0'	Slight	10.0 > 2552 9.0 7.672	
P53 e 0'		9.4 7 2552 6.2 6664	<u></u>
PSM E o'		9.4 72552 6.4 7216	
P55 e 01		11.0 7 2552 8.8 23288	Λ
Sample Point = SP #1 @ ## etc		Test Trench = TT #1 @ ##	Resamples= SP #1 @ 5b or SW #1b

Sidewall = SW #1 etc

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

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

GPS Sample Points, Center of Comp Areas



Date:

<u>Padula 6. Swo #1</u> per: Project: Project Number:

. Latitude:

Longitude:

Sample ID	PID/Odor	Chloride Conc.	Sample ID Me Chloride (
TT-2 @ COCO 9Ft		1,808	FS 12 Quin 4,840
TT-2 @ ICFt		160	FS 13 10,668
TT-2 @ 12Ft		220	FS 74 18,428 FS 75 11,592
FS 55 A Dinches		892 \$	FS 75 11,592
F5 56 @ 1		644 \$	FS 76 18428
FS 57 A)		644	FS 77 194.428
FS 58 AS 2 inches		1,196	15 78 18.4.28
FS I @ 2Ft		396	FS 79 4 16,636
FS 12		498	FS 8006in 16,636
F5 13		396	FS E7 6 4 2608
F5 14		396	FS 686561 \$1576
FS 12 FS 13 FS 14 FS 15 FS 16 FS 17 6 2Ft		440	FS 69 Q SUN \$ 1,576
FS 16,1		536	FS 706 507 2,608
FS 1762Ft		396	FS 67@44 892
FS 10@2Ft		396	FS 63 @ 477 588
FS 55 6 5/n FS 56 6 6in FS 57 6 5in FS 58 6 5in FS 785 60 5in		488	FS 69 624FH 760
FS 56 @ 5in		536	PS 700 4A 644
F.5 57 @ 5:n		488	
FS 58 @ 5in		438	
		320	
FS test of on Road Sufface		284	
FS Tested on Read Surface		396	
Eus		220	
NWS		396	
UUS		284	
FS 59 @ 4Ft		220	
EWS 6		488	
EWS 7		1284	
EWS 8		0.24	
CWS /		532	
EUS 8		588	
$\begin{array}{c} F5 \\ F5 $		280	
FS 64 P 47Ft		192	
		346	
FS ic A 4 Ft FS 71 60 6i A Sample Point = SP #1@ ## etc	I 	100	
FS 71 COGIN		11,592	
Sample Point = SP #1 @ ## etc		Test Trench = TT #1 @ ##	Resamples= SP #1 @ 5b or SW #1b

Floor = FL #1 etc

Refusal = SP #1 @ 4'-R

Stockpile = Stockpile #1

Sidewall = SW #1 etc

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

GPS Sample Points, Center of Comp Areas

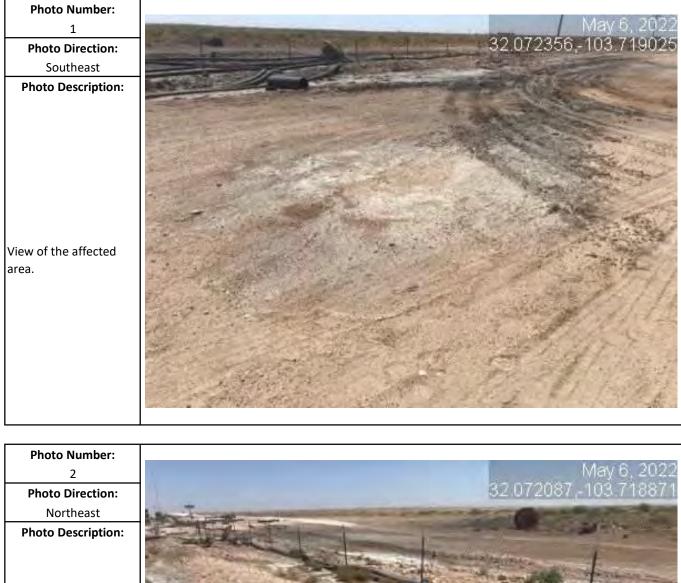


Soil Profile

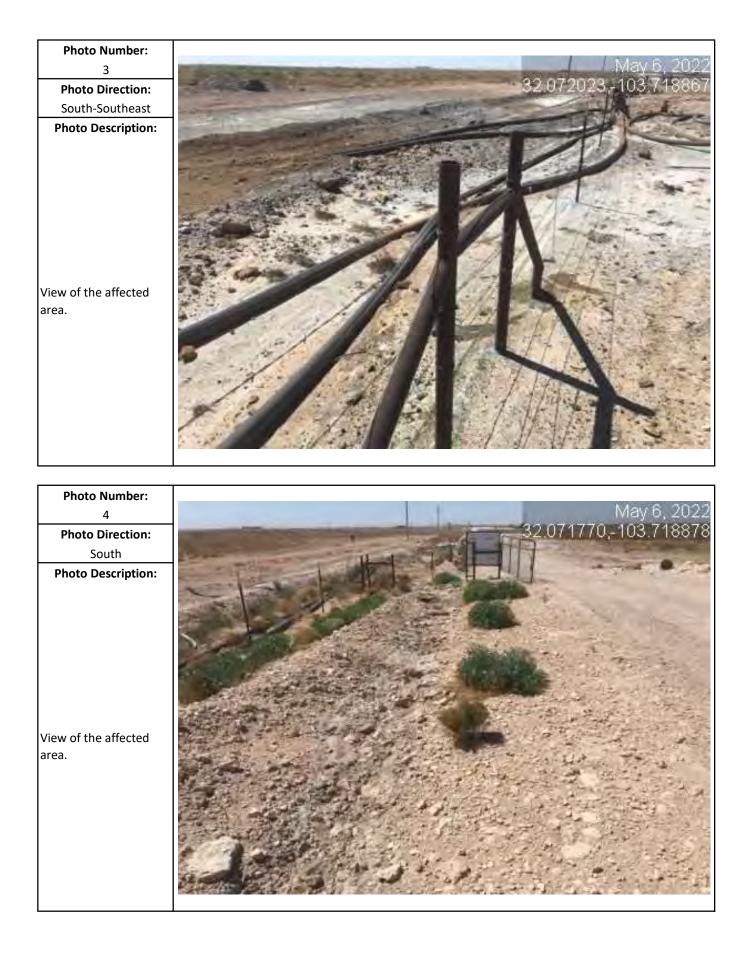
Environmental & Safety Solutions, Inc.				Date:	
Project: Paduca 6 SWD Project Number:	Pending	Latitude:	32.072194	Longitude:	-103.718847
Depth (ft. bgs) 1 O-4' 2 4'-8' 3 8-12' 4	Cal roc cali	iche -sar K- Caliche iche-Clar	Des	scription	
6 7 8 9 10 11					
12 13 14 15 16 17					
18 19 20 21 22 23					
24 25 26 27 28					
29 30 31 32 33 34					
35 36 37 38 39					
40					

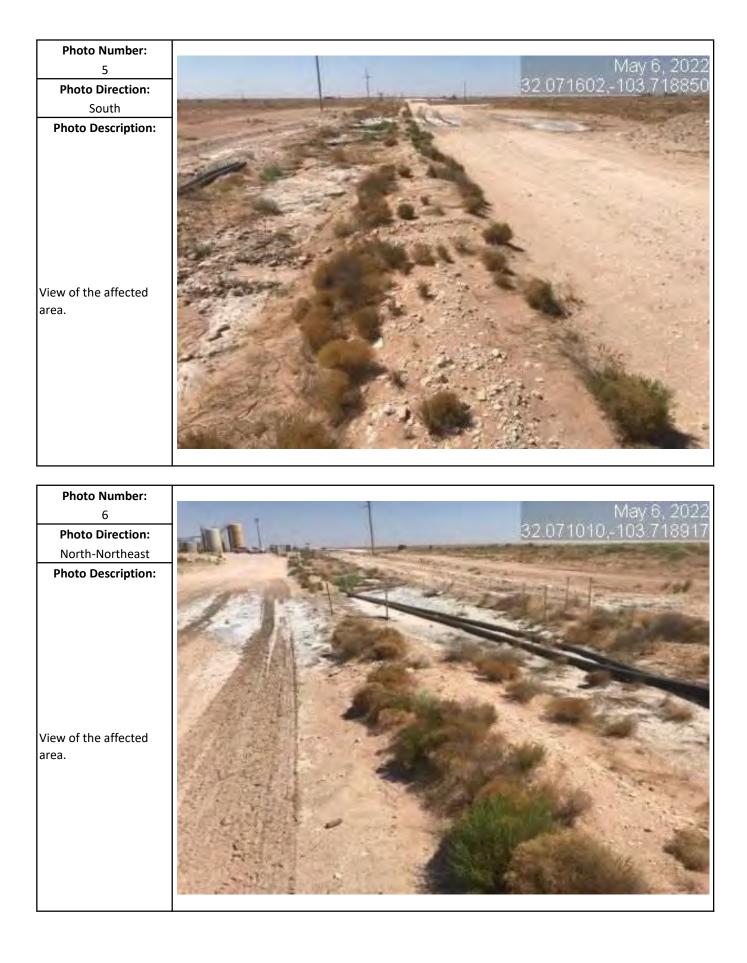
•

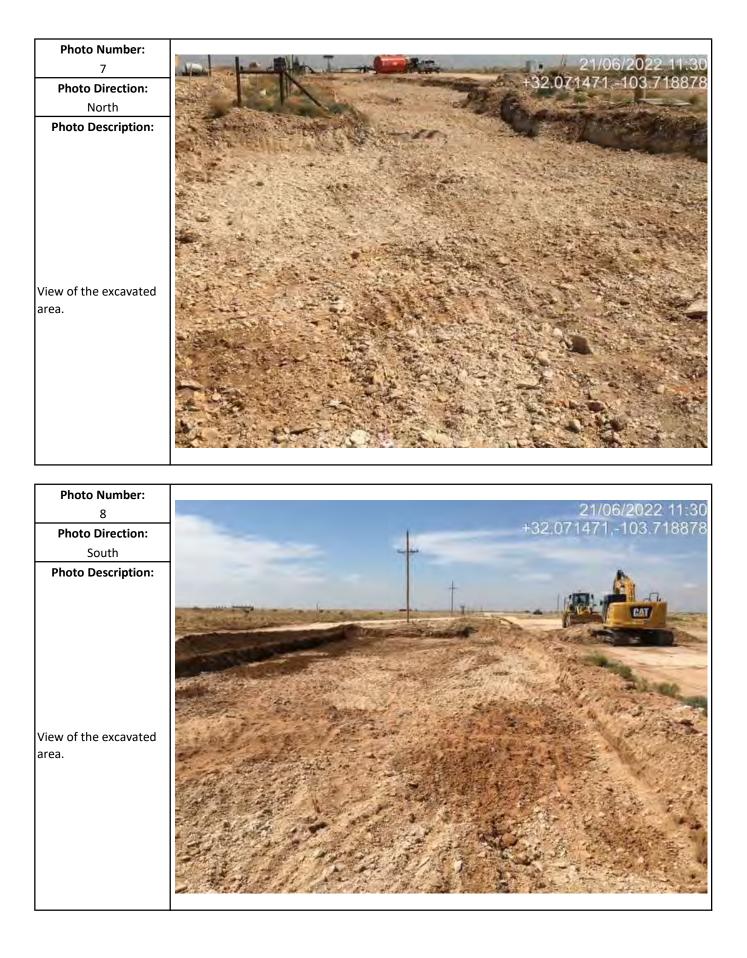
Appendix C Photographic Log

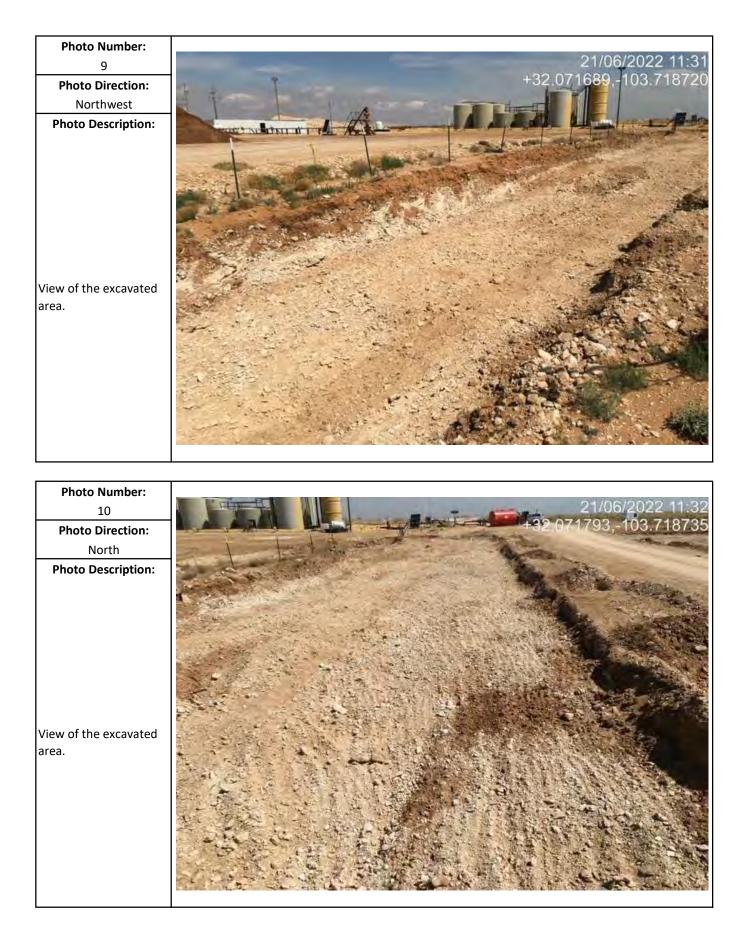


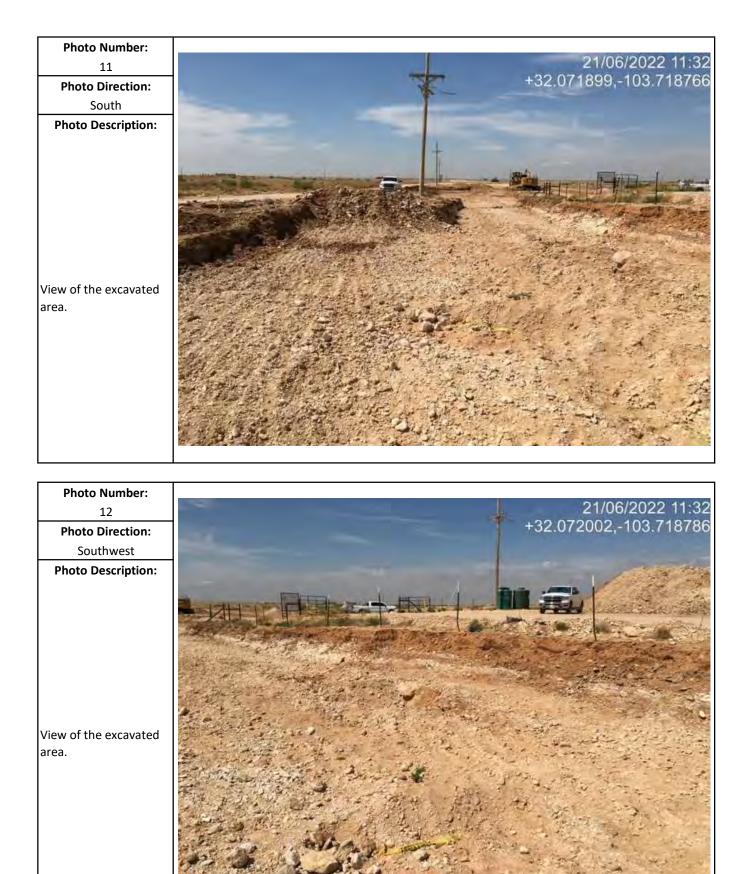












Photographic Log

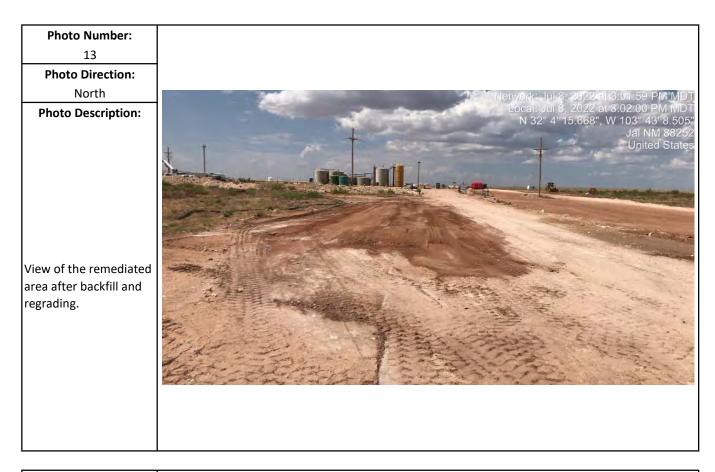
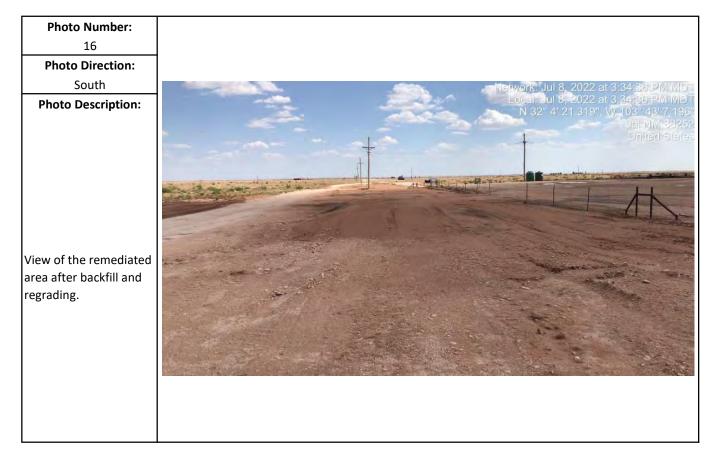
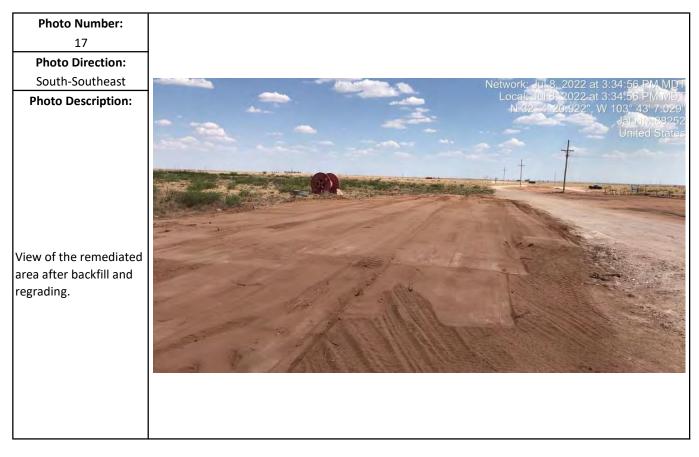




Photo Number:	
15	
Photo Direction:	
North	Network: Jul 8, 2022 at 3:02:59 PM MDT
Photo Description:	Local: Jul 8, 2022 at 3:03:00 PM MDT
View of the remediated area after backfill and regrading.	Network: Jul 8; 2022 at 3:03:06 PM MDT Local: Jul 8; 2022 at 3:03:06 PM MDT JairtMi 88252 United States







Appendix D Laboratory Analytical Reports



June 08, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/03/22 13:11.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: EWS 1 (H222367-01)

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/06/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/06/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/06/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/06/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/06/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	80.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	88.4	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: EWS 2 (H222367-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	84.3	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	93 .0	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: EWS 3 (H222367-03)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	86.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.8	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: NWS 1 (H222367-04)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	79.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	87.5	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 1 @ 1' (H222367-05)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	81.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	89.5	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 2 @ 1' (H222367-06)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	84.6	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	92.6	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 3 @ 0-6" (H222367-07)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	81.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	89.9	% 59.5-14	2						

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 4 @ 0-6" (H222367-08)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.5	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	80.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	88.5	% 59.5-14	2						

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Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 5 @ 0-6" (H222367-09)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.04	102	2.00	5.47	
Toluene*	<0.050	0.050	06/07/2022	ND	2.05	102	2.00	5.77	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.91	95.6	2.00	5.61	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	5.97	99.4	6.00	5.57	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	81.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	89.6	% 59.5-14	2						

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Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 6 @ 0-6" (H222367-10)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.09	104	2.00	12.2	
Toluene*	<0.050	0.050	06/07/2022	ND	2.07	104	2.00	12.9	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	2.00	100	2.00	12.0	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.25	104	6.00	12.3	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.6	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	81.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	88.9	% 59.5-14	2						

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Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 7 @ 0-6" (H222367-11)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.09	104	2.00	12.2	
Toluene*	<0.050	0.050	06/07/2022	ND	2.07	104	2.00	12.9	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	2.00	100	2.00	12.0	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.25	104	6.00	12.3	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 \$	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	80.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	89.7	% 59.5-14	2						

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Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 8 @ 0-6" (H222367-12)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.09	104	2.00	12.2	
Toluene*	<0.050	0.050	06/07/2022	ND	2.07	104	2.00	12.9	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	2.00	100	2.00	12.0	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.25	104	6.00	12.3	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.1	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/07/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	82.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	91.6	% 59.5-14	2						

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 9 @ 0-6" (H222367-13)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.76	
Toluene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.82	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.98	99.1	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.20	103	6.00	4.08	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/07/2022	ND	416	104	400	8.00	
TPH 8015M	mg/	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	86.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	95.9	% 59.5-14	2						

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 10 @ 10" (H222367-14)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.76	
Toluene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.82	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.98	99.1	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.20	103	6.00	4.08	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	06/07/2022	ND	416	104	400	8.00	
TPH 8015M	mg,	/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	188	94.1	200	2.34	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	202	101	200	4.88	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	78.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	86.4	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 11 @ 1' (H222367-15)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.76	
Toluene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.82	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.98	99.1	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.20	103	6.00	4.08	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	06/07/2022	ND	416	104	400	8.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	208	104	200	5.89	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	193	96.5	200	12.2	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	88.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	91.8	% 59.5-14	2						

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/03/2022	Sampling Date:	06/03/2022
Reported:	06/08/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 12 @ 1' (H222367-16)

BTEX 8021B	mg,	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.76	
Toluene*	<0.050	0.050	06/07/2022	ND	2.11	106	2.00	2.82	
Ethylbenzene*	<0.050	0.050	06/07/2022	ND	1.98	99.1	2.00	3.27	
Total Xylenes*	<0.150	0.150	06/07/2022	ND	6.20	103	6.00	4.08	
Total BTEX	<0.300	0.300	06/07/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.8	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	06/07/2022	ND	416	104	400	8.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2022	ND	208	104	200	5.89	
DRO >C10-C28*	<10.0	10.0	06/07/2022	ND	193	96.5	200	12.2	
EXT DRO >C28-C36	<10.0	10.0	06/07/2022	ND					
Surrogate: 1-Chlorooctane	91.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	94.6	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RDINAL LABORATORIES

Page 75 of 255

101 East Marland, Hobbs, NM 88240

Project #: Project Name: Pcc Project Location: Sampler Name: Ac FOR LAB USE ONLY	ох 301 96-2378 иса 6 5	State: NM Fax #: (575) 39 Project Owner						A	ttn: /	any: Rob		ewbou, e Run												
Address: P.O. Box City: Lovington Phone #: (575) 39 Project #: Project Name: Pcc Project Location: Sampler Name: Ac FOR LAB USE ONLY	ох 301 96-2378 иса 6 5	State: NM Fax #: (575) 39 Project Owner	96-1					A	ttn: /	Rob														
Phone #: (575) 39 Project #: Project Name: Pose Project Location: Sampler Name: Action FOR LAB USE ONLY	educa 6 s	Fax #: (575) 39 Project Owner	96-1					A	ddre		bio	e Run	nds											
Project #: Project Name: Pour Project Location: Sampler Name: Action FOR LAB USE ONLY	educa 6 s	Project Owner		429				A	ddre															
Project Name: Pcc Project Location: Sampler Name: Ac								C		Address:														
Project Location: Sampler Name: Ac		wD #1							ity:							-								
Project Location: Sampler Name: Ac				-	Act Name: Paduca 6 SwD #F1							Zip:		FPH (8015M)	BTEX (8021B)									
FOR LAB USE ONLY	tavon Rios										Phone #:													
FOR LAB USE ONLY			mpler Name: Aavon Rios						ax #:					Chloride	H	EX								
						MAT	RIX	-	PR	ESEF	RV.	SAMPL	ING	1	4	10								
Lab I.D.	Sample	e I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER		OIL	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME											
	ws 1.			X		X				X		6-3-22		X	X	X								
2 24	ws 2.			1		1				1		1		1	1	1					_		-	
3 Ew						111	_	-			4					11	-				_	_		
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Le ES	5 2	@ 1Ft		╟		+++	+-	+	+		+			++			+	+	-+	-+	-+-	-+-	-+-	
7 ES		@ 0-Ginches		\mathbb{H}	-+-	+++	-	+	+	$\left \right $	+			H		++	+	+		-+				+
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IO ES		A) O-Ginches		V		U	+	+	+	V	+	U		W	10	W	+		-+	-	-	-	-	
PLEASE NOTE: Liability and Dama analyses. All claims including those service. In no event shall Cerdinal I	mages, Cardinal's liability a cas for negligence and any al be liable for incidental or	nd client's exclusive remady for an	deeme	d waie st ilmib	ed unless ation, busi	made in : ness inter	willing a	and rec a, icea	ceived in of use,	y Cardi or loss	of pro	thin 30 days all dis incurred by	er completion of t client, in subsidie	he applica	ble						-			
Relinquished By: Aaron Ki'o S Relinquished By:		Date: 13.22 Time: J3.11 Date: Time:	Re		ved B	r: de						r	Phone Re Fax Resu REMARK	it:			No No	Add'l P Add'l F		:				
Delivered By: (C Sampler - UPS - Bi FORM-006	Circle One) Bus - Other:	0.De) C.0 5524				mple (ol li Yeş No	Cond Intact	ition es Vo	<			ED BY: als)	Please e	email r	esult	s to p	m@ef	echenv	.com.					

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

RDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

Company Name	e: Ete	ch Environm	nental & Safety Solu	tions	s, Inc	2				-		BI	LL TO						ANA	LYS	IS R	EQU	EST		
Project Manage	er: Lo	nce Ci	renshaw							P.O.	*											T	T		
Address: P.C	D. Box 30	1								Com	pan	v:Tr	ewbour,	ne											
City: Lovingt	on		State: NM	Zip	: 88	260				Attn:	R	666	ie Run	nels											
Phone #: (57	5) 396-23	378	Fax #: (575) 3	96-1	429					Addr															
Project #:	_		Project Owne	r:						City:															
Project Name:	Pado	ca 6	SWD#1						-1	State			Zip:			TPH (8015M)	BTEX (8021B)								
Project Locatio										Phon	ie #:				Chloride	801	802								
Sampler Name:	Aasor	Rios								Fax					Ē	H	X								
FOR LAB USE ONLY	1			Г			MA	TRIX	_		RESI	ERV.	SAMPL	NG	1	1 d	BT								
Lab I.D.		Sample		(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER ; ACID/BASE	ICE / COOL	OTHER :	DATE	TIME											
11	FS	7	DO-Ginch		X		X				X		6-3-22		X	K	X								
12	FS	8	A) O-Giant		X		X				X		6-3-22		X	X	X								
13	FS	9	A O-binch		X		X	-			X		6-3-22		X	×	X					-			
14	FS	10	10 loin Ches		X		X			+	X		6-3-22		X	X	X		-	-	-	-			-
15	FS	11	@ I.Ft		X		X	-		+	X	- i-	6-3-22	-	X		X	-	-	-	-		-	-	
16	FS	12	6 1.Ft	-	X	-	X	-		-	X	-	6-3-22		X	X	y		-	-	-	-		-	-
						-+-	+	-			+	-			-		-	-	-	-	+	+-	-	-	 -
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				+			-	-		+	-	-		-		-		-	-		+	+	+	+	 -
analyses. All claims includ service. In no event shall G attliates or successors and Relinquished B Auron Mic Relinquished B	ing increasion for managements of the indication of the indication of the rest	egligence and any of to for lucidental or of initial to the perform	nd client's exclusive remedy for a sitter cause whatsoever shall be consequential damages, including nance of services horsunder by G Date: Time: 1311 Date: Time: 2.0°) C · O.9 5.5° # 1	Re Re Re		d unices fion, build deas of ved B ved B ved B	mate incess in attention y: Y: Y: Y: mple pol Y: Ne		g and i long, la <u>saim is</u> diffic ct Yes No	ecolorid as of use besed u	CH	iteck (Initi	ethio 30 days afte dis incurred by c a above stated re ED BY: (alts)	r completion of 8 direct, fin subsidia mons or otherwis Phone Re Fax Resul REMARKS Please e	ne apploa rice, suft: it: S: mail r	esult	ns ⊡ stopr	No No	Add	Phone Fax #					

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Released to Imaging: 10/25/2022 12:39:39 PM



October 03, 2022

LANCE CRENSHAW

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/08/22 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 03-Oct-22 08:58
---	-----------------	--	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PS 1 @ 0'	H222447-01	Soil	08-Jun-22 00:00	08-Jun-22 15:00
PS 2 @ 0'	H222447-02	Soil	08-Jun-22 00:00	08-Jun-22 15:00
PS 3 @ 0'	H222447-03	Soil	08-Jun-22 00:00	08-Jun-22 15:00
PS 4 @ 0'	H222447-04	Soil	08-Jun-22 00:00	08-Jun-22 15:00
PS 5 @ 0'	H222447-05	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 1 @ 0'	H222447-06	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 1 @ 4'	H222447-07	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 1 @ 7'	H222447-08	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 2 @ 0'	H222447-09	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 2 @ 4'	H222447-10	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 2 @ 8'-R	H222447-11	Soil	08-Jun-22 00:00	08-Jun-22 15:00
Π3@0'	H222447-12	Soil	08-Jun-22 00:00	08-Jun-22 15:00
Π3@5'	H222447-13	Soil	08-Jun-22 00:00	08-Jun-22 15:00
Π 3 @ 11'	H222447-14	Soil	08-Jun-22 00:00	08-Jun-22 15:00
Π 3 @ 18'	H222447-15	Soil	08-Jun-22 00:00	08-Jun-22 15:00
Π4@0'	H222447-16	Soil	08-Jun-22 00:00	08-Jun-22 15:00
TT 4 @ 2'	H222447-17	Soil	08-Jun-22 00:00	08-Jun-22 15:00
WWS 1	H222447-18	Soil	08-Jun-22 00:00	08-Jun-22 15:00
FS 13 @ 2'	H222447-19	Soil	08-Jun-22 00:00	08-Jun-22 15:00
FS 14 @ 2'	H222447-20	Soil	08-Jun-22 00:00	08-Jun-22 15:00
FS 15 @ 2'	H222447-21	Soil	08-Jun-22 00:00	08-Jun-22 15:00
FS 16 @ 2'	H222447-22	Soil	08-Jun-22 00:00	08-Jun-22 15:00

10/03/22 - Client changed sample IDs for -19 through -22 (See COC). This is the revised report and will replace the one sent on 06/14/22.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Pro Project Num Project Mana Fay	(Reported: 03-Oct-22 08:58					
				1 @ 0' 447-01 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	33600		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	QM-07
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Toluene*	0.119		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	GC-NC1
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			107 %	69.9	-140	2060918	JH	09-Jun-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			74.6 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			80.7 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Project Num Project Mana		(Reported: 03-Oct-22 08:58				
				2 @ 0 447-02 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Labora	tories					
<u>Inorganic Compounds</u> Chloride	25600		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.4 %	69.9	-140	2060918	ЛН	09-Jun-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	148		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	186		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			84.2 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			103 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project Num Project Mana		Reported: 03-Oct-22 08:58					
				3 @ 0' 147-03 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	6260		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PL	D)		103 %	69.9	-140	2060918	JH	09-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	24.9		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	36.1		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			79.3 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			86.2 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	Project Num Project Mana	ber: 160				C	Reported:)3-Oct-22 08:	58		
				4 @ 0' 147-04 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds	1/000		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Chloride	16800		16.0	шу/ку	4	2001014	AC	10-Jun-22	4300-СІ-В	
Volatile Organic Compound	<u>s by EPA Method 8</u>	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		106 %	69.9	-140	2060918	JH	09-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			77.2 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			83.5 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project Num Project Mana	ber: 160				C	Reported: 03-Oct-22 08:	58
				5 @ 0' 447-05 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	33600		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	JH	09-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	ЛН	09-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PII))		103 %	69.9	-140	2060918	JH	09-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									S-04
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	91.8		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	89.3		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			64.5 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			78.2 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 08:58		
				1@0 447-06 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	39600		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.200		0.200	mg/kg	200	2060918	JH	14-Jun-22	8021B	
Toluene*	< 0.200		0.200	mg/kg	200	2060918	JH	14-Jun-22	8021B	
Ethylbenzene*	< 0.200		0.200	mg/kg	200	2060918	JH	14-Jun-22	8021B	
Total Xylenes*	< 0.600		0.600	mg/kg	200	2060918	JH	14-Jun-22	8021B	GC-NC1
Total BTEX	<1.20		1.20	mg/kg	200	2060918	ЛН	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PII	D)		99.4 %	69.9	-140	2060918	ЈН	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	32.2		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	21.8		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			77.4 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			86.3 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	Project Num Project Mana	, ber: 160		Reported: 03-Oct-22 08:58						
				1 @ 4' 447-07 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds			16.0			20(1014		10.1.22		
Chloride	720		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060918	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	ЛН	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	JH	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	PID)		103 %	69.9	-140	2060918	JH	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			70.5 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			77.4 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 08:58		
				1 @ 7 447-08 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
Inorganic Compounds											
Chloride	16.0		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compounds	by EPA Method 80	21									
Benzene*	< 0.050		0.050	mg/kg	50	2060918	JH	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060918	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060918	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060918	JH	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060918	JH	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PI	D)		104 %	69.9	-140	2060918	JH	10-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B		
Surrogate: 1-Chlorooctane			76.5 %	66.9	-136	2060911	MS	10-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			82.1 %	59.5	-142	2060911	MS	10-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240		Project Num Project Mana		Reported: 03-Oct-22 08:58						
				2 @ 0' 447-09 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds			16.0			20(1014	10	10.1 22	4500 CL D	
Chloride	8000		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		102 %	69.9	-140	2060919	JH	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctane			76.9 %	66.9	-136	2060911	MS	10-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			82.5 %	59.5	-142	2060911	MS	10-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 08:58		
				2 @ 4' 447-10 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	848		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compound	s by EPA Method 8	021									
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЛН	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (Pl	ID)		103 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060911	MS	10-Jun-22	8015B		
Surrogate: 1-Chlorooctane			71.2 %	66.9	-136	2060911	MS	10-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			76.9 %	59.5	-142	2060911	MS	10-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240					Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					
				2 @ 8' - 147-11 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	2800		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PII	D)		104 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctane			84.7 %	66.9	-136	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			84.3 %	59.5	-142	2060921	MS	09-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ty Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 08:58		
				3 @ 0 447-12 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	1460		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compounds I	by EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	ЛН	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID))		104 %	69.9	-140	2060919	JH	10-Jun-22	8021B		
Petroleum Hydrocarbons by C	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctane			80.5 %	66.9	-136	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			80.5 %	59.5	-142	2060921	MS	09-Jun-22	8015B		

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 08:58		
				3 @ 5 447-13 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
Inorganic Compounds Chloride	6000		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compounds	s by EPA Method 8	021									
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЛН	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (Pl	D)		103 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctane			90.2 %	66.9	-136	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			92.7 %	59.5	-142	2060921	MS	09-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project Num Project Mana	, iber: 160				C	Reported: 03-Oct-22 08:6	58
				3 @ 11 447-14 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	2040		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	ЈН	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Ph	D)		102 %	69.9	-140	2060919	JH	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctane			93.9 %	66.9	-136	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			96.3 %	59.5	-142	2060921	MS	09-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 08:58		
				3 @ 18 447-15 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
Inorganic Compounds Chloride	80.0		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compounds		021		0.0							
Benzene*	< 0.050		0.050	mg/kg	50	2060919	ЛН	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЈН	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PL	D)		104 %	69.9	-140	2060919	JH	10-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctane			92.8 %	66.9	-136	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			90.6 %	59.5	-142	2060921	MS	09-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project:PADUCA 6 SWD #1Reported:Project Number:1603903-Oct-22 08:Project Manager:LANCE CRENSHAWFax To:						58	
				4 @ 0 447-16 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	5440		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PIL))		101 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
DRO >C10-C28*	140		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
EXT DRO >C28-C36	34.6		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctane			74.3 %	66.9	-136	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			74.4 %	59.5	-142	2060921	MS	09-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project Num Project Mana	, ber: 160				Reported: 03-Oct-22 08:58				
				4 @ 2' 447-17 (Se								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Laborat	tories							
<u>Inorganic Compounds</u> Chloride	208		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B			
Volatile Organic Compounds	s by EPA Method 8	021										
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЛН	10-Jun-22	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B			
Surrogate: 4-Bromofluorobenzene (Pl	ID)		103 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B			
Petroleum Hydrocarbons by	GC FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B			
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B			
Surrogate: 1-Chlorooctane			92.6 %	66.9	-136	2060921	MS	09-Jun-22	8015B			
Surrogate: 1-Chlorooctadecane			91.7 %	59.5	-142	2060921	MS	09-Jun-22	8015B			

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions	y Solutions Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:							Reported:)3-Oct-22 08:	58
				WWS 1 447-18 (So	sil)					
			11222	11/10 (50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	928		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		104 %	69.9	-140	2060919	JH	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctane			103 %	66.9	-136	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			102 %	59.5	-142	2060921	MS	09-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions	Project Num Project Mana	ber: 160				Reported: 03-Oct-22 08:58			
				13 @ 2 447-19 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	6080		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		103 %	69.9	-140	2060919	ЛН	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctane			89.0 %	66.9	-136	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			88.9 %	59.5	-142	2060921	MS	09-Jun-22	8015B	

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Etech Environmental & Safet 2617 W MARLAND HOBBS NM, 88240	5					D #1 HAW		Reported: 03-Oct-22 08:58			
				14 @ 2 447-20 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	4080		16.0	mg/kg	4	2061014	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compounds b	y EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЛН	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			105 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B		
Petroleum Hydrocarbons by G	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctane			100 %	66.9	-136	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			100 %	59.5	-142	2060921	MS	09-Jun-22	8015B		

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Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240					PADUCA 6 SWD #1 Reported: 16039 03-Oct-22 08: LANCE CRENSHAW					58
				15 @ 2 147-21 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	4000		16.0	mg/kg	4	2061015	AC	10-Jun-22	4500-Cl-B	QM-07
Volatile Organic Compounds	by EPA Method 802	21								
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	JH	10-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	ЛН	10-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PII	D)		101 %	69.9	-140	2060919	JH	10-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctane			99.9 %	66.9	-136	2060921	MS	09-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			97.6 %	59.5	-142	2060921	MS	09-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project Num Project Mana	ber: 160				Reported: 03-Oct-22 08:58			
				16 @ 2 147-22 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	4720		16.0	mg/kg	4	2061015	AC	10-Jun-22	4500-Cl-B		
Volatile Organic Compounds	by EPA Method 8	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2060919	ЛН	10-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2060919	JH	10-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PIL))		102 %	69.9	-140	2060919	ЈН	10-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctane			90.8 %	66.9	-136	2060921	MS	09-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			88.6 %	59.5	-142	2060921	MS	09-Jun-22	8015B		

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Etech Environmental & Safety SolutionsProject:PADUCA 6 SWD #12617 W MARLANDProject Number:16039HOBBS NM, 88240Project Manager:LANCE CRENSHAWFax To:Fax To:Fax To:	Reported: 03-Oct-22 08:58
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Inorganic Compounds - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2061014 - 1:4 DI Water										
Blank (2061014-BLK1)				Prepared &	Analyzed:	10-Jun-22				
Chloride	ND	16.0	mg/kg							
LCS (2061014-BS1)				Prepared &	Analyzed:	10-Jun-22				
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (2061014-BSD1)				Prepared &	Analyzed:	10-Jun-22				
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	
Batch 2061015 - 1:4 DI Water										
Blank (2061015-BLK1)				Prepared &	Analyzed:	10-Jun-22				
Chloride	ND	16.0	mg/kg							
LCS (2061015-BS1)				Prepared &	Analyzed:	10-Jun-22				
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (2061015-BSD1)				Prepared &	Analyzed:	10-Jun-22				
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	

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Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 03-Oct-22 08:58	
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2060918 - Volatiles										
Blank (2060918-BLK1)				Prepared &	Analyzed:	09-Jun-22				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0514		mg/kg	0.0500		103	69.9-140			
LCS (2060918-BS1)				Prepared &	Analyzed:	09-Jun-22				
Benzene	1.85	0.050	mg/kg	2.00		92.4	83.4-122			
Toluene	1.98	0.050	mg/kg	2.00		99.2	84.2-126			
Ethylbenzene	1.84	0.050	mg/kg	2.00		92.2	84.2-121			
m,p-Xylene	3.65	0.100	mg/kg	4.00		91.4	89.9-126			
o-Xylene	1.78	0.050	mg/kg	2.00		89.0	84.3-123			
Total Xylenes	5.43	0.150	mg/kg	6.00		90.6	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	69.9-140			
LCS Dup (2060918-BSD1)				Prepared &	Analyzed:	09-Jun-22				
Benzene	2.04	0.050	mg/kg	2.00		102	83.4-122	9.82	12.6	
Toluene	2.14	0.050	mg/kg	2.00		107	84.2-126	7.61	13.3	
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	84.2-121	10.1	13.9	
m,p-Xylene	4.10	0.100	mg/kg	4.00		103	89.9-126	11.6	13.6	
o-Xylene	2.01	0.050	mg/kg	2.00		100	84.3-123	11.9	14.1	
Total Xylenes	6.11	0.150	mg/kg	6.00		102	89.1-124	11.7	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0523		mg/kg	0.0500		105	69.9-140			

Batch 2060919 - Volatiles

Blank (2060919-BLK1)			Prepared: 09-Jun-22 Analyzed: 10-Jun-22
Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 03-Oct-22 08:58	
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
, , , , , , , , , , , , , , , , , , ,										
Batch 2060919 - Volatiles										
Blank (2060919-BLK1)				Prepared: 0	9-Jun-22 A	nalyzed: 10	0-Jun-22			
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.7	69.9-140			
LCS (2060919-BS1)				Prepared: 0	9-Jun-22 A	nalyzed: 10	0-Jun-22			
Benzene	1.96	0.050	mg/kg	2.00		98.0	83.4-122			
Toluene	2.01	0.050	mg/kg	2.00		100	84.2-126			
Ethylbenzene	1.90	0.050	mg/kg	2.00		95.2	84.2-121			
m,p-Xylene	3.78	0.100	mg/kg	4.00		94.5	89.9-126			
o-Xylene	1.86	0.050	mg/kg	2.00		92.8	84.3-123			
Total Xylenes	5.64	0.150	mg/kg	6.00		93.9	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0519		mg/kg	0.0500		104	69.9-140			
LCS Dup (2060919-BSD1)				Prepared: 0	9-Jun-22 A	nalyzed: 10	0-Jun-22			
Benzene	2.08	0.050	mg/kg	2.00		104	83.4-122	5.83	12.6	
Toluene	2.18	0.050	mg/kg	2.00		109	84.2-126	8.10	13.3	
Ethylbenzene	2.08	0.050	mg/kg	2.00		104	84.2-121	8.90	13.9	
m,p-Xylene	4.18	0.100	mg/kg	4.00		104	89.9-126	10.0	13.6	
o-Xylene	2.02	0.050	mg/kg	2.00		101	84.3-123	8.44	14.1	
Total Xylenes	6.20	0.150	mg/kg	6.00		103	89.1-124	9.52	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0531		mg/kg	0.0500		106	69.9-140			

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Celey D. Keene, Lab Director/Quality Manager



2617 W MARLAND Project Number:	PADUCA 6 SWD #1 Reported: 16039 03-Oct-22 08:58 LANCE CRENSHAW
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal	Laboratories
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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2060911 - General Prep - Organics										
Blank (2060911-BLK1)				Prepared &	Analyzed:	09-Jun-22				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	46.1		mg/kg	50.0		92.2	66.9-136			
Surrogate: 1-Chlorooctadecane	51.4		mg/kg	50.0		103	59.5-142			
LCS (2060911-BS1)				Prepared &	Analyzed:	09-Jun-22				
GRO C6-C10	179	10.0	mg/kg	200		89.6	78.5-128			
DRO >C10-C28	184	10.0	mg/kg	200		92.0	75.8-135			
Total TPH C6-C28	363	10.0	mg/kg	400		90.8	81.5-127			
Surrogate: 1-Chlorooctane	53.0		mg/kg	50.0		106	66.9-136			
Surrogate: 1-Chlorooctadecane	57.1		mg/kg	50.0		114	59.5-142			
LCS Dup (2060911-BSD1)				Prepared &	Analyzed:	09-Jun-22				
GRO C6-C10	191	10.0	mg/kg	200		95.4	78.5-128	6.28	21.4	
DRO >C10-C28	198	10.0	mg/kg	200		99.2	75.8-135	7.53	17.9	
Total TPH C6-C28	389	10.0	mg/kg	400		97.3	81.5-127	6.91	17.6	
Surrogate: 1-Chlorooctane	56.7		mg/kg	50.0		113	66.9-136			
Surrogate: 1-Chlorooctadecane	62.3		mg/kg	50.0		125	59.5-142			
Batch 2060921 - General Prep - Organics										
Blank (2060921-BLK1)				Prepared &	Analyzed:	09-Jun-22				

Blank (2060921-BLK1)				Prepared & Anal	lyzed: 09-Jun-22		
GRO C6-C10	ND	10.0	mg/kg				
DRO >C10-C28	ND	10.0	mg/kg				
EXT DRO >C28-C36	ND	10.0	mg/kg				
Surrogate: 1-Chlorooctane	55.5		mg/kg	50.0	111	66.9-136	
Surrogate: 1-Chlorooctadecane	56.3		mg/kg	50.0	113	59.5-142	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project: PADUCA 6 SWD # Project Number: 16039 Project Manager: LANCE CRENSHAV Fax To:	03-Oct-22 08:58
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2060921 - General Prep - Organics										
LCS (2060921-BS1)				Prepared &	Analyzed:	09-Jun-22				
GRO C6-C10	194	10.0	mg/kg	200		97.2	78.5-128			
DRO >C10-C28	183	10.0	mg/kg	200		91.7	75.8-135			
Total TPH C6-C28	378	10.0	mg/kg	400		94.4	81.5-127			
Surrogate: 1-Chlorooctane	59.7		mg/kg	50.0		119	66.9-136			
Surrogate: 1-Chlorooctadecane	62.5		mg/kg	50.0		125	59.5-142			
LCS Dup (2060921-BSD1)				Prepared &	Analyzed:	09-Jun-22				
GRO C6-C10	192	10.0	mg/kg	200		95.9	78.5-128	1.35	21.4	
DRO >C10-C28	181	10.0	mg/kg	200		90.6	75.8-135	1.18	17.9	
Total TPH C6-C28	373	10.0	mg/kg	400		93.3	81.5-127	1.27	17.6	
Surrogate: 1-Chlorooctane	61.5		mg/kg	50.0		123	66.9-136			
Surrogate: 1-Chlorooctadecane	64.2		mg/kg	50.0		128	59.5-142			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name	(575) 393-2326 FAX (575) 393-2 : Etech Environmental & Safety Solu	-	Inc			-				RI	LL TO					ANA	LYS	IS R	EOI	IEST		e 1 of :
Project Manage							-	P.O.	#:	-		at an a de ana	1			1	T	T	T	T	T	T
	7 West Marland						-	Com	-		Mewbo		1									
City: Hobbs	State: NM	Zip	: 88	240			-	Attn:			Robbie Ru						1					1
	5) 264-9884 Fax #:								ess:		NUDDIE NUI											
Project #: 160			Me	who	oume			-	ess.													
	Paduca 6 SWD 1							City:		-	71			Î	<u>a</u>							
	n: Rural Lea County, NM						-	State			Zip:		Chloride	TPH (8015M)	05							
								Phon					P	1 (8)	×							
FOR LAB USE ONLY	Matthew Greco	-	-	-	MA	TRIX		Fax	F: RESE	RV	SAMPL	ING	^o	1 de	BTEX (8021B)							
Lab I.D. 1 H222446	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER : ACID/BASE	ICE / COOL	OTHER :	DATE	TIME										
1	PS1 @ 0'	G	1		X				X		6/8/22		X	X	X			T				
2	PS2 @ 0'	G	1		X				X		6/8/22		X	X	x							
3	PS3 @ 0'	G	1		X				X		6/8/22		X	X	X	-	-	-	-		-	
4	PS4 @ 0'	G	1		X				X		6/8/22		X	X	X		-	-	-	-	-	-
5	PS5 @ 0'	G	1		X				X		6/8/22		X	X	X	-	-	-	-	-	-	1
6	TT1@0'	G	1		X		1		X		6/8/22	-	X	X	X		-	-	+	-	-	-
	TT1 @ 4'	G	1		X				X		6/8/22		X	X	X	+	-	-	+	+	+	-
2	TT1@7'	G	1		X				X		6/8/22		X	X	X	-	+	-	+	-	+	-
9	TT2 @ 0'	G	1		X				X		6/8/22		X	X	X		+-	-	+	+		-
EASE NOTE: Liphibu at	TT2 @ 4' d Damagee. Cardinal's liability and client's exclusive remedy for	G	1		X				X	miled to	6/8/22	id by the client for	X	X	X	1	1	1	1	1	_	1
alyses. All claims include	ing those for negligence and any other cause whatsoever shall be indinal be liable for incidental or consequental damages, includin	deeme	i walve	ed unles	es made i	n willin	ng and	received	by Can	dinal w	lihin 30 days allo	er completion of th	te applicat	bie								
	g out of or related to the performance of services hereunder by	Cardinal	reger		f whether								e. sult: it:	□ Ye □ Ye			I Phone I Fax #					
telinguished By	Time:	Re	ceiv	/ed E						0		Please e	mail r	esults	and cop	y of Co	C to p	m@e	etech	env.ca	om.	
Delivered By: Sampler - UPS	(Circle One) -35 - Bus - Other: -4.0	2	417	Sample Condition Cool Intact						ECK (Initi												

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	26 FAX (575) 393-2 nmental & Safety Solu	-	Inc			-	E	10	0	LL TO		-				ANAL	Veic	REC	ILEC	-	age 2 o	13
Company Name: Etech Enviro Project Manager: Lance Crens		tions	, IRC				P	0. #	-	LLIU	110-0	-	-	-	-	ANAL	1313	REG	IUES		T	-
Address: 2617 West Marland										March												
City: Hobbs	State: NM	Zip	88	240				omp	ariy	Mewbo												
Phone #: (575) 264-9884	Fax #:	-ib						ttn:		Robbie Ru	nneis											
Project #: 16039	Project Owne		Me	wbou	Ime		-	ddre	55:													
Project Name: Paduca 6 SWD 1	-		1010					ity:		7:			Î	8								
Project Location: Rural Lea Co							-	tate:		Zip:		ride	015	302								
Sampler Name: Matthew Grieco	any, tur							hone				Chloride	TPH (8015M)	BTEX (8021B)								
FOR LAB USE ONLY		-		-	MAT	RIX	Fa	PR	ESERV	SAMPL	ING	1°	1 A	E I					1			
Lab I.D. Samı H222 441	ole I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME											
11 TT2 @ 8' - R		G	1		X				X	6/8/22		X	X	X								
12 TT3@0'		G	1		X				X	6/8/22	-	X	X	X			-	_	-	_	-	-
13 TT3 @ 5'		G	1		X		-		X	6/8/22		X	X	X			_	-	-+		-	
14 TT3 @ 11'		G	1		X				X	6/8/22	-	X	X	X	-		-	-+	-	-+	+	\rightarrow
15 TT3 @ 18'		G	1		X		+	\vdash	X	6/8/22		X	X	X	-		-+	-+	\rightarrow	-+		
10 TT4 @ 0'		G	1		X		-	+	X	6/8/22		X	X	X	-		-+	-+	\rightarrow	-+	+	-+-
TT4 @ 2'		G	1	+	X		-	\vdash	X	6/8/22		X	X	X	-			-+	-+	+	+	-
18 WWS 1	V	C	1		X	-	+	+	X	6/8/22		X	X	X	-		-+	-+	-+	-+	-+-	-
19 FS13@4'2'	* ×	c c		+	X		-	+	X	6/8/22	-	X	X	X	-		-+	-+	-+	-+	+	+
PLEASE NOTE: Lisbility and Damages. Cardinal's liabili markess. All claims including those for negligence and i ervice. In no event shall cardinal be fields for incledent filliates or successors arising out of or related to the per Relinquished By: Relinquished By: Delivered By: (Circle One) Sampler - UPS - Bus - Other:	my other cause whatsoever shall be or connequential damages, includin	g withou Cardinal Re	d weiw t limits regar	ed unless ition, busi diess of y red B Ved B Ved B	made in ness inte whether : Y: MM	Conc Intact	and rec ns, loss of aim is be V	elved by af use, c sed upc	Cardinal r loss of p m any of t	rolls incurred by he above stated r	client, its subsidin ensons or otherni Phone Re Fax Resu	ries, ise. isult: it: S: for	D Ye	- R	No 90		ax #: tccl	5			Unar 7 9	1/30/1

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

of 255

	(575) 393-2326				_	_	_		P	BILL TO							-			010	-	FOT	Page 3	of 3																																																			
Company Name:		ental & Safety Solu	tions	s, I n	C.				-	20		BI	LL TO		-	-			NALY	SISF	REQU	EST	TT																																																				
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October 04, 2022

LANCE CRENSHAW

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/10/22 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 04-Oct-22 13:41
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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS 18 @ 4'	H222506-01	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 19 @ 4'	H222506-02	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 20 @ 4'	H222506-03	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 21 @ 4'	H222506-04	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 22 @ 4'	H222506-05	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 23 @ 4'	H222506-06	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 24 @ 4'	H222506-07	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 25 @ 4'	H222506-08	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 26 @ 4'	H222506-09	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 27 @ 4'	H222506-10	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 28 @ 4'	H222506-11	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 29 @ 4'	H222506-12	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 30 @ 4'	H222506-13	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 31 @ 4'	H222506-14	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 32 @ 4'	H222506-15	Soil	10-Jun-22 00:00	10-Jun-22 16:50
FS 33 @ 4'	H222506-16	Soil	10-Jun-22 00:00	10-Jun-22 16:50
SWS 1	H222506-17	Soil	10-Jun-22 00:00	10-Jun-22 16:50
WWS 1	H222506-18	Soil	10-Jun-22 00:00	10-Jun-22 16:50
EWS 4	H222506-19	Soil	10-Jun-22 00:00	10-Jun-22 16:50
EWS 5	H222506-20	Soil	10-Jun-22 00:00	10-Jun-22 16:50

10/04/22 - Client changed the sample ID on -17 (See COC). This is the revised report and will replace the one sent on 06/15/22.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Project Num Project Mana		Reported: 04-Oct-22 13:41					
			FS H2225	18 @ 4 506-01 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	4960		16.0	mg/kg	4	2061408	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2061319	JH/	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061319	JH/	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061319	JH/	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061319	JH/	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061319	JH/	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.5 %	69.9	-140	2061319	JH/	14-Jun-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B	
Surrogate: 1-Chlorooctane			100 %	66.9	-136	2061311	MS	13-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			117 %	59.5	-142	2061311	MS	13-Jun-22	8015B	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Project Num Project Mana	, ber: 160		Reported: 04-Oct-22 13:41									
FS 19 @ 4' H222506-02 (Soil)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	tories								
<u>Inorganic Compounds</u> Chloride	5120		16.0	mg/kg	4	2061408	AC	14-Jun-22	4500-Cl-B				
Volatile Organic Compounds by	EPA Method	8021											
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (PID)			98.4 %	69.9	-140	2061320	JH/	14-Jun-22	8021B				
Petroleum Hydrocarbons by GC	C FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctane			99.3 %	66.9	-136	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane			115 %	59.5	-142	2061311	MS	13-Jun-22	8015B				

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240		Project Num Project Mana	ber: 160		Reported: 04-Oct-22 13:41								
FS 20 @ 4' H222506-03 (Soil)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	ories								
<u>Inorganic Compounds</u> Chloride	3040		16.0	mg/kg	4	2061408	AC	14-Jun-22	4500-Cl-B				
Volatile Organic Compound	s by EPA Method 80	21											
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (Pl	D)		97.6 %	69.9	-140	2061320	JH/	14-Jun-22	8021B				
Petroleum Hydrocarbons by	GC FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctane			86.7 %	66.9	-136	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane			102 %	59.5	-142	2061311	MS	13-Jun-22	8015B				

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	Project Num Project Mana	ber: 160		Reported: 04-Oct-22 13:41									
FS 21 @ 4' H222506-04 (Soil)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	tories								
<u>Inorganic Compounds</u> Chloride	3240		16.0	mg/kg	4	2061408	AC	14-Jun-22	4500-Cl-B				
Volatile Organic Compounds	by EPA Method 8	8021											
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (PII	D)		98.1 %	69.9	-140	2061320	JH/	14-Jun-22	8021B				
Petroleum Hydrocarbons by	GC FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctane			98.9 %	66.9	-136	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane			114 %	59.5	-142	2061311	MS	13-Jun-22	8015B				

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*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Project Num Project Mana	, ber: 160		C	Reported: 04-Oct-22 13:41								
FS 22 @ 4' H222506-05 (Soil)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	tories								
<u>Inorganic Compounds</u> Chloride	3440		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B				
Volatile Organic Compounds by	EPA Method	8021											
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (PID)			97.2 %	69.9	-140	2061320	JH/	14-Jun-22	8021B				
Petroleum Hydrocarbons by GC	C FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctane			89.9 %	66.9	-136	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane		105 % 59.5-142			2061311	MS	13-Jun-22	8015B					

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240		Project Num Project Mana	, ber: 160		Reported: 04-Oct-22 13:41								
FS 23 @ 4' H222506-06 (Soil)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	ories								
Inorganic Compounds													
Chloride	2680		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B				
Volatile Organic Compounds	by EPA Method 802	21											
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (PII))		96.8 %	69.9	-140	2061320	JH/	14-Jun-22	8021B				
Petroleum Hydrocarbons by	GC FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctane			106 %	66.9	-136	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane			123 %	59.5	-142	2061311	MS	13-Jun-22	8015B				

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240		Project Num Project Mana		C	Reported: 04-Oct-22 13:41								
FS 24 @ 4' H222506-07 (Soil)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	ories								
Inorganic Compounds													
Chloride	3640		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B				
Volatile Organic Compounds	s by EPA Method 80	021											
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (PI	D)		98.1 %	69.9	-140	2061320	JH/	14-Jun-22	8021B				
Petroleum Hydrocarbons by	GC FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctane			99.1 %	66.9	-136	2061311	MS	13-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane			114 %	59.5	-142	2061311	MS	13-Jun-22	8015B				

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions Project: PADUCA 6 SWD #1 Reported: 2617 W MARLAND Project Number: 16039 04-Oct-22 13:41 HOBBS NM, 88240 Project Manager: LANCE CRENSHAW Fax To: PROJECT OF MERCING								C	•	41
			FS H2225	25 @ 4 506-08 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	3080		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 802	21								
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		97.4 %	69.9	-140	2061320	JH/	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	13-Jun-22	8015B	
Surrogate: 1-Chlorooctane			94.2 %	66.9	-136	2061311	MS	13-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			109 %	59.5	-142	2061311	MS	13-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	DUCA 6 SW 39 CE CRENSI			C	Reported:)4-Oct-22 13:4	11				
				26 @ 4 506-09 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
<u>Inorganic Compounds</u> Chloride	2200		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PL	D)		98.1 %	69.9	-140	2061320	JH/	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			95.5 %	66.9	-136	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			111 %	59.5	-142	2061311	MS	14-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project Num Project Mana		Reported: 04-Oct-22 13:41					
			FS H222	27 @ 4 506-10 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	4680		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	3021								
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PII	D)		98.4 %	69.9	-140	2061320	JH/	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			<i>99.2 %</i>	66.9	-136	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			115 %	59.5	-142	2061311	MS	14-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety SolutionsProject:PADUCA 6 SWD #1Reported:2617 W MARLANDProject Number:1603904-Oct-22 13:41HOBBS NM, 88240Project Manager:LANCE CRENSHAWFax To:Fax To:Fax To:								41		
			FS H222	28 @ 4 506-11 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ll Laborat	ories					
Inorganic Compounds	~~~~		16.0	4		20(1417	10	14.1 22	4500 CL D	
Chloride	6800		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	021								
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Ph	ID)		97.7 %	69.9	-140	2061320	JH/	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
DRO >C10-C28*	30.5		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			102 %	66.9	-136	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			121 %	59.5	-142	2061311	MS	14-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



HOBBS NM, 88240 Project Manager: LANCE CRENSHAW Fax To:								C	Reported:)4-Oct-22 13:4	41
			FS H222:	29 @ 4 506-12 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	2480		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 80	21								
Benzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061320	JH/	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PI	D)		97.7 %	69.9	-140	2061320	JH/	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			99.6 %	66.9	-136	2061311	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			117 %	59.5	-142	2061311	MS	14-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safet 2617 W MARLAND HOBBS NM, 88240	y Solutions		Project Num Project Mana Fax	ber: 160 ger: LAN To:	ice Crensi			(Reported:)4-Oct-22 13:/	41
			FS H2225	30 @ 4 506-13 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	1600		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds by	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061403	ЛН	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			102 %	69.9	-140	2061403	JH	14-Jun-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
DRO >C10-C28*	11.7		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			88.5 %	66.9	-136	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			96.3 %	59.5	-142	2061327	MS	14-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety SolutionsProject:PADUCA 6 SWD #1Reported:2617 W MARLANDProject Number:1603904-Oct-22 13HOBBS NM, 88240Project Manager:LANCE CRENSHAWFax To:Fax To:								•	41	
			FS H222	31 @ 4 506-14 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	3400		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	ЛН	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PIL))		102 %	69.9	-140	2061403	ЈН	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
DRO >C10-C28*	13.6		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			96.4 %	66.9	-136	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			104 %	59.5	-142	2061327	MS	14-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safet 2617 W MARLAND HOBBS NM, 88240	y Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 04-Oct-22 13:41		
			FS H2225	32 @ 4 506-15 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	tories						
<u>Inorganic Compounds</u> Chloride	1150		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B		
Volatile Organic Compounds by	y EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			102 %	69.9	-140	2061403	ЈН	14-Jun-22	8021B		
Petroleum Hydrocarbons by G	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctane			90.0 %	66.9	-136	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			94.2 %	59.5	-142	2061327	MS	14-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Project Num Project Mana	ber: 160 ger: LAN To:	ice Crensi			(Reported:)4-Oct-22 13:	41
				506-16 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds	20(0		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Chloride	2960		16.0	mg/kg	4	2001417	AC	14-Jun-22	4300-СІ-В	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			101 %	69.9	-140	2061403	JH	14-Jun-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
DRO >C10-C28*	12.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			86.2 %	66.9	-136	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			92.3 %	59.5	-142	2061327	MS	14-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ty Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 04-Oct-22 13:41		
				WS 1 506-17 (Se	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	tories						
<u>Inorganic Compounds</u> Chloride	208		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B		
Volatile Organic Compounds b	oy EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	ЛН	14-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID))		102 %	69.9	-140	2061403	ЈН	14-Jun-22	8021B		
Petroleum Hydrocarbons by G	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctane			85.3 %	66.9	-136	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			88.6 %	59.5	-142	2061327	MS	14-Jun-22	8015B		

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	afety Solutions		Project Num Project Mana		Reported: 04-Oct-22 13:41					
				VWS 1 506-18 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	ıl Laborat	ories					
Inorganic Compounds										
Chloride	6000		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	21								
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	ЈН	14-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		102 %	69.9	-140	2061403	ЛН	14-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctane			83.4 %	66.9	-136	2061327	MS	14-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			89.3 %	59.5	-142	2061327	MS	14-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ty Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 04-Oct-22 13:41		
			-	EWS 4 506-19 (So	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	432		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B		
Volatile Organic Compounds b	oy EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	ЛН	14-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID))		103 %	69.9	-140	2061403	ЈН	14-Jun-22	8021B		
Petroleum Hydrocarbons by G	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctane			90.9 %	66.9	-136	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			95.3 %	59.5	-142	2061327	MS	14-Jun-22	8015B		

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safet 2617 W MARLAND HOBBS NM, 88240	y Solutions	Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 04-Oct-22 13:41			
				EWS 5 506-20 (So	oil)						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	1040		16.0	mg/kg	4	2061417	AC	14-Jun-22	4500-Cl-B		
Volatile Organic Compounds by	y EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2061403	ЛН	14-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2061403	JH	14-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			102 %	69.9	-140	2061403	JH	14-Jun-22	8021B		
Petroleum Hydrocarbons by G	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctane			81.9 %	66.9	-136	2061327	MS	14-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			86.5 %	59.5	-142	2061327	MS	14-Jun-22	8015B		

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety SolutionsProject:PADUCA 6 SWD #12617 W MARLANDProject Number:16039HOBBS NM, 88240Project Manager:LANCE CRENSHAWFax To:Fax To:Fax To:	Reported: 04-Oct-22 13:41
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Inorganic Compounds - Quality Control

Cardinal Laboratories

	Reporting		Spike	Source		%REC		RPD	
Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
			Prepared &	Analyzed:	14-Jun-22				
ND	16.0	mg/kg							
			Prepared &	z Analyzed:	14-Jun-22				
416	16.0	mg/kg	400		104	80-120			
			Prepared &	Analyzed:	14-Jun-22				
432	16.0	mg/kg	400		108	80-120	3.77	20	
			Prepared &	Analyzed:	14-Jun-22				
ND	16.0	mg/kg							
			Prepared &	Analyzed:	14-Jun-22				
432	16.0	mg/kg	400		108	80-120			
			Prepared &	Analyzed:	14-Jun-22				
432	16.0	mg/kg	400		108	80-120	0.00	20	
	ND 416 432 ND 432	Result Limit ND 16.0 416 16.0 432 16.0 ND 16.0 432 16.0	Result Limit Units ND 16.0 mg/kg 416 16.0 mg/kg 432 16.0 mg/kg ND 16.0 mg/kg	Result Limit Units Level Prepared & ND 16.0 mg/kg 416 16.0 mg/kg 400 416 16.0 mg/kg 400 432 16.0 mg/kg 400 Prepared & ND 16.0 mg/kg Prepared & Prepared & 16.0 mg/kg 400	Result Limit Units Level Result Prepared & Analyzed: ND 16.0 mg/kg 416 16.0 mg/kg 400 416 16.0 mg/kg 400 432 16.0 mg/kg 400 Prepared & Analyzed: MD 16.0 mg/kg Prepared & Analyzed: Prepared & Analyzed:	Result Limit Units Level Result %REC Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg Prepared & Analyzed: 14-Jun-22 416 16.0 mg/kg 400 104 Prepared & Analyzed: 14-Jun-22 Prepared & Analyzed: 14-Jun-22 108 432 16.0 mg/kg 400 108 Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg 400 108 Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg 400 108 Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg 400 108 Prepared & Analyzed: 14-Jun-22 MD 16.0 mg/kg 400 108 Prepared & Analyzed: 14-Jun-22 432 16.0 mg/kg 400 108 Prepared & Analyzed: 14-Jun-22	Result Limit Units Level Result %REC Limits Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg Prepared & Analyzed: 14-Jun-22 416 16.0 mg/kg 400 104 80-120 416 16.0 mg/kg 400 108 80-120 432 16.0 mg/kg 400 108 80-120 Prepared & Analyzed: 14-Jun-22 MD 16.0 mg/kg 400 108 80-120 Prepared & Analyzed: 14-Jun-22 MD 16.0 mg/kg 400 108 80-120 Prepared & Analyzed: 14-Jun-22 MD 16.0 mg/kg 400 108 80-120 Prepared & Analyzed: 14-Jun-22 432 16.0 mg/kg 400 108 80-120 Prepared & Analyzed: 14-Jun-22	Result Limit Units Level Result %REC Limits RPD Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg Prepared & Analyzed: 14-Jun-22	Result Limit Units Level Result %REC Limits RPD Limit Prepared & Analyzed: 14-Jun-22 ND 16.0 mg/kg Prepared & Analyzed: 14-Jun-22

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 04-Oct-22 13:41
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal I	Laboratories
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Amalarta	Result	Reporting Limit	Units	Spike	Source	%REC	%REC	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Result	%KEC	Limits	KPD	Limit	Notes
Batch 2061319 - Volatiles										
Blank (2061319-BLK1)				Prepared: 1	3-Jun-22 A	nalyzed: 14	4-Jun-22			
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		96.9	69.9-140			
LCS (2061319-BS1)				Prepared: 1	3-Jun-22 A	nalyzed: 14	4-Jun-22			
Benzene	2.07	0.050	mg/kg	2.00		104	83.4-122			
Toluene	2.08	0.050	mg/kg	2.00		104	84.2-126			
Ethylbenzene	2.01	0.050	mg/kg	2.00		101	84.2-121			
m,p-Xylene	4.25	0.100	mg/kg	4.00		106	89.9-126			
o-Xylene	2.01	0.050	mg/kg	2.00		101	84.3-123			
Total Xylenes	6.26	0.150	mg/kg	6.00		104	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0475		mg/kg	0.0500		95.1	69.9-140			
LCS Dup (2061319-BSD1)				Prepared: 1	3-Jun-22 A	nalyzed: 14	4-Jun-22			
Benzene	2.04	0.050	mg/kg	2.00		102	83.4-122	1.47	12.6	
Toluene	2.06	0.050	mg/kg	2.00		103	84.2-126	0.998	13.3	
Ethylbenzene	2.00	0.050	mg/kg	2.00		100	84.2-121	0.588	13.9	
m,p-Xylene	4.23	0.100	mg/kg	4.00		106	89.9-126	0.377	13.6	
o-Xylene	1.99	0.050	mg/kg	2.00		99.5	84.3-123	1.12	14.1	
Total Xylenes	6.22	0.150	mg/kg	6.00		104	89.1-124	0.615	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0478		mg/kg	0.0500		95.7	69.9-140			

Batch 2061320 - Volatiles

Blank (2061320-BLK1)			Prepared & Analyzed: 13-Jun-22
Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Volatile Organic Compounds by EPA Method 8021 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2061320 - Volatiles										
Blank (2061320-BLK1)				Prepared &	Analyzed:	13-Jun-22				
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.6	69.9-140			
LCS (2061320-BS1)				Prepared &	k Analyzed:	13-Jun-22				
Benzene	1.92	0.050	mg/kg	2.00		96.2	83.4-122			
Toluene	1.92	0.050	mg/kg	2.00		96.2	84.2-126			
Ethylbenzene	1.88	0.050	mg/kg	2.00		94.1	84.2-121			
m,p-Xylene	4.00	0.100	mg/kg	4.00		100	89.9-126			
o-Xylene	1.90	0.050	mg/kg	2.00		95.1	84.3-123			
Total Xylenes	5.90	0.150	mg/kg	6.00		98.4	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0471		mg/kg	0.0500		94.1	69.9-140			
LCS Dup (2061320-BSD1)				Prepared &	k Analyzed:	13-Jun-22				
Benzene	2.02	0.050	mg/kg	2.00		101	83.4-122	5.00	12.6	
Toluene	2.04	0.050	mg/kg	2.00		102	84.2-126	5.70	13.3	
Ethylbenzene	1.98	0.050	mg/kg	2.00		98.9	84.2-121	4.96	13.9	
m,p-Xylene	4.19	0.100	mg/kg	4.00		105	89.9-126	4.51	13.6	
o-Xylene	1.97	0.050	mg/kg	2.00		98.5	84.3-123	3.54	14.1	
Total Xylenes	6.15	0.150	mg/kg	6.00		103	89.1-124	4.20	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0472		mg/kg	0.0500		94.4	69.9-140			
Batch 2061403 - Volatiles										
Blank (2061403-BLK1)				Prepared &	z Analyzed:	14-Jun-22				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0506		mg/kg	0.0500		101	69.9-140			

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 04-Oct-22 13:41
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2061403 - Volatiles										
LCS (2061403-BS1)				Prepared &	Analyzed:	14-Jun-22				
Benzene	1.97	0.050	mg/kg	2.00		98.5	83.4-122			
Toluene	2.02	0.050	mg/kg	2.00		101	84.2-126			
Ethylbenzene	1.92	0.050	mg/kg	2.00		95.8	84.2-121			
m,p-Xylene	4.03	0.100	mg/kg	4.00		101	89.9-126			
p-Xylene	1.92	0.050	mg/kg	2.00		95.8	84.3-123			
Total Xylenes	5.94	0.150	mg/kg	6.00		99.0	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0496		mg/kg	0.0500		99.2	69.9-140			
LCS Dup (2061403-BSD1)				Prepared &	Analyzed:	14-Jun-22				
Benzene	1.94	0.050	mg/kg	2.00		96.9	83.4-122	1.60	12.6	
Toluene	2.00	0.050	mg/kg	2.00		100	84.2-126	0.771	13.3	
Ethylbenzene	1.89	0.050	mg/kg	2.00		94.6	84.2-121	1.23	13.9	
m,p-Xylene	3.98	0.100	mg/kg	4.00		99.5	89.9-126	1.17	13.6	
p-Xylene	1.93	0.050	mg/kg	2.00		96.6	84.3-123	0.915	14.1	
Total Xylenes	5.91	0.150	mg/kg	6.00		98.6	89.1-124	0.496	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0487		mg/kg	0.0500		97.4	69.9-140			

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 04-Oct-22 13:41	
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal I	Laboratories
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		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2061311 - General Prep - Organics										
Blank (2061311-BLK1)				Prepared &	Analyzed:	13-Jun-22				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	49.8		mg/kg	50.0		99.6	66.9-136			
Surrogate: 1-Chlorooctadecane	55.6		mg/kg	50.0		111	59.5-142			
LCS (2061311-BS1)				Prepared &	Analyzed:	13-Jun-22				
GRO C6-C10	200	10.0	mg/kg	200		100	78.5-128			
DRO >C10-C28	213	10.0	mg/kg	200		106	75.8-135			
Total TPH C6-C28	413	10.0	mg/kg	400		103	81.5-127			
Surrogate: 1-Chlorooctane	53.1		mg/kg	50.0		106	66.9-136			
Surrogate: 1-Chlorooctadecane	61.2		mg/kg	50.0		122	59.5-142			
LCS Dup (2061311-BSD1)				Prepared &	Analyzed:	13-Jun-22				
GRO C6-C10	208	10.0	mg/kg	200		104	78.5-128	3.95	21.4	
DRO >C10-C28	231	10.0	mg/kg	200		115	75.8-135	7.98	17.9	
Total TPH C6-C28	439	10.0	mg/kg	400		110	81.5-127	6.05	17.6	
Surrogate: 1-Chlorooctane	57.3		mg/kg	50.0		115	66.9-136			
Surrogate: 1-Chlorooctadecane	65.7		mg/kg	50.0		131	59.5-142			

Blank (2061327-BLK1)				Prepared & Ana	lyzed: 13-Jun-22		
GRO C6-C10	ND	10.0	mg/kg				
DRO >C10-C28	ND	10.0	mg/kg				
EXT DRO >C28-C36	ND	10.0	mg/kg				
Surrogate: 1-Chlorooctane	47.5		mg/kg	50.0	95.0	66.9-136	
Surrogate: 1-Chlorooctadecane	50.3		mg/kg	50.0	101	59.5-142	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



	Project: PADUCA 6 SWD #1 ject Number: 16039 ject Manager: LANCE CRENSHAW Fax To:	Reported: 04-Oct-22 13:41
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2061327 - General Prep - Organics										
LCS (2061327-BS1)				Prepared &	Analyzed:	13-Jun-22				
GRO C6-C10	214	10.0	mg/kg	200		107	78.5-128			
DRO >C10-C28	227	10.0	mg/kg	200		113	75.8-135			
Total TPH C6-C28	440	10.0	mg/kg	400		110	81.5-127			
Surrogate: 1-Chlorooctane	52.9		mg/kg	50.0		106	66.9-136			
Surrogate: 1-Chlorooctadecane	57.8		mg/kg	50.0		116	59.5-142			
LCS Dup (2061327-BSD1)				Prepared &	Analyzed:	13-Jun-22				
GRO C6-C10	222	10.0	mg/kg	200		111	78.5-128	3.87	21.4	
DRO >C10-C28	230	10.0	mg/kg	200		115	75.8-135	1.46	17.9	
Total TPH C6-C28	452	10.0	mg/kg	400		113	81.5-127	2.64	17.6	
Surrogate: 1-Chlorooctane	57.6		mg/kg	50.0		115	66.9-136			
Surrogate: 1-Chlorooctadecane	60.7		mg/kg	50.0		121	59.5-142			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

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

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 30 of 31

Company Name:	Etech	Environm	nental	& Safety Sol	utions	, Ind	C.				Т			BI	LI	L TO						AN	ALYS	is	REC	QUES	ST			
Project Manager	Lance	CICAS	shaw	/							1	2.0	#:									T	T	T						Γ
	Box 301		1			_	-				0	Con	npar	y; 7	ne	whow	rne	1												
City: Lovington	n		S	itate: NM	Zip	:88	260)			1	ttn	: 7	066	ie	Runn	rels													
Phone #: (575)	396-2378	3	F	ax #: (575)	396-1	429	1						ress			A day have														
Project #:			P	roject Own	97:						C	City	:			-		1												
Project Name: 7	Paduci	26	Sw	0 #1.			the opposite				15	stat	e:		Zi	p:			TPH (8015M)	BTEX (8021B)										
Project Location											F	ho	ne i					Chloride	801	(80)										
Sampler Name:	Aaron t	ids									F	ax	#:					CP	H	EX										
FOR LAB USE ONLY	11				T	Γ		1	ATT	RIX		F	RES	ERV.		SAMPLI	NG	1	1	a										
Lab I.D. H222506		Sampl	e I.D		(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	OTHER :		DATE	TIME													
1	FS	18	A	4Ft		X			X				X		6	10-22		X	X	X										
2	FS	19	1			1			1				1			1		1	1	1							-			
3	FS	20				Ш			4	_	-	1			L						-	-		-	_					1
4	FS	21	-		+	11			++	_	_	+			L			H	++-		-	+		+	-+	-				+
5	FS	22			+	H	+		++	-		+	-		⊢			\mathbf{H}	++		-	+	+	+	-+					+
67	FS	23	+		+-	₽			++	-+		+	-		⊢				++	+ +-	+	+	+	+	-	-			-	+
8	FS	24	+		+	₩	\vdash		++	+	+	+	-		⊢	-			++-	++-	+-	+		+	-+					+
9	FS	26	1	1	+	H			++	-+	-+-	t			H	1				++-	1	+	+	+		-		-		t
10	FS	27	V	W	-	V	F		6	+	-	+	1	1	F	¥		V	V	U	1	+	1	+	-					t
nervice. In no event shull Car affiliates or successors arisin Relinquished By Acon Ala Relinquished By	g those for neglig rdinal be liable fo g out of or relate	ponce and any r incidential or d to the perform	other cause consequent mance of a	Dete: //0/2 Time: 50 Date:	a deerer ing willion Cardina Z Re Z Re	ut limit L, rega	ved ved ved ved	By: By:	ade in to as inter atter s		nan, han airm is Me		ed by C ne, ar i 1 upon	ardinal i max of pa any of the Of	nibir rollio te ab	t 30 days afte incontrol by c cove similar re	ir completion of i dient, its subsidie	te applica alon, <u>ino.</u> iss <u>urit:</u> it: S:		HS	No No	Add	fl Phon fl Fax # env.co	¥:						
Delivered By: Sampler-UPS FORM-006	(Circle) - Bus - (One) Other:	3			#3		Coo	ple (I li Yes No		t Yes No		0	HEAD	k	AJ -	, written o			E7E 20	2.24	76								_

Revision 1.0

Page 139 of 255

ARDINAL LABORATORIES

Page 140 of 255

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 31 of 31

Company Name:	Etech Environm	nental & Safety Sol	itions	, Inc	2			T		-	BI	LL TO						AN/	ALYS	IS R	REQU	EST			
Project Manager	: Zance Cri								P.O.		-			1				T	T	T	T	T	T		T
Address: P.O.	and a subscription of the		and the second second						Com	pany	v: 7	newbour	ne	1											
City: Lovingto	n	State: NM	Zip	: 88	260				Attn:	1	66	ie Kunn	els												
Phone #: (575) 396-2378	Fax #: (575)	396-1	429					Addr			- punn	C.R.C	1											
Project #:		Project Owne	H:						City:																
Project Name: 7	Bduco 6	SWD #1							State			Zip:			(W)	(a)									
Project Location								-	hon					pro	3016	802									
Sampler Name:	Aaron Res								ax					Chloride	TPH (8015M)	BTEX (8021B)									
FOR LAB USE ONLY	Marines		T			MA	TRIX		-	-	ERV.	SAMPLI	NG	Ĭ	4	E E									1
Lab I.D. H272506	Sampl	e I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER : ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME												
11	FS 28	@ 4 Ft		Y		X			Τ	X		6-10-22		X	X	X									
12	F5 29	@ 4 Ft		X		X				X		1		X	×	X									
13	FS 30	@ 4 Ft		×		X				X				×	×	×									
14	FS 31	@ 4 Ft		X		X	-		1	X				×	X	×							-		
15	FS 32	6 4 Ft		X		X				×				×	x	X		-						-	
16	FS 33	ØYH	-	X		X			_	X				×	X	X		-	-		-	-	-		-
× 17	Sw15 1.		1	X		×			1	X				X	×	×	-	-	-	-		-	-	-	-
18	wws 1.		+	X		X	-		+	X				X	X	X	-	-	-	+-		-	-	-	1
19	Ews 4.		+	X	-+-	X		-	-	X	-	\uparrow		Y ,	×	X	-		+	+	+	-	+	-	
PLEASE NOTE: Lishih and	EWS 5.	and client's exclusive remedy for	any chair	x arisis	g wheth	y bines	in con	fract of	tort, sh	A be i	inshed (o the amount pair	t by the client for	X	×	X		1				-			
analyses. All claims including	Hose for negligence and any	other cause wheteoever shall b consequented damages, include	deeme	d waiw	ed unless	made	n weilin	g and r	scelved	by Ca	rdinal v	ditain 30 days aller	completion of B	he applical	bla										
	out of or related to the perfor	mance of services hereunder by	Cardina	i, regar		shether							Phone Re		[] Ye	s []	No	Add	1 Phon	n #:					
Arenfies		Times 50	5	All	d	Ľ	1	K	M	D	Ð	n	Fax Resul	Ht: S:	□ Ye	s 🛛	No	Add	'I Fax #	k:					
Relinquíshed By		Date: Time:	Re	Ceiv	ed B								+ Please e								ze.	ЪĻ	?- 10	0/4/2	22
Delivered By: Sampler - UPS		5,82	41)	3	Sa	TYes No	Con Intac	ditio Yes	n	СН	(Init	ED/BY:													

Received by OCD: 10/6/2022 4:46:52 PM



June 17, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/14/22 16:54.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 34 @ 4' (H222553-01)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/15/2022	ND	2.14	107	2.00	6.08	
Toluene*	<0.050	0.050	06/15/2022	ND	2.12	106	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/15/2022	ND	2.07	103	2.00	5.77	
Total Xylenes*	<0.150	0.150	06/15/2022	ND	6.44	107	6.00	5.97	
Total BTEX	<0.300	0.300	06/15/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4000	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	85.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	83.1	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 35 @ 4' (H222553-02)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2022	ND	2.14	107	2.00	6.08	
Toluene*	<0.050	0.050	06/15/2022	ND	2.12	106	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/15/2022	ND	2.07	103	2.00	5.77	
Total Xylenes*	<0.150	0.150	06/15/2022	ND	6.44	107	6.00	5.97	
Total BTEX	<0.300	0.300	06/15/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.1	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	94.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	92.3	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 36 @ 4' (H222553-03)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2022	ND	2.14	107	2.00	6.08	
Toluene*	<0.050	0.050	06/15/2022	ND	2.12	106	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/15/2022	ND	2.07	103	2.00	5.77	
Total Xylenes*	<0.150	0.150	06/15/2022	ND	6.44	107	6.00	5.97	
Total BTEX	<0.300	0.300	06/15/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.6	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	97.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	96.9	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 37 @ 4' (H222553-04)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2022	ND	2.14	107	2.00	6.08	
Toluene*	<0.050	0.050	06/15/2022	ND	2.12	106	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/15/2022	ND	2.07	103	2.00	5.77	
Total Xylenes*	<0.150	0.150	06/15/2022	ND	6.44	107	6.00	5.97	
Total BTEX	<0.300	0.300	06/15/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	97.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	96.0	% 59.5-14	2						

Cardinal Laboratories

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 38 @ 4' (H222553-05)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2022	ND	2.14	107	2.00	6.08	
Toluene*	<0.050	0.050	06/15/2022	ND	2.12	106	2.00	4.96	
Ethylbenzene*	<0.050	0.050	06/15/2022	ND	2.07	103	2.00	5.77	
Total Xylenes*	<0.150	0.150	06/15/2022	ND	6.44	107	6.00	5.97	
Total BTEX	<0.300	0.300	06/15/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	105	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	104	% 59.5-14	2						

Cardinal Laboratories

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 39 @ 4' (H222553-06)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	<i>98.3</i>	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	107	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	104	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 40 @ 4' (H222553-07)

BTEX 8021B	mg,	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	189	94.5	200	5.49	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	191	95.4	200	9.55	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	89.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	86.7	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 41 @ 4' (H222553-08)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.2	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	192	96.0	200	6.76	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	200	99.8	200	6.75	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	93.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	104	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/14/2022	Sampling Date:	06/14/2022
Reported:	06/17/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 42 @ 4' (H222553-09)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.7	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	06/15/2022	ND	432	108	400	3.64	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/15/2022	ND	192	96.0	200	6.76	
DRO >C10-C28*	<10.0	10.0	06/15/2022	ND	200	99.8	200	6.75	
EXT DRO >C28-C36	<10.0	10.0	06/15/2022	ND					
Surrogate: 1-Chlorooctane	88.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	97.4	% 59.5-14	2						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 12 of 12

101 East Marland, Hobbs, NM 88240

(575) 393-2326 FAX (575) 393-2476

	Environmental & Safety Solu	tions	s, Inc	2			BILL TO ANALYSIS REQUEST															
Project Manager: Jace	Crenshaw						P.0	. #:									T	T		1		
Address: P.O. Box 301							Company: Mewbourne			1												
City: Lovington	State: NM	Zip	: 88	260		-	Attr	1: 1	1.h	hie 7	unnel	5										
Phone #: (575) 396-2378	Phone #: (575) 396-2378 Fax #: (575) 396-1429						ires		10-10		4											
Project #: 16039 Project Owner: Project Name: PodUCa 6 SuD # 1.					City					1												
Project Name: Partin	a 6 SUD#1	/					Sta			Zip:			Ŵ	BTEX (8021B)								
Project Location:	a c my + 1						-	one :	#-	Lip.		Chloride	TPH (8015M)	000								
Sampler Name: Aaron	Riac						Fax					1 Se	E B	2								
FOR LAB USE ONLY	100	T		N	ATE	ЧX	_	-	SERV	SAMP	LING	1	TP	Ë								
Lab I.D. 5	ample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER	SOIL	OIL	OTHER :	ACID/BASE:	ICE / COOL OTHER :	DATE	TIME											
I FS	54 @ 4Ft		X		X					6-14-2	2	V	V		X		1	1				
2 FS	35 1		X		K					-		X	X)			1					
2 FS 3 FS 4 FS	36		X		X					-		X	X	1			1		1			
4 FS	37		X		X							X	X	X								
5 F3	38		X		X							X	X	X								
G FS	39		X		X							X	X	X								
7 FS	40		X		x							X	X	X								
8 FS	41 11.		X		X							X	X	×	1							
9 F5	42		X		X							X	L	X								
AR F			×		*	-	-				-	1	1	7	-							
PLEASE NOTE: Liability and Damages. Card analyses. All claims including tioos for anyling service. In no overst strail cardnal be indea for atilitates or successors arising out of or related Relinquished By: Relinquished By: Delivered By: (Circle C Sampler - UPS - Bus - C	Inclant any other cause vehatiosever shall be includented or consequential damages, including to the performance of services hereauder by Date: Time: 1650 Date: Time: One) 4.8° 2-0.5°	Re	nd walw ut limits celv celv	ed anders no disn, business rdiess of whet wed By: wed By: yed By: Same	de in w interr her su ()	nilling and uptions, i ch claim			Cardinal close of p a any of th CHEC	within 30 days a arollin incurved t he above stated	itter completion o ly client, its subsi	f the upplic limite, wise. tesuit: uit: KS:		85	D No	Add	1 Phone 1 Fax #	:				

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June 20, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/15/22 16:03.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 43 @ 4' (H222569-01)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	QR-03
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1440	16.0	06/16/2022	ND	384	96.0	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	86.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	95.2	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 44 @ 4' (H222569-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.0	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	06/16/2022	ND	384	96.0	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	82.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	92.1	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 45 @ 4' (H222569-03)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.5	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3320	16.0	06/16/2022	ND	384	96.0	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	87.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	99.2	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 46 @ 4' (H222569-04)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.3	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	06/16/2022	ND	384	96.0	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	93.6	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	105	% 59.5-14	2						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 47 @ 4' (H222569-05)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.5	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2000	16.0	06/16/2022	ND	384	96.0	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	93.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	103	% 59.5-14	2						

Cardinal Laboratories

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 48 @ 4' (H222569-06)

BTEX 8021B	mg	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	06/16/2022	ND	448	112	400	3.64	QM-07
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	90.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	100	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 49 @ 4' (H222569-07)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	96.5	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3000	16.0	06/16/2022	ND	448	112	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	91.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	101	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 50 @ 4' (H222569-08)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.1	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2640	16.0	06/16/2022	ND	448	112	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	87.5	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	97.6	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 51 @ 4' (H222569-09)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.18	109	2.00	3.80	
Toluene*	<0.050	0.050	06/16/2022	ND	2.15	108	2.00	3.61	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	2.09	104	2.00	3.25	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.44	107	6.00	2.97	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.4	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3480	16.0	06/16/2022	ND	448	112	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	92.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	103	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/15/2022	Sampling Date:	06/15/2022
Reported:	06/20/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 52 @ 4' (H222569-10)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/16/2022	ND	2.08	104	2.00	1.57	
Toluene*	<0.050	0.050	06/16/2022	ND	2.07	104	2.00	0.666	
Ethylbenzene*	<0.050	0.050	06/16/2022	ND	1.97	98.7	2.00	1.49	
Total Xylenes*	<0.150	0.150	06/16/2022	ND	6.17	103	6.00	2.17	
Total BTEX	<0.300	0.300	06/16/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1520	16.0	06/16/2022	ND	448	112	400	3.64	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/16/2022	ND	184	92.2	200	7.97	
DRO >C10-C28*	<10.0	10.0	06/16/2022	ND	192	95.9	200	8.82	
EXT DRO >C28-C36	<10.0	10.0	06/16/2022	ND					
Surrogate: 1-Chlorooctane	89.6	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	99.4	% 59.5-14	2						

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

E.	00/04/			150
A	RDINAL	LABO	RATOR	IES
	101 East	Marland, H	obbs. NM	88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

240



(575) 393-2326 FAX (575) 393-24 Company Name: Etech Environmental & Safety Solut		BILL TO			ANALYSIS REQUEST
Project Manager: Lance (Constraw		P.O. #:		II	
Address: P.O. Box 301		Company: Meubeurne			
City: Lovington State: NM	Zip: 88260	Attn: Robbie Kennels			
Phone #: (575) 396-2378 Fax #: (575) 3		Address:			
Project #: /60.39 Project Owner		City:			
Project Name: Paduca 6 SwD #1			. W	(8)	
Project Location:			Chioride TPH (8015M)	BTEX (8021B)	
Sampler Name: John fics		Phone #:	hlo 1 (8	X	
FOR LAB USE ONLY	MATRIX	Fax #: PRESERV SAMPLING	OL	E	
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL	OTHER : ACID/BASE: ICE / COOL OTHER : amit alva			
IFS 43 QUFF	X Y	6-15-22	XX	X	
2 FS 44 1	XX		XX	X	
3 FS 45	V X		XX	×	
4 FS 46	XX		XX	×	
	XX		XX	×	
6 FS 48	XX		XX	×	
7 FS 49	XX		XX	X	
5 FS 47 47 4 FS 48 7 FS 49 8 FS 50 9 FS 51 $ 7 $	XX		XX	X	
	XX	NU	XX	X	
D FS 50 PLEANE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for a	XX		XV	X	
analyses. All claims including those for negligence and any effer cause whatever shall be service. In no event shall Cardinal be liable for incldental or consequential damages, including dilliates or accessors atting out of or related to the performance of services hereunder by C Relinquished By: <i>Underfulf</i> Relinquished By: Date: Time: Delivered By: (Circle One) 5.9° (C-0.5) Sampler - UPS - Bus - Other: 5.4° +	without limitation, but near interruptions, ardinal, regardless of whother such claim Received By: Received By: Received By:	Ions of use, or loss of profile incurred by client, its substitle is based upon any of the above stated reasons or otherwise Phome Re Fax Resul REMARKS Please e ion CHECKED BY: (Initials)	ion, 19. suit: 19 t: 19 Y S:	fes 🗆 Nic	

Released to Imaging: 10/25/2022 12:39:39 PM

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October 03, 2022

LANCE CRENSHAW

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/17/22 15:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 03-Oct-22 09:01
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Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS 10 @ 2'	H222609-01	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 11 @ 2'	H222609-02	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 12 @ 2'	H222609-03	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 13 @ 4'	H222609-04	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 14 @ 4'	H222609-05	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 15 @ 4'	H222609-06	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 16 @ 4'	H222609-07	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 17 @ 2'	H222609-08	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 53 @ 4'	H222609-09	Soil	17-Jun-22 00:00	17-Jun-22 15:40
FS 54 @ 4'	H222609-10	Soil	17-Jun-22 00:00	17-Jun-22 15:40

10/03/22 - Client changed the sample IDs on -04 through -07 (See COC). This is the revised report and will replace the one sent on 06/22/22.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 09:01		
				10 @ 2 509-01 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
Inorganic Compounds											
Chloride	496		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B		
Volatile Organic Compounds by	EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062003	JH	20-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2062003	JH	20-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			99.1 %	69.9	-140	2062003	ЛН	20-Jun-22	8021B		
Petroleum Hydrocarbons by GC	FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctane			94.3 %	66.9	-136	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			104 %	59.5	-142	2062007	MS	21-Jun-22	8015B		

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					C	Reported: 03-Oct-22 09:01		
				11 @ 2 509-02 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	320		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062003	JH	20-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062003	JH	20-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062003	JH	20-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062003	JH	20-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062003	ЛН	20-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		98.9 %	69.9	-140	2062003	ЈН	20-Jun-22	8021B	
Petroleum Hydrocarbons by C	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctane			95.7 %	66.9	-136	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			106 %	59.5	-142	2062007	MS	21-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					Reported: 03-Oct-22 09:01		
				12 @ 2 609-03 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	592		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	3021								
Benzene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062003	ЈН	20-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062003	ЛН	20-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PI	D)		99.1 %	69.9	-140	2062003	ЛН	20-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctane			95.3 %	66.9	-136	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			107 %	59.5	-142	2062007	MS	21-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					C	Reported: 03-Oct-22 09:01		
				13 @ 4 609-04 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	336		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B		
Volatile Organic Compounds	by EPA Method 8	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2062003	JH	20-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062003	ЛН	20-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062003	ЈН	20-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2062003	ЛН	20-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PII	D)		99.2 %	69.9	-140	2062003	ЛН	20-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctane			95.6 %	66.9	-136	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			106 %	59.5	-142	2062007	MS	21-Jun-22	8015B		

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					C	Reported: 03-Oct-22 09:01		
				14 @ 4 509-05 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	592		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B	
Volatile Organic Compounds	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062004	ЛН	21-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		99.1 %	69.9	-140	2062004	ЈН	21-Jun-22	8021B	
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctane			98.6 %	66.9	-136	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			109 %	59.5	-142	2062007	MS	21-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					C	Reported: 03-Oct-22 09:01		
				15 @ 4 609-06 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	208		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B		
Volatile Organic Compounds	by EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PIL))		98.4 %	69.9	-140	2062004	ЛН	21-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctane			98.7 %	66.9	-136	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			109 %	59.5	-142	2062007	MS	21-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions		Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 09:01		
				16 @ 4 509-07 (Se							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	tories						
<u>Inorganic Compounds</u> Chloride	560		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B		
Volatile Organic Compounds	by EPA Method 8	021									
Benzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062004	JH	21-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PL	D)		98.5 %	69.9	-140	2062004	JH	21-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctane			95.6 %	66.9	-136	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			106 %	59.5	-142	2062007	MS	21-Jun-22	8015B		

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Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Project Num Project Mana	ber: 160		C	Reported: 03-Oct-22 09:01			
				17 @ 2 609-08 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
<u>Inorganic Compounds</u> Chloride	384		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062004	JH	21-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			99.2 %	69.9	-140	2062004	JH	21-Jun-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctane			94.3 %	66.9	-136	2062007	MS	21-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			105 %	59.5	-142	2062007	MS	21-Jun-22	8015B	

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Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project Num Project Mana	ber: 160				C	Reported: 03-Oct-22 09:01		
				53 @ 4 509-09 (So							
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	3160		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B		
Volatile Organic Compounds	by EPA Method 8	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062004	ЈН	21-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2062004	ЛН	21-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PII	D)		98.8 %	69.9	-140	2062004	ЛН	21-Jun-22	8021B		
Petroleum Hydrocarbons by	GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctane			96.9 %	66.9	-136	2062007	MS	21-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			109 %	59.5	-142	2062007	MS	21-Jun-22	8015B		

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Saf 2617 W MARLAND HOBBS NM, 88240	ety Solutions	Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 03-Oct-22 09:01					
				54 @ 4 609-10 (Se									
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes			
			Cardina	l Laborat	ories								
<u>Inorganic Compounds</u> Chloride	3600		16.0	mg/kg	4	2062111	GM	21-Jun-22	4500-Cl-B				
Volatile Organic Compounds	by EPA Method 8	8021											
Benzene*	< 0.050		0.050	mg/kg	50	2062004	JH	21-Jun-22	8021B				
Toluene*	< 0.050		0.050	mg/kg	50	2062004	ЛН	21-Jun-22	8021B				
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062004	ЛН	21-Jun-22	8021B				
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062004	ЛН	21-Jun-22	8021B				
Total BTEX	< 0.300		0.300	mg/kg	50	2062004	ЛН	21-Jun-22	8021B				
Surrogate: 4-Bromofluorobenzene (PII	D)		98.7 %	69.9	-140	2062004	ЛН	21-Jun-22	8021B				
Petroleum Hydrocarbons by	GC FID												
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B				
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B				
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062007	MS	21-Jun-22	8015B				
Surrogate: 1-Chlorooctane			92.8 %	66.9	-136	2062007	MS	21-Jun-22	8015B				
Surrogate: 1-Chlorooctadecane			103 %	59.5	-142	2062007	MS	21-Jun-22	8015B				

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety SolutionsProject:PADUCA 6 SWD #12617 W MARLANDProject Number:16039HOBBS NM, 88240Project Manager:LANCE CRENSHAWFax To:Fax To:Fax To:	Reported: 03-Oct-22 09:01
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Inorganic Compounds - Quality Control

Cardinal Laboratories RPD Spike %REC Reporting Source %REC Analyte Result Limit Units Level Result Limits RPD Limit Notes Batch 2062111 - 1:4 DI Water Blank (2062111-BLK1) Prepared & Analyzed: 21-Jun-22 Chloride ND 16.0 mg/kg LCS (2062111-BS1) Prepared & Analyzed: 21-Jun-22 Chloride 416 104 400 80-120 16.0 mg/kg LCS Dup (2062111-BSD1) Prepared & Analyzed: 21-Jun-22 Chloride 400 16.0 mg/kg 400 100 80-120 3.92 20

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Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 03-Oct-22 09:01
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2062003 - Volatiles										
Blank (2062003-BLK1)				Prepared &	Analyzed:	20-Jun-22				
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.7	69.9-140			
LCS (2062003-BS1)				Prepared &	Analyzed:	20-Jun-22				
Benzene	1.88	0.050	mg/kg	2.00		94.1	83.4-122			
Toluene	1.89	0.050	mg/kg	2.00		94.6	84.2-126			
Ethylbenzene	1.81	0.050	mg/kg	2.00		90.4	84.2-121			
m,p-Xylene	3.81	0.100	mg/kg	4.00		95.2	89.9-126			
p-Xylene	1.81	0.050	mg/kg	2.00		90.5	84.3-123			
Total Xylenes	5.62	0.150	mg/kg	6.00		93.7	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0478		mg/kg	0.0500		95.6	69.9-140			
LCS Dup (2062003-BSD1)				Prepared &	Analyzed:	20-Jun-22				
Benzene	1.90	0.050	mg/kg	2.00		94.8	83.4-122	0.751	12.6	
Toluene	1.90	0.050	mg/kg	2.00		95.2	84.2-126	0.552	13.3	
Ethylbenzene	1.83	0.050	mg/kg	2.00		91.5	84.2-121	1.25	13.9	
n,p-Xylene	3.86	0.100	mg/kg	4.00		96.4	89.9-126	1.23	13.6	
p-Xylene	1.86	0.050	mg/kg	2.00		92.8	84.3-123	2.44	14.1	
Total Xylenes	5.71	0.150	mg/kg	6.00		95.2	89.1-124	1.62	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0472		mg/kg	0.0500		94.5	69.9-140			

Batch 2062004 - Volatiles

Blank (2062004-BLK1)			Prepared: 20-Jun-22 Analyzed: 21-Jun-22
Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 03-Oct-22 09:01
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2062004 - Volatiles										
Blank (2062004-BLK1)				Prepared: 2	20-Jun-22 A	nalyzed: 2	1-Jun-22			
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		98.7	69.9-140			
LCS (2062004-BS1)				Prepared: 2	20-Jun-22 A	nalyzed: 2	1-Jun-22			
Benzene	1.86	0.050	mg/kg	2.00		93.0	83.4-122			
Toluene	1.87	0.050	mg/kg	2.00		93.4	84.2-126			
Ethylbenzene	1.79	0.050	mg/kg	2.00		89.5	84.2-121			
m,p-Xylene	3.78	0.100	mg/kg	4.00		94.6	89.9-126			
o-Xylene	1.81	0.050	mg/kg	2.00		90.3	84.3-123			
Total Xylenes	5.59	0.150	mg/kg	6.00		93.1	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0480		mg/kg	0.0500		95.9	69.9-140			
LCS Dup (2062004-BSD1)				Prepared: 2	20-Jun-22 A	nalyzed: 2	1-Jun-22			
Benzene	1.92	0.050	mg/kg	2.00		96.1	83.4-122	3.29	12.6	
Toluene	1.93	0.050	mg/kg	2.00		96.6	84.2-126	3.27	13.3	
Ethylbenzene	1.85	0.050	mg/kg	2.00		92.4	84.2-121	3.19	13.9	
m,p-Xylene	3.92	0.100	mg/kg	4.00		97.9	89.9-126	3.51	13.6	
o-Xylene	1.88	0.050	mg/kg	2.00		93.8	84.3-123	3.80	14.1	
Total Xylenes	5.79	0.150	mg/kg	6.00		96.6	89.1-124	3.61	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0482		mg/kg	0.0500		96.5	69.9-140			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



	Project: PADUCA 6 SWD #1 roject Number: 16039 pject Manager: LANCE CRENSHAW Fax To:	Reported: 03-Oct-22 09:01
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2062007 - General Prep - Organics										
Blank (2062007-BLK1)				Prepared &	k Analyzed:	20-Jun-22				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	49.8		mg/kg	50.0		99.6	66.9-136			
Surrogate: 1-Chlorooctadecane	55.3		mg/kg	50.0		111	59.5-142			
LCS (2062007-BS1)				Prepared &	analyzed:	20-Jun-22				
GRO C6-C10	173	10.0	mg/kg	200		86.6	78.5-128			
DRO >C10-C28	167	10.0	mg/kg	200		83.7	75.8-135			
Total TPH C6-C28	341	10.0	mg/kg	400		85.1	81.5-127			
Surrogate: 1-Chlorooctane	55.5		mg/kg	50.0		111	66.9-136			
Surrogate: 1-Chlorooctadecane	60.1		mg/kg	50.0		120	59.5-142			
LCS Dup (2062007-BSD1)				Prepared &	Analyzed:	20-Jun-22				
GRO C6-C10	180	10.0	mg/kg	200		90.0	78.5-128	3.87	21.4	
DRO >C10-C28	184	10.0	mg/kg	200		92.2	75.8-135	9.72	17.9	
Total TPH C6-C28	364	10.0	mg/kg	400		91.1	81.5-127	6.79	17.6	
Surrogate: 1-Chlorooctane	54.8		mg/kg	50.0		110	66.9-136			
Surrogate: 1-Chlorooctadecane	58.6		mg/kg	50.0		117	59.5-142			

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

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

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Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 EAX (575) 393-2476

	: Etech Enviror	imental & Safety Solu		, Inc	2		-		T	-		BI	L	LTO	-	-		-		ANALYSIS R	EQU	EST			-
Project Manage	"Jance Cres	That					_		P	.0.	R:							Τ	T		T		T	T	
Address: P.O	. Box 301								c	om	ban	Vi 7	11	leubou	rne	1									
City: Lovingto	on	State: NM	Zip	: 88:	260				Attn: Poblie Runnels																
Phone #: (57	5) 396-2378	Fax #: (575) 3	96-1	429						ddn				1.001.	inces_	1									
Project #: 16	1239	Project Owne							City:																
Project Name:	Raduca 6 5	S. 1 #1							-	State: Zip:					Ŵ		10								
Project Location									-				4	ip.		Chloride	TPH (8015M)		BTEX (8021B)						
Sampler Name: Auon Rios			-	hon ax #	-			and a set of the set o		hlo	1 (8)		×												
FOR LAB USE ONLY	March Prics		1		-	M	ATE	XIX	Fi	-	-	ERV.	Г	SAMPLI	NG	0	T		E						
Lab I.D. H222609	Samp	ole I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SUL	OIL	OTHER :	ACID/BASE:	ICE / COOL	OTHER :		DATE	TIME										
1	FS IC	. Q 2Ft		X			X			Т				-17-22		X	X	T	X		T				
2	FS 11			T						T				1		1	1		1						
3	FS 12	. @ 2Ft										1	Γ				Π	Τ							
* 4	FS 13.	@ 2Fr 4'									1		Γ												
* 5	FS 14.	@ SFT 4'																							
7 6	FS 15.	@ JEF 4'																							
4567	FS 16.	@ 2FF 4'																							
8	FS 17.	@ 2Ft					Π										Π								
9	FS 53.	6 4 FF														11		1							
10	FS 54.	6 4Ft		V		1	2							V		6	V								
PLEASE NOTE: Liability an analyses, All claims includie		y and client's exclusive remody for a ny other cause whatsoever shall be															de la								
service. In no event shall Ca affiliates or successors arisis	arclinal be liable for incidental ng out of or related to the perf	er consequential damages, includin ormance of services hereunder by (Cardina	at Breaks I, regar	dien, bu diess o	animous d whath	inter ler su	uplion ch clai	n, kune m is be	of use used u	, or la	nes of pa any of th	velle te ab	incurred by d	lent, its subsidior sors or otherwis	ies, M.									
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Received by OCD: 10/6/2022 4:46:52 PM



June 24, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/20/22 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: TT - @ 12' (H222634-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	06/21/2022	ND	432	108	400	7.69	

Sample ID: 55 @ 5" (H222634-02)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/22/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/22/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/22/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/22/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/22/2022	ND					

69.9-140

Surrogate: 4-Bromofluorobenzene (PID 104 %

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	06/21/2022	ND	432	108	400	7.69	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	179	89.6	200	3.38	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	182	91.2	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: 55 @ 5" (H222634-02)

TPH 8015M	mg,	/kg	Analyz	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Surrogate: 1-Chlorooctadecane	80.6	% 59.5-142							

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: 56 @ 5" (H222634-03)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/22/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/22/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/22/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/22/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/22/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	107	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	06/21/2022	ND	432	108	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	179	89.6	200	3.38	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	182	91.2	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	73.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	78.8	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: 57 @ 5" (H222634-04)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/22/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/22/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/22/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/22/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/22/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	06/21/2022	ND	432	108	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	179	89.6	200	3.38	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	182	91.2	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	73.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	80.3	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: 58 @ 5" (H222634-05)

BTEX 8021B	mg/	′kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/22/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/22/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/22/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/22/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/22/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	528	16.0	06/21/2022	ND	432	108	400	7.69	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	179	89.6	200	3.38	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	182	91.2	200	5.35	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	74.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	79.4	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS 2. (H222634-06)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/22/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/22/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/22/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/22/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/22/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2760	16.0	06/21/2022	ND	432	108	400	7.69	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	173	86.5	200	4.75	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	164	82.2	200	8.26	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	72.1	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	73.7	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS 3. (H222634-07)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/22/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/22/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/22/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/22/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/22/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	06/21/2022	ND	432	108	400	7.69	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	173	86.5	200	4.75	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	164	82.2	200	8.26	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	83.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	87.5	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS 4. (H222634-08)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/23/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/22/2022	ND	432	108	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	173	86.5	200	4.75	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	164	82.2	200	8.26	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	65.6	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	66.7	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: EWS 5. (H222634-09)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/23/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	104	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/22/2022	ND	432	108	400	7.69	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	173	86.5	200	4.75	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	164	82.2	200	8.26	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	73.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	78.0	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/20/2022	Sampling Date:	06/20/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	Cool & Intact
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: EWS 6. (H222634-10)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	1.93	96.7	2.00	0.848	
Toluene*	<0.050	0.050	06/23/2022	ND	2.00	100	2.00	2.49	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	1.95	97.5	2.00	1.32	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	5.79	96.5	6.00	0.950	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	105	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/22/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/22/2022	ND	173	86.5	200	4.75	
DRO >C10-C28*	<10.0	10.0	06/22/2022	ND	164	82.2	200	8.26	
EXT DRO >C28-C36	<10.0	10.0	06/22/2022	ND					
Surrogate: 1-Chlorooctane	70.9	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	74.4	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 13 of 13

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	101	East	Marland	d. Hobt	s. Ni	M 88240

(575) 393-2326 FAX (575) 393-2476

Company Name: Etech Environmental & Safety Solutions, Inc.							BILL TO						A	ANALYSIS REQUEST											
Project Manage	- Lance Cren	shaw								P.O.	#:		-												
Address: P.O	. Box 301									Com	pan	y: 9	Newbay	rne											
City: Lovingto	on	Sta	te: NM	Zip	: 882	260				Attn:	7	Cob	he Ku	nads	1										
Phone #: (575) 396-2378 Fax #: (575) 396-1429								-	Addr			1.01													
Project #: 160	039	Pro	ject Owne	r:						City:															
	Padulca 6	SwD	#1.							State	:		Zip:			TPH (8015M)	BTEX (8021B)								
Project Location	n:		- 61 F (Phon	e #:				Pro	801	80				1				
Sampler Name:	Aaron Kios		and they want							Fax d	k:				Chloride	H	X					1			
FOR LAB USE ONLY				Γ			M.A	TRD	(P	RES	ERV.	SAMPLI	ING	1	H	BT								
Lab I.D.	Sampl	e I.D.		(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER : ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME											
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	57	0	5 inches												×	×	X								
	58	0	5 inches												X	×	X			_					
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	wws 4.										-				X	X	X		_	-	_				
	EWS 5.						1	,		-	-				X	¥	X		-	-		-			
	EWS 6.				V		-	1							¥	X	X								
alyses. All clearns includin rvice. In no event shaff C litetes or successors arisi	nd Demoges, Cardinal's liability o ng those for negligence and any ardinal be liable for inclanital or ng out of or related to the perfor	other cause wi consequental mence of servi	hatsoover shall be demages, includin ces termunder by (deeme g without Cardina	id veiden ut limite i, regar	iden, bu	na mada sinana i f whatha	in write Norrupi	ng njući u Iona, ka	ecalved as of use	iby Ca , or lo	ardinal w	ithis 30 days allo ofte incurred by c	er completien of t client, in subsidie asons or otherwi	ke applice des, 10.										
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June 24, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/21/22 16:14.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 59. @ 4' (H222651-01)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	84.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	81.5	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 60. @ 5" (H222651-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	73.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	73.1	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 61. @ 5" (H222651-03)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	78.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	79.6	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 62. @ 5" (H222651-04)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	80.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	79.3	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 63. @ 4' (H222651-05)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	85.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	83.6	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 64. @ 4' (H222651-06)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	88.7	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	90.9	% 59.5-14	2						

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 65. @ 4' (H222651-07)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	102	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	06/23/2022	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	81.0	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	83.2	% 59.5-14	2						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: FS 66. @ 4' (H222651-08)

BTEX 8021B	mg,	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	06/23/2022	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	85.8	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	86.7	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: ESW 7. (H222651-09)

BTEX 8021B	mg/	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	100	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	06/23/2022	ND	416	104	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	91.2	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	91.4	% 59.5-14	2						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/21/2022	Sampling Date:	06/21/2022
Reported:	06/24/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: ESW 8. (H222651-10)

BTEX 8021B	mg	/kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/23/2022	ND	2.20	110	2.00	11.2	
Toluene*	<0.050	0.050	06/23/2022	ND	2.16	108	2.00	11.5	
Ethylbenzene*	<0.050	0.050	06/23/2022	ND	2.12	106	2.00	11.2	
Total Xylenes*	<0.150	0.150	06/23/2022	ND	6.56	109	6.00	10.4	
Total BTEX	<0.300	0.300	06/23/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 69.9-14	0						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	06/23/2022	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/23/2022	ND	199	99.5	200	2.87	
DRO >C10-C28*	<10.0	10.0	06/23/2022	ND	194	97.0	200	3.86	
EXT DRO >C28-C36	<10.0	10.0	06/23/2022	ND					
Surrogate: 1-Chlorooctane	84.4	% 66.9-13	6						
Surrogate: 1-Chlorooctadecane	84.7	% 59.5-14	2						

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose site to the services interruptors, loss of profits incurred by client, its subsidiaries, afflictes or successor arising out of or related to the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 13 of 13

101 East Marland, Hobbs, NM 88240

Company Name			ental & Safety	y Solutio	ms	, Inc				T			BI	LL	TO						A	NAL	YSIS	R	EQL	JEST	Г		
Project Manage	r. Larce	Cran	Shaw								P.O.	#:						1	T	T					T				
Address: P.O	. Box 301										Com	par	ny: 7	m	ub	W/AP													
City: Lovingto	DI		State: N	IM Z	Tip:	882	260				Attn	K	abbi	è	Run	mels													
Phone #: (575	5) 396-2378		Fax #: (575) 39	6-1-	429					Add					an	1												
Project #: 160	039		Project	Owner:						-	City:																		
Project #: /60 Project Name: 7	Palina	6 4	SUD#1							-	State			Zip				1	(ma	18)									
Project Location	n:	0 0	won L							-	Pho		l:				Chioride	TDU (SOLEM)		BTEX (8021B)									
Sampler Name:	Aason &	is						a		-	Fax						- E			EX									
FOR LAB USE ONLY	100 10							MA	TRU	_	-	-	ERV.	5	AMPL	ING	٦Ť	1	-	E									
Lab I.D. Нааристи	s	ample			(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	OTHER :		OTHER :	0	ATE	TIME													
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PLEASE NOTE: Liability an																		1		0				_	1	_		_	_
analyses. All claims includin service. In no event shall Ca difficutes or aucousport artisf Relinquished By Relinquished By Delivered By: Sampler- UPS	ardinal be liable for ng out of or released t y: y: (Circle O	incidental or c in the perform	Date:	n, including w under by Carr 1-32 214 0-5	Re	regar	tion, but desc of red E red E red E	inversi in witherbar ly: diy: ly: ly: umplic	e Con	ions, is claim is Of	in of us based	upon :	any of th	Tolins in abov	arred by a stated re	client, in subs	klinine, ruine. Result: sult: KS:		Yes		lo A	dd'i i	Phone Fax #: Fax #: V.COM						

Page 209 of 255



June 29, 2022

LANCE CRENSHAW

Etech Environmental & Safety Solutions

2617 W MARLAND

HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/23/22 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 29-Jun-22 10:04
---	-----------------	--	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PS 1 @ 0-6"	H222703-01	Soil	23-Jun-22 00:00	23-Jun-22 16:05
PS 2@ 0-6"	H222703-02	Soil	23-Jun-22 00:00	23-Jun-22 16:05
PS 3@ 0-6"	H222703-03	Soil	23-Jun-22 00:00	23-Jun-22 16:05
PS 4 @ 0-6"	H222703-04	Soil	23-Jun-22 00:00	23-Jun-22 16:05
PS 5@ 0-6"	H222703-05	Soil	23-Jun-22 00:00	23-Jun-22 16:05
NWS 2.	H222703-06	Soil	23-Jun-22 00:00	23-Jun-22 16:05
WWS 5.	H222703-07	Soil	23-Jun-22 00:00	23-Jun-22 16:05
WWS 6.	H222703-08	Soil	23-Jun-22 00:00	23-Jun-22 16:05
WWS 7.	H222703-09	Soil	23-Jun-22 00:00	23-Jun-22 16:05
WWS 8.	H222703-10	Soil	23-Jun-22 00:00	23-Jun-22 16:05
FS 67 @ 4'	H222703-11	Soil	23-Jun-22 00:00	23-Jun-22 16:05
FS 68 @ 4'	H222703-12	Soil	23-Jun-22 00:00	23-Jun-22 16:05
FS 69 @ 4'	H222703-13	Soil	23-Jun-22 00:00	23-Jun-22 16:05
FS 70 @ 4'	H222703-14	Soil	23-Jun-22 00:00	23-Jun-22 16:05
EWS 9	H222703-15	Soil	23-Jun-22 00:00	23-Jun-22 16:05
EWS 10	H222703-16	Soil	23-Jun-22 00:00	23-Jun-22 16:05

06/29/22 - Client added depths to samaples -01 to -05 on 06/28/22 (See COC). This is the revised report and will replace the one sent on 06/27/22.

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	Solutions		Proj Project Num Project Mana Fax	2	Reported: 29-Jun-22 10:04					
				1 @ 0-6 703-01 (Se						
				105-01 (50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	tories					
Inorganic Compounds										
Chloride	9200		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	QM-07
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			97.8 %	69.9	-140	2062404	JH/	25-Jun-22	8021B	
Petroleum Hydrocarbons by GC	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	46.4		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	14.7		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			123 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			146 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safet 2617 W MARLAND HOBBS NM, 88240	y Solutions		Project Num Project Mana		2	Reported: 29-Jun-22 10:04				
				2 @ 0-6 703-02 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	4080		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds b	y EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062404	JH/	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			98.7 %	69.9	-140	2062404	JH/	25-Jun-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			123 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			153 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety 2617 W MARLAND HOBBS NM, 88240	y Solutions		Project Num Project Mana Fax	ger: LAN	2	Reported: 29-Jun-22 10:04				
				3 @ 0-6 703-03 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	22000		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds by	EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			103 %	69.9	-140	2062405	JH	25-Jun-22	8021B	
Petroleum Hydrocarbons by GO	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	74.3		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	21.2		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			134 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			160 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240			Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					Reported: 29-Jun-22 10:04				
PS 4 @ 0-6'' H222703-04 (Soil)												
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes		
			Cardina	l Laborat	ories							
Inorganic Compounds												
Chloride	13200		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B			
Volatile Organic Compound	s by EPA Method 8	021										
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B			
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B			
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B			
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B			
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	JH	25-Jun-22	8021B			
Surrogate: 4-Bromofluorobenzene (PID)			99.6 %	99.6% 69.9-140		2062405	ЛН	25-Jun-22	8021B			
Petroleum Hydrocarbons by	GC FID											
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B			
DRO >C10-C28*	14.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B			
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B			
Surrogate: 1-Chlorooctane			131 %	43-149		2062419	MS	25-Jun-22	8015B			
Surrogate: 1-Chlorooctadecane			158 %	42.5-161		2062419	MS	25-Jun-22	8015B			

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240			Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:					Reported: 29-Jun-22 10:04			
PS 5 @ 0-6'' H222703-05 (Soil)											
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes	
			Cardina	l Laborat	ories						
<u>Inorganic Compounds</u> Chloride	11000		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B		
Volatile Organic Compounds b	y EPA Method	8021									
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B		
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B		
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B		
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	ЛН	25-Jun-22	8021B		
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B		
Surrogate: 4-Bromofluorobenzene (PID)			103 %	103 % 69.9-140		2062405	ЛН	25-Jun-22	8021B		
Petroleum Hydrocarbons by G	C FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B		
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B		
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B		
Surrogate: 1-Chlorooctane			114 %	43-149		2062419	MS	25-Jun-22	8015B		
Surrogate: 1-Chlorooctadecane			141 %	42.5-161		2062419	MS	25-Jun-22	8015B		

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Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ety Solutions		Project Num Project Mana	, ber: 160				Reported: 29-Jun-22 10:04		
				IWS 2. 703-06 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	128		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds	by EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		102 %	69.9	-140	2062405	ЛН	25-Jun-22	8021B	
Petroleum Hydrocarbons by (GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			109 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			134 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions	ty Solutions Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						2	Reported: 29-Jun-22 10:1	04
				/WS 5. 703-07 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЈН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	(D)		101 %	69.9	-140	2062405	ЛН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			130 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			161 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions	ns Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 29-Jun-22 10:04		
				/WS 6. 703-08 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	32.0		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PI	D)		103 %	69.9	-140	2062405	ЛН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			121 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			150 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ty Solutions	ns Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 29-Jun-22 10:04		
				/WS 7. 703-09 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	336		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds I	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЈН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		98.1 %	69.9	-140	2062405	ЈН	25-Jun-22	8021B	
Petroleum Hydrocarbons by G	FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			112 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			138 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240	ty Solutions	Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						Reported: 29-Jun-22 10:04		
				/WS 8. 703-10 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	320		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds I	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		101 %	69.9	-140	2062405	ЈН	25-Jun-22	8021B	
Petroleum Hydrocarbons by G	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			104 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			128 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safe 2617 W MARLAND HOBBS NM, 88240								2	Reported: 29-Jun-22 10:1	04
				0						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	400		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds b	oy EPA Method	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (PID))		101 %	69.9	-140	2062405	JH	25-Jun-22	8021B	
Petroleum Hydrocarbons by G	C FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			112 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			136 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	IOBBS NM, 88240 Project Manager: LANCE CRENSHAW Fax To:							2	Reported: 9-Jun-22 10:0	04
				68 @ 4 703-12 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	400		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compound	ls by EPA Method 8	021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P	PID)		103 %	69.9	-140	2062405	ЈН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			102 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			126 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	- · · · · · · · · · · · · · · · · · ·							2	Reported: 29-Jun-22 10:	04
				69 @ 4 703-13 (So						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	400		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80)21								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (P.	ID)		104 %	69.9	-140	2062405	ЛН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			98.0 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			121 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240								2	Reported: 29-Jun-22 10:	04
				70 @ 4 703-14 (Se						
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	368		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 80	021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	ЈН	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		101 %	69.9	-140	2062405	ЛН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			105 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			129 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240								2	Reported: 29-Jun-22 10:0	04
				EWS 9 703-15 (So	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
Inorganic Compounds										
Chloride	64.0		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compound	s by EPA Method 80	21								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЈН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		99.5 %	69.9	-140	2062405	ЈН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			108 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			132 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Sa 2617 W MARLAND HOBBS NM, 88240	fety Solutions	Solutions Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:						2	Reported: 29-Jun-22 10:1	04
				WS 10 703-16 (Se	oil)					
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
			Cardina	l Laborat	ories					
<u>Inorganic Compounds</u> Chloride	48.0		16.0	mg/kg	4	2062707	GM	27-Jun-22	4500-Cl-B	
Volatile Organic Compounds	s by EPA Method 8	8021								
Benzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Toluene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Ethylbenzene*	< 0.050		0.050	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total Xylenes*	< 0.150		0.150	mg/kg	50	2062405	JH	25-Jun-22	8021B	
Total BTEX	< 0.300		0.300	mg/kg	50	2062405	ЛН	25-Jun-22	8021B	
Surrogate: 4-Bromofluorobenzene (Pl	D)		101 %	69.9	-140	2062405	ЛН	25-Jun-22	8021B	
Petroleum Hydrocarbons by	GC FID									
GRO C6-C10*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctane			105 %	43-	149	2062419	MS	25-Jun-22	8015B	
Surrogate: 1-Chlorooctadecane			130 %	42.5	-161	2062419	MS	25-Jun-22	8015B	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project: PADUCA 6 SWD #1 Project Number: 16039 Project Manager: LANCE CRENSHAW Fax To:	Reported: 29-Jun-22 10:04
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Inorganic Compounds - Quality Control

Cardinal Laboratories RPD Spike %REC Reporting Source %REC Analyte Result Limit Units Level Result Limits RPD Limit Notes Batch 2062707 - 1:4 DI Water Blank (2062707-BLK1) Prepared & Analyzed: 27-Jun-22 Chloride ND 16.0 mg/kg LCS (2062707-BS1) Prepared & Analyzed: 27-Jun-22 416 104 Chloride 400 80-120 16.0 mg/kg LCS Dup (2062707-BSD1) Prepared & Analyzed: 27-Jun-22 Chloride 432 16.0 mg/kg 400 108 80-120 3.77 20

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 29-Jun-22 10:04	
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2062404 - Volatiles										
Blank (2062404-BLK1)				Prepared: 2	24-Jun-22 A	nalyzed: 25	5-Jun-22			
Benzene	ND	0.050	mg/kg	1		5				
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0506		mg/kg	0.0500		101	69.9-140			
LCS (2062404-BS1)				Prepared: 2	24-Jun-22 A	nalyzed: 27	7-Jun-22			
Benzene	1.97	0.050	mg/kg	2.00		98.4	83.4-122			
Toluene	1.95	0.050	mg/kg	2.00		97.5	84.2-126			
Ethylbenzene	1.89	0.050	mg/kg	2.00		94.5	84.2-121			
m,p-Xylene	3.96	0.100	mg/kg	4.00		99.1	89.9-126			
o-Xylene	1.88	0.050	mg/kg	2.00		94.2	84.3-123			
Total Xylenes	5.85	0.150	mg/kg	6.00		97.5	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0487		mg/kg	0.0500		97.4	69.9-140			
LCS Dup (2062404-BSD1)				Prepared: 2	24-Jun-22 A	nalyzed: 25	5-Jun-22			
Benzene	2.11	0.050	mg/kg	2.00		106	83.4-122	7.17	12.6	
Toluene	2.09	0.050	mg/kg	2.00		104	84.2-126	6.84	13.3	
Ethylbenzene	2.03	0.050	mg/kg	2.00		101	84.2-121	6.94	13.9	
m,p-Xylene	4.25	0.100	mg/kg	4.00		106	89.9-126	6.91	13.6	
o-Xylene	2.03	0.050	mg/kg	2.00		101	84.3-123	7.32	14.1	
Total Xylenes	6.27	0.150	mg/kg	6.00		105	89.1-124	7.04	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0493		mg/kg	0.0500		98.7	69.9-140			

Batch 2062405 - Volatiles

Blank (2062405-BLK1)			Prepared: 24-Jun-22 Analyzed: 25-Jun-22
Benzene	ND	0.050	mg/kg
Toluene	ND	0.050	mg/kg
Ethylbenzene	ND	0.050	mg/kg
Total Xylenes	ND	0.150	mg/kg

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 29-Jun-22 10:04
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Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 2062405 - Volatiles

Blank (2062405-BLK1)				Prepared: 24-Jun	1-22 Analyzed: 2	5-Jun-22			
Total BTEX	ND	0.300	mg/kg						
Surrogate: 4-Bromofluorobenzene (PID)	0.0504		mg/kg	0.0500	101	69.9-140			
LCS (2062405-BS1)				Prepared: 24-Jun	1-22 Analyzed: 2	5-Jun-22			
Benzene	2.04	0.050	mg/kg	2.00	102	83.4-122			
Toluene	2.01	0.050	mg/kg	2.00	100	84.2-126			
Ethylbenzene	1.95	0.050	mg/kg	2.00	97.6	84.2-121			
m,p-Xylene	3.88	0.100	mg/kg	4.00	97.0	89.9-126			
o-Xylene	1.87	0.050	mg/kg	2.00	93.3	84.3-123			
Total Xylenes	5.75	0.150	mg/kg	6.00	95.8	89.1-124			
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500	100	69.9-140			
LCS Dup (2062405-BSD1)				Prepared: 24-Jun	1-22 Analyzed: 2	5-Jun-22			
Benzene	2.03	0.050	mg/kg	2.00	101	83.4-122	0.655	12.6	
Toluene	2.02	0.050	mg/kg	2.00	101	84.2-126	0.690	13.3	
Ethylbenzene	1.96	0.050	mg/kg	2.00	98.0	84.2-121	0.399	13.9	
m,p-Xylene	3.91	0.100	mg/kg	4.00	97.8	89.9-126	0.763	13.6	
o-Xylene	1.90	0.050	mg/kg	2.00	95.1	84.3-123	1.82	14.1	
Total Xylenes	5.81	0.150	mg/kg	6.00	96.9	89.1-124	1.11	13.4	
Surrogate: 4-Bromofluorobenzene (PID)	0.0506		mg/kg	0.0500	101	69.9-140			

Cardinal Laboratories

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS NM, 88240	Project Number:	PADUCA 6 SWD #1 16039 LANCE CRENSHAW	Reported: 29-Jun-22 10:04
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Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2062419 - General Prep - Organics										
Blank (2062419-BLK1)				Prepared &	Analyzed:	24-Jun-22				
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	60.2		mg/kg	50.0		120	43-149			
Surrogate: 1-Chlorooctadecane	73.7		mg/kg	50.0		147	42.5-161			
LCS (2062419-BS1)				Prepared &	Analyzed:	24-Jun-22				
GRO C6-C10	207	10.0	mg/kg	200		104	78.5-128			
DRO >C10-C28	216	10.0	mg/kg	200		108	75.8-135			
Total TPH C6-C28	423	10.0	mg/kg	400		106	81.5-127			
Surrogate: 1-Chlorooctane	63.4		mg/kg	50.0		127	43-149			
Surrogate: 1-Chlorooctadecane	78.4		mg/kg	50.0		157	42.5-161			
LCS Dup (2062419-BSD1)				Prepared &	Analyzed:	24-Jun-22				
GRO C6-C10	203	10.0	mg/kg	200		101	78.5-128	2.08	21.4	
DRO >C10-C28	214	10.0	mg/kg	200		107	75.8-135	0.895	17.9	
Total TPH C6-C28	417	10.0	mg/kg	400		104	81.5-127	1.47	17.6	
Surrogate: 1-Chlorooctane	62.7		mg/kg	50.0		125	43-149			
Surrogate: 1-Chlorooctadecane	77.6		mg/kg	50.0		155	42.5-161			

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Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 24 of 25

(575) 393-2326 FAX (575) 393-2476 Company Name: Etech Environmental & Safety Solutions, Inc.								T		-	BI	11	TO		_	-			ANA	YSI	S RI	EQUE	ST		
								1	2.0.						1		1	T			T				
Project Manage Address: P.C	D. Box 301									-	. 1	Maria	they we		1										
City: Lovingt		State: NM	Zin	: 88	260				Company: Mewborrne Attn: Robbie Runnels																
Phone #: (57												NC 1	KUM	1100											
Phone #: (575) 396-2378 Fax #: (575) 396-1429 Project #: /6039 Project Owner:								Addre	ess:																
									City:							ŝ	â								
		. 6. SWD #	<i>t 1.</i>					-	state			Zip:			g	TPH (8015M)	3TEX (8021B)								
Project Locatio		2							hon						Chloride	80	× (8					1			
Sampler Name:	Acron Ylig	5	_	-				_	ax	_	-	-			Ū	I	E								
FOR LAB USE ONLY			10.		-	MA	TRIX		124	ESI	ERV.	s	AMPLI	NG			00								
Lab I.D.		mple I.D.	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER Soll	OIL	SLUDGE	ACID/BASE:	ICE / COOL	OTHER :	D	ATE	TIME											
1	PS	1.60-6"	*	X		X			Т	X		6-	23-22		X	X	X								
3	PS PS PS PS PS	2.60-6"	K	X		X				×		6-	1-22		X	×	X								
3	PS	3.60-6"	*	×		X				×		6 -	-22		X	X	×								
45	PS	4. 6_0-6"	*	×		×	-			X		6-	1-22		×	×	X								
5	PS	5. (9 0-6"	*	X		X	-			X		6-	-22		×	X	X								
4	NWS	2.		X		X				X		6-	-22		X	X	X								
7	wws	5		×		X				X		6-	-22		×	x	X								
8	wws	6		x		×				X		6-	-22		X	x	X								
9	wws	7		×		×				×		67	122		×	X	×								
10	wws	8		X		X				X		6-1	-23		X	×	X								
10 PLEASE NOTE: Liability a analyses, All claims includ service. In no event shall C	IN US S and Dermeges. Cardinal ing those for negligeno andinal be liable for inc ing out of or related to t	S s fieldity and client's exclusive remedy and any other cause visiticever sha blantal or consequential damages, incl the performance of services hereunde Date: GJ3:3.2	I be deems hading witho by Cardine Re	Tri ariali nd waite at limite at limite at limite	rdiens of ved E	ver besen te made sinese in whether By:	f in cor n write arrupt such o	g and ro ans, kus Jaim is l	icelved a of use based u	to be lit	ntinual w as of pe ty of the	niikin 30 miike inc ne above	-21 mount pair days aller sated by c	r completion of t first, its subsidie more or otherwite Phone Re	r the the applicat den, se. isuit:	× ×	15 E	No		Phone Fax #:					
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Page 233 of 255

Released to Imaging: 10/25/2022 12:39:39 PM

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 25 of 25

Company Name	: Etech	Environme	ental & S	afety Sol	utions	, Inc							81	LL TO					ANALYSIS	REQUEST	
Project Manage	r: June	· Cress	haw							1	P.O. 1	k									
Address: P.O	Box 301									1	Comp	any	: 7	Newbou	INC						
City: Lovingto	no		Stat	e: NM	Zip	: 88	260			1	Attn:	Rel	bie	Runn	els						
Phone #: (57	Phone #: (575) 396-2378 Fax #: (575) 396-1429										Addre										
Project #: /60	39		Proj	ect Own	er:					-	City:										
Project Name:	Palura	6 5	Sel0	#1.							State			Zip:			EM)	218			
Project Location	n:			dillon of						1	Phon	e #:				Chloride	801	80			
Sampler Name:	Aaron	Ros								1	ax #	:				U.F.	rPH (8015M)	BTEX (8021B)			
FOR LAB USE ONLY								MA	TREX	-	PR	ESE	RV.	SAMPLI	NG	1	F	6			
Lab I.D.		Sample	I.D.		(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER WASTEWATER	SOIL	lio	SLUDGE	OTHER : ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME						
11	FS	67	6)	YFT		X		×	1 1			×		6110		X	¥	X			
	FS	68	0	4Ft		X		Y				X		6-23-22		X	×	X			
13	FS	64	6	4Ft		X		×	+			X				X	×	X			
14	FS	70	6)	4Ft		X		X		_	-	X				X	X	X			
15	Ews	9				X		X			-	X			1	X	X	X			
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LEASE NOTE: Listify or naives. All chirrs includ protes. In no event deal C Being or woccases end cellinguished By delinguished By Delivered By: Sampler - UPS	ng those for neg andred to hade ng out of or relative y: (Circle	ligence and any off for incluental or on ad to the performan	Party C'arrive Time Date Time	3.27 1009	Condition		id universe time, basis desse of a red By red By red By San Co	mesle i nesse int thether Y: Y: Y: Y: Thether tool	such d	ditio		CHE		ED BY:	Phone Re Fax Result REMARKS	it: S:	Presults		lo Add'I Phone i lo Add'I Fax #: Detechenv.com		

Page 234 of 255



June 29, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/27/22 16:36.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/27/2022	Sampling Date:	06/27/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: NWS 3. (H222744-01)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/28/2022	ND	2.06	103	2.00	3.57	
Toluene*	<0.050	0.050	06/28/2022	ND	2.05	102	2.00	4.49	
Ethylbenzene*	<0.050	0.050	06/28/2022	ND	2.07	103	2.00	3.53	
Total Xylenes*	<0.150	0.150	06/28/2022	ND	6.28	105	6.00	4.04	
Total BTEX	<0.300	0.300	06/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/28/2022	ND	432	108	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/28/2022	ND	229	114	200	0.636	
DRO >C10-C28*	<10.0	10.0	06/28/2022	ND	229	115	200	0.471	
EXT DRO >C28-C36	<10.0	10.0	06/28/2022	ND					
Surrogate: 1-Chlorooctane	84.3	% 43-149	1						
Surrogate: 1-Chlorooctadecane	95.1	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/27/2022	Sampling Date:	06/27/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: PS 6. (H222744-02)

BTEX 8021B	mg,	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/28/2022	ND	2.06	103	2.00	3.57	
Toluene*	<0.050	0.050	06/28/2022	ND	2.05	102	2.00	4.49	
Ethylbenzene*	<0.050	0.050	06/28/2022	ND	2.07	103	2.00	3.53	
Total Xylenes*	<0.150	0.150	06/28/2022	ND	6.28	105	6.00	4.04	
Total BTEX	<0.300	0.300	06/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	111 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18400	16.0	06/28/2022	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/28/2022	ND	229	114	200	0.636	
DRO >C10-C28*	74.2	10.0	06/28/2022	ND	229	115	200	0.471	
EXT DRO >C28-C36	25.4	10.0	06/28/2022	ND					
Surrogate: 1-Chlorooctane	92.6	% 43-149)						
Surrogate: 1-Chlorooctadecane	100	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/27/2022	Sampling Date:	06/27/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: PS 7. (H222744-03)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/28/2022	ND	2.06	103	2.00	3.57	
Toluene*	<0.050	0.050	06/28/2022	ND	2.05	102	2.00	4.49	
Ethylbenzene*	<0.050	0.050	06/28/2022	ND	2.07	103	2.00	3.53	
Total Xylenes*	<0.150	0.150	06/28/2022	ND	6.28	105	6.00	4.04	
Total BTEX	<0.300	0.300	06/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 69.9-14	0						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11600	16.0	06/28/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/28/2022	ND	229	114	200	0.636	
DRO >C10-C28*	63.8	10.0	06/28/2022	ND	229	115	200	0.471	
EXT DRO >C28-C36	28.7	10.0	06/28/2022	ND					
Surrogate: 1-Chlorooctane	83.6	% 43-149)						
Surrogate: 1-Chlorooctadecane	92.2	% 42.5-16	1						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/27/2022	Sampling Date:	06/27/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS 9. (H222744-04)

BTEX 8021B	mg/	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/28/2022	ND	2.06	103	2.00	3.57	
Toluene*	<0.050	0.050	06/28/2022	ND	2.05	102	2.00	4.49	
Ethylbenzene*	<0.050	0.050	06/28/2022	ND	2.07	103	2.00	3.53	
Total Xylenes*	<0.150	0.150	06/28/2022	ND	6.28	105	6.00	4.04	
Total BTEX	<0.300	0.300	06/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	112 9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/28/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/28/2022	ND	229	114	200	0.636	
DRO >C10-C28*	<10.0	10.0	06/28/2022	ND	229	115	200	0.471	
EXT DRO >C28-C36	<10.0	10.0	06/28/2022	ND					
Surrogate: 1-Chlorooctane	88.5	% 43-149	,						
Surrogate: 1-Chlorooctadecane	101 9	% 42.5-16	1						

Cardinal Laboratories

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/27/2022	Sampling Date:	06/27/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS 10. (H222744-05)

BTEX 8021B	mg/	kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/28/2022	ND	2.06	103	2.00	3.57	
Toluene*	<0.050	0.050	06/28/2022	ND	2.05	102	2.00	4.49	
Ethylbenzene*	<0.050	0.050	06/28/2022	ND	2.07	103	2.00	3.53	
Total Xylenes*	<0.150	0.150	06/28/2022	ND	6.28	105	6.00	4.04	
Total BTEX	<0.300	0.300	06/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	110 9	69.9-14	0						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/28/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/28/2022	ND	179	89.3	200	2.09	
DRO >C10-C28*	61.8	10.0	06/28/2022	ND	169	84.7	200	3.06	
EXT DRO >C28-C36	35.6	10.0	06/28/2022	ND					
Surrogate: 1-Chlorooctane	83.1	% 43-149	,						
Surrogate: 1-Chlorooctadecane	89.8	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/27/2022	Sampling Date:	06/27/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Shalyn Rodriguez
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS 11. (H222744-06)

BTEX 8021B	mg/	′kg	Analyze	d By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/28/2022	ND	2.12	106	2.00	0.205	
Toluene*	<0.050	0.050	06/28/2022	ND	2.09	105	2.00	0.671	
Ethylbenzene*	<0.050	0.050	06/28/2022	ND	2.07	104	2.00	0.117	
Total Xylenes*	<0.150	0.150	06/28/2022	ND	6.28	105	6.00	0.547	
Total BTEX	<0.300	0.300	06/28/2022	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.9	% 69.9-14	0						
Chloride, SM4500Cl-B	mg/	′kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/28/2022	ND	432	108	400	0.00	
TPH 8015M	mg/	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/28/2022	ND	198	98.9	200	2.10	
DRO >C10-C28*	118	10.0	06/28/2022	ND	207	103	200	1.25	
EXT DRO >C28-C36	53.9	10.0	06/28/2022	ND					
Surrogate: 1-Chlorooctane	85.3	% 43-149)						
Surrogate: 1-Chlorooctadecane	111 9	42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C

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

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

-Page 9 of 9

101	East	Marland,	Hobbs,	NM	88240

1	(575)	393-2326	FAX	(575)	393-2476

Company Name: Etech Environmental & Safety Sol	utions	s, In	C.						BI	LL TO	2					-	AN	ALYS	SIS I	REQU	JEST	r -		
Project Manager: Jance Crenshau							P.O.	#:								T	T	T	T	T		T	1	1
Address: P.O. Box 301							Com	pan	iy: 7	Newbo	Uri	10												
City: Lovington State: NM	Zip	: 88	260				Attn:	R	2/1	ie Ko	ma	165												
Phone #: (575) 396-2378 Fax #: (575)	396-1	429	1				Addr				14													
Project #: 16039 Project Own	er:						City:																	
Project Name: Paduca 6. Swo # 1.						-	State			Zip:				(WS	18)									
Project Location:						-	Pho	ne #	ł:				Chloride	TPH (8015M)	BTEX (8021B)									
Sampler Name: Auron fies							Fax	k:					CHI	H	EX									
FOR LAB USE ONLY	T	T		M/	TRI	X	P	RES	ERV.	SAM	PLIN	IG		F	BT									
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June 29, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/28/22 16:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/28/2022	Sampling Date:	06/28/2022
Reported:	06/29/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: PS 3 @ 1' (H222769-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	06/29/2022	ND	448	112	400	3.64	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of 4

101 East Marland, Hobbs, NM 88240

Company Name:			mental & Sa	fety Solu	tions	, Inc								BI	LL TO						AN/	ALYS	IS R	EQU	EST			
Project Manager	" Lan	e Cr	renstran								Ρ.	0. #	-													T		
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City: Lovingto	m		State	: NM	Zip	: 88	260				At	tn:	V	6	ie fu	nnels	1											
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July 05, 2022

LANCE CRENSHAW Etech Environmental & Safety Solutions 2617 W MARLAND HOBBS, NM 88240

RE: PADUCA 6 SWD #1

Enclosed are the results of analyses for samples received by the laboratory on 06/30/22 16:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Etech Environmental & Safety Solutions LANCE CRENSHAW 2617 W MARLAND HOBBS NM, 88240 Fax To:

Received:	06/30/2022	Sampling Date:	06/30/2022
Reported:	07/05/2022	Sampling Type:	Soil
Project Name:	PADUCA 6 SWD #1	Sampling Condition:	** (See Notes)
Project Number:	16039	Sample Received By:	Tamara Oldaker
Project Location:	MEWBOURNE - LEA CO NM		

Sample ID: WWS B # 11. (H222818-01)

TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2022	ND	210	105	200	2.17	
DRO >C10-C28*	<10.0	10.0	07/01/2022	ND	200	100	200	6.07	
EXT DRO >C28-C36	<10.0	10.0	07/01/2022	ND					
Surrogate: 1-Chlorooctane	95.7	% 43-149)						
Surrogate: 1-Chlorooctadecane	97.8	% 42.5-16	1						

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of 4

101 East Marland, Hobbs, NM 88240 (575) 393-2326 EAX (575) 393-2476

Company Name: Etech Environmental & Safety Solutions, Inc.	BILL TO	ANALYSIS REQUEST
Project Manager: Jance Cren Show	P.O. #:	
Address: 2617 W Marland	Company Meubourne	1
City: Hobbs State: NM Zip: 88240	Attn: Robbie RUNALS	
Phone #: (575) 264-9884 Fax #:	Address:	1
Project #: 16039 Project Owner:	City:	
Project Name: Paduca 6 SwD # 1.	State: Zip:	
Project Location:	Phone #:	Chioride TPH (8015M) BTEX (8021B)
Sampler Name: Aaron Rios	Fax #:	
FOR LAB USE ONLY MATRI	The second se	
Tap I.D. Sample I.D. #SOUNDWATER #CONTAINERS GROUNDWATER SOIL	SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : AMIL	
1 WWS B # 11. X X	6/30/23	X
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in clanatyses. All claims including those for negligence and any other cause whateoever shall be desmed watered unlease made in well sorvice. In no event shall Cardinal be liable for incidential or consequential damages, including without finalition, business letter under any claim arising whether based in claims including without finalition, business letter under the under any claim arising whether based in claims including without finalition, business letter under by Cardinal, regardless of whether such arising out of or related to the performance of services. hereunder by Cardinal, regardless of whether such arising and of or related to the performance of services. hereunder by Cardinal, regardless of whether such arising and of or related to the performance of services. hereunder by Cardinal, regardless of whether such arising and of or related by the performance of services. hereunder by Cardinal, regardless of whether such arising and the arising and of or related by the performance of services. hereunder by Cardinal, regardless of whether such arising and the arising and the arising and the arising and the arises the arises the arises the arises the arises are arised as a success arises are arised as a success. Relinquished By: Date: Time: Received By: Delivered By: (Circle One) 31.1c C-0.5c Sample Co.Cool into arises are arised as a success are arised as a success are arised as a success are arbitrary and arises are arbitrary are arbitrary and arbitrary are arbitrary	g and visical-well by Cardinati within 30 days after completies of if one, teas of use, or teas of profile inpured by client, its unbelient istim is based upon any of the above stated reasons or otherwit and the state of the state of the state of the state of the state Phone Re Fax Result REMARKS Please e	he applicable rise, rsult: <u>Yes</u> No <u>Add'I Phone #:</u> It: <u>Yes</u> No <u>Add'I Fax #:</u> S: email results and copy of CoC to pm@etechenv.com.

Released to Imaging: 10/25/2022 12:39:39 PM

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Appendix E Regulatory Correspondence

From:	Lance Crenshaw
To:	Ben Arguijo
Subject:	FW: [EXTERNAL] Mewbourne Oil Co – NGL Paduca– napp2213957876 sampling notice
Date:	Wednesday, June 22, 2022 3:21:59 PM

From: Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>
Sent: Wednesday, June 22, 2022 1:57 PM
To: Lance Crenshaw <lance@etechenv.com>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <kep>
<Robert.Hamlet@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>
Subject: FW: [EXTERNAL] Mewbourne Oil Co – NGL Paduca– napp2213957876 sampling notice

Lance

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks Jennifer Nobui

From: Enviro, OCD, EMNRD <<u>OCD.Enviro@state.nm.us</u>>
Sent: Wednesday, June 22, 2022 1:48 PM
To: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>; Harimon, Jocelyn, EMNRD
<<u>Jocelyn.Harimon@state.nm.us</u>>; Nobui, Jennifer, EMNRD <<u>Jennifer.Nobui@state.nm.us</u>>; Bratcher,
Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>
Subject: Fw: [EXTERNAL] Mewbourne Oil Co – NGL Paduca– napp2213957876 sampling notice

From: Lance Crenshaw <lance@etechenv.com>
Sent: Wednesday, June 22, 2022 1:46 PM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@state.nm.us</u>>
Cc: Robbie Runnels <<u>rrunnels@mewbourne.com</u>>; Connor Walker <<u>cwalker@mewbourne.com</u>>;
Joel Lowry <<u>ioel@etechenv.com</u>>; Ben Arguijo <<u>bena@etechenv.com</u>>
Subject: [EXTERNAL] Mewbourne Oil Co – NGL Paduca– napp2213957876 sampling notice

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

This email serves as notice that Etech intends to collect excavation confirmation soil samples from the following locations/reportable release sites:

Mewbourne Oil Co – NGL Paduca – napp2213957876

If you have any questions or need any additional information, please contact Lance Crenshaw by phone (575-631-2532) or email (lance@etechenv.com

Lance Crenshaw **Etech Environmental & Safety Solutions** 575-631-2532

Total Control Panel

To: <u>lance@etechenv.com</u> From: jennifer.nobui@state.nm.us My Spam Blocking Level: High

Message Score: 10

Block this sender Block state.nm.us High (60): Pass Medium (75): Pass Low (90): Pass

<u>Login</u>

This message was delivered because the content filter score did not exceed your filter level.

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
MEWBOURNE OIL CO	14744
P.O. Box 5270	Action Number:
Hobbs, NM 88241	149492
	Action Type:
	[C-141] Release Corrective Action (C-141)
CONDITIONS	

CONDING				
Created By	Condition	Condition Date		
jnobui	Closure Report Approved.	10/25/2022		

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CONDITIONS

Action 149492

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