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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2123634554
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Shelby Pennington	Contact Telephone 281-723-9353
Contact email shelby.pennington@exxonmobil.com	Incident # *(assigned by OCD)*
Contact mailing address 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 79707	

Location of Release Source

Latitude 32.53378 Longitude -104.20753
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Avalon Delaware Unit 624	Site Type Production Well
Date Release Discovered 8/10/2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
D	32	20S	28E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 0.38	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 8.21	Volume Recovered (bbls) 0
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Lease operator discovered fluids releasing from a corroded flow line. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2123634554
District RP	
Facility ID	
Application ID	

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

Initial Response

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

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

If all the actions described above have not been undertaken, explain why:

NA

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Adrian Baker
Title: SSHE Coordinator

Signature: Adrian Baker
Date: 8/24/21

email: adrian.baker@exxonmobil.com
Telephone: 432-236-3808

OCD Only

Received by: Ramona Marcus
Date: 8/24/2021

NAPP2123634554

Location:	Avalon Delaware Unit 624	
Spill Date:	8/10/2021	
Area 1		
Approximate Area =	724.00	sq. ft.
Average Saturation (or depth) of spill =	4.00	inches
Average Porosity Factor =	0.20	
VOLUME OF LEAK		
Total Crude Oil =	0.38	bbls
Total Produced Water =	8.21	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.38**	**bbls**
Total Produced Water =	**8.21**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**0.00**	**bbls**

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: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 44037
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	8/24/2021

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2123634554
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☒ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2123634554
District RP	
Facility ID	
Application ID	

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

Printed Name: ____Adrian Baker_____ Title: _____Environmental Coordinator_____

Signature:_____Adrian Baker_____ Date: __05/03/2022_____

email: ___adrian.baker@exxonmobil.com_____ Telephone: _____432-236-3808_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2123634554
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

Printed Name: _____Adrian Baker_____ Title: __Environmental Coordinator_____

Signature: _____Adrian Baker_____ Date: ___05/03/2022_____

email: __adrian.baker@exxonmobil.com_____ Telephone: ___432-236-3808_____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2123634554
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
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Printed Name: _____Adrian Baker_____ Title: __Environmental Coordinator_____

Signature: _____Adrian Baker_____ Date: ___05/03/2022_____

email: __adrian.baker@exxonmobil.com_____ Telephone: ___432-236-3808_____

OCD Only

Received by: __Robert Hamlet_____ Date: __7/20/2022___

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

Signature: Robert Hamlet Date: 7/20/2022

ENSOLUM

May 5, 2022

District II
New Mexico Oil Conservation Division
811 S. First St.
Artesia, New Mexico 88210

Re: Remediation Work Plan
Avalon Delaware Unit 624
Incident Number NAPP2123634554
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared the following Remediation Work Plan to document the site assessment activities completed to date and propose a work plan to address the impacted soil identified at the Avalon Delaware Unit 624 (Site), resulting from a flow line release of crude oil and produced water into the surrounding pasture. The following Work Plan proposes lateral and vertical delineation of the release, excavation of impacted soil, and installation of a 20-mil impermeable liner in the floor of the excavation to address residual chloride impacts.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit D, Section 32, Township 20 South, Range 28 East, in Eddy County, New Mexico (32.53378° N, 104.20753° W) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On August 10, 2021, corrosion of a flow line resulted in the release of approximately 0.38 barrels (bbls) of crude oil and 8.21 bbls of produced water into the surrounding pasture. No fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 24, 2021. The release was assigned Incident Number NAPP2123634554.

SITE CHARATERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) Well CP-00851, located approximately 2,087 feet west of the Site. The groundwater well has a reported depth to groundwater of 115 feet bgs and a total

depth of 255 feet bgs. Ground surface elevation at the groudnwater well location is 3,239 feet above mean sea level (amsl), which is approximately 12 feet higher in elevation than the Site. All wells used for depth to water determination are depicted on Figure 1 and the referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 2,057 feet northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On August 26, 2021, Ensolum personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Three preliminary assessment soil samples (SS01 through SS03) were collected within the release extent from a depth of approximately 0.5 feet bgs. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The preliminary soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 through SS03 indicated that TPH concentrations exceeded the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical report is included in Appendix D.

Further remediation was delayed pending State Land access. A Right-of-Entry (ROE) Permit was submitted to the State land Office (SLO) in October 2021. The executed permit was received on January 18, 2022.

On February 2, 2022, delineation activities were conducted at the Site to assess the vertical extent of impacted soil. Potholes PH01 through PH03 were advanced via track mounted backhoe within the

release extent at the locations of preliminary soil samples SS01 through SS03. The delineation potholes were advanced to depths ranging from 5 feet to 15 feet bgs. Soil from the potholes was field screened at depths ranging from 1-foot to 15 feet bgs using a PID and chloride Hach® chloride QuanTab® test strips. Field screening results indicated elevated chloride concentrations in potholes PH01 through PH03 at depths ranging from 1 foot to 15 feet bgs. Field screening results indicated elevated TPH concentrations in the top four feet of the release area. Due to the elevated field screening results, the delineation soil samples were not submitted for laboratory analysis. One additional pothole (PH04) was advanced to a depth of 4 feet bgs outside of the release extent and confirmed the absence of naturally occuring chloride at the Site. Field screening results and observations from the potholes were documented on lithologic/soil sampling logs, which are included as Appendix C. The pothole locations are presented on Figure 2.

PROPOSED REMEDIATION WORK PLAN

The results from the delineation soil sampling suggest soil containing elevated TPH concentrations is present across the 750 square foot release area and extends from the ground surface to approximately 4 feet bgs; elevated chloride concentrations potentially extend from depths ranging from 1-foot to greater than 15 feet bgs. XTO proposes continued lateral and vertical delineation of the impacted soil, excavation of the top four feet of soil within the release footprint to remove soil impacted by TPH and chloride, and installation of a liner in the floor of the excavation to mitigate further chloride impacts to the subsurface.

XTO requests approval to complete the following remediation activities:

- Lateral and vertical delineation of impacted soil to below the Site Closure Criteria. Proposed delineation locations are provided on Figure 3.
- Lateral and vertical excavation of the TPH impacted soil until concentrations in remaining soil are below 100 mg/kg.
- Lateral and vertical excavation of chloride impacted soil in the top 4 feet (or greater if removal of TPH impacted soil exceeds 4 feet). Excavation will proceed laterally until sidewall samples confirm chloride concentrations are compliant with the Closure Criteria in the top four feet. The estimated excavation extent is shown on Figure 3.
- Following removal of the impacted soil, 5-point composite confirmation samples will be collected at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation samples will be submitted for laboratory analysis of BTEX, TPH, and chloride.
- Upon completed of excavation activities, a 20-mil impermeable liner will be installed over the chloride impacted soil to mitigate further chloride impacts to the subsurface. The liner will be installed at 4 feet bgs within the open excavation as shown on Figure 3.
- An estimated 195 cubic yards of impacted soil will be excavated and disposed of at a licensed disposal facility.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture will be re-seeded with an approved BLM seed mixture.

XTO will complete the delineation, excavation, and liner installation activities within 90 days of the date of approval of this Work Plan by the NMOCD. A final report requesting closure will be submitted within 3 weeks of receipt of final laboratory analytical results.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,
Ensolum, LLC

Kalei Jennings
Senior Scientist

Aimee Cole
Senior Managing Scientist

cc: Adrian Baker, XTO
New Mexico State Land Office

Appendices:

Figure 1	Site Location Map
Figure 2	Preliminary and Delineation Soil Sample Locations
Figure 3	Proposed Delineation Locations and Estimated Excavation and Liner Extent
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Lithologic / Soil Sampling Logs
Appendix D	Laboratory Analytical Results
Appendix E	NMOCD Notifications

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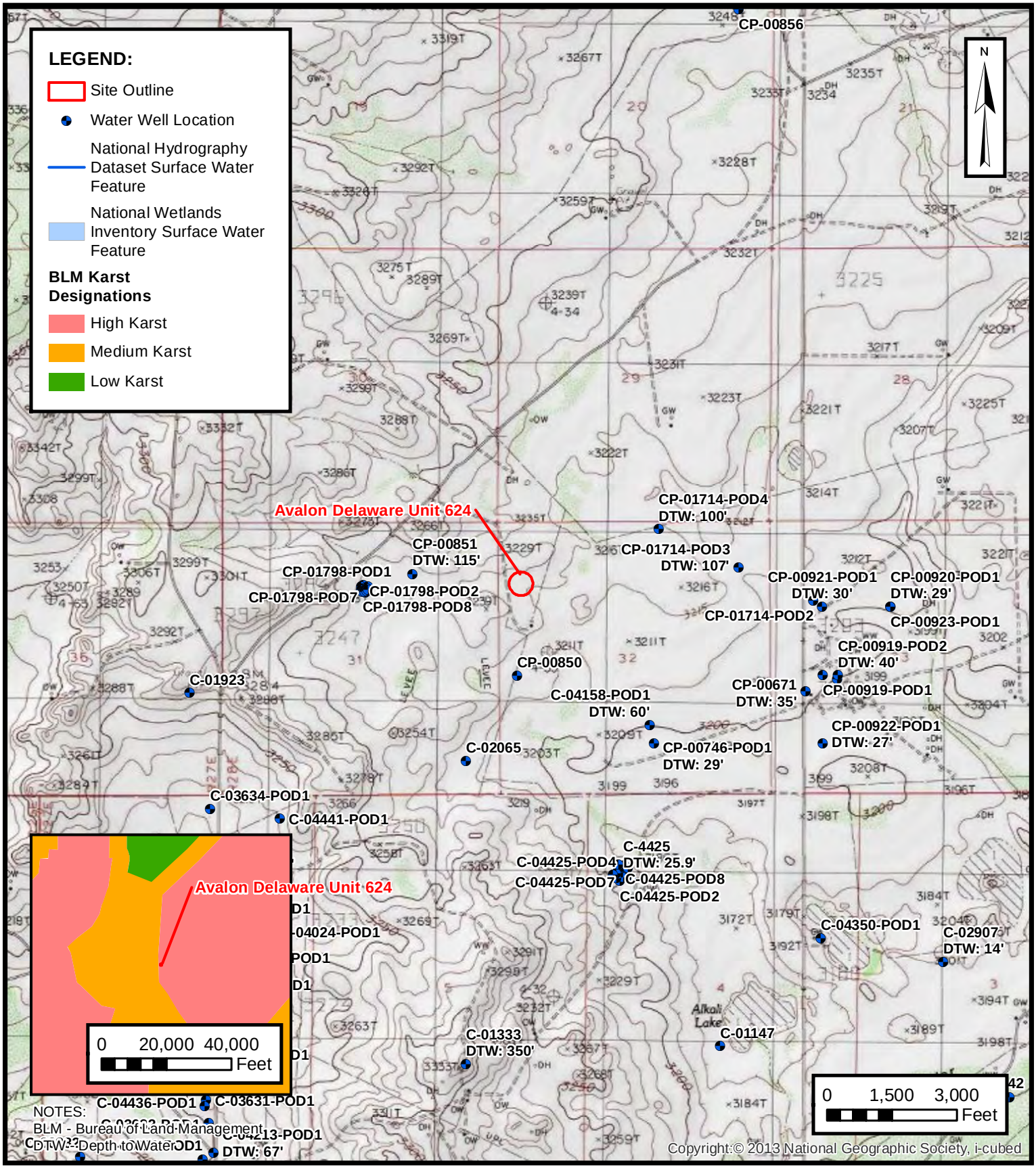
FIGURES



NOTES:
BLM - Bureau of Land Management
DTW - Depth to Water

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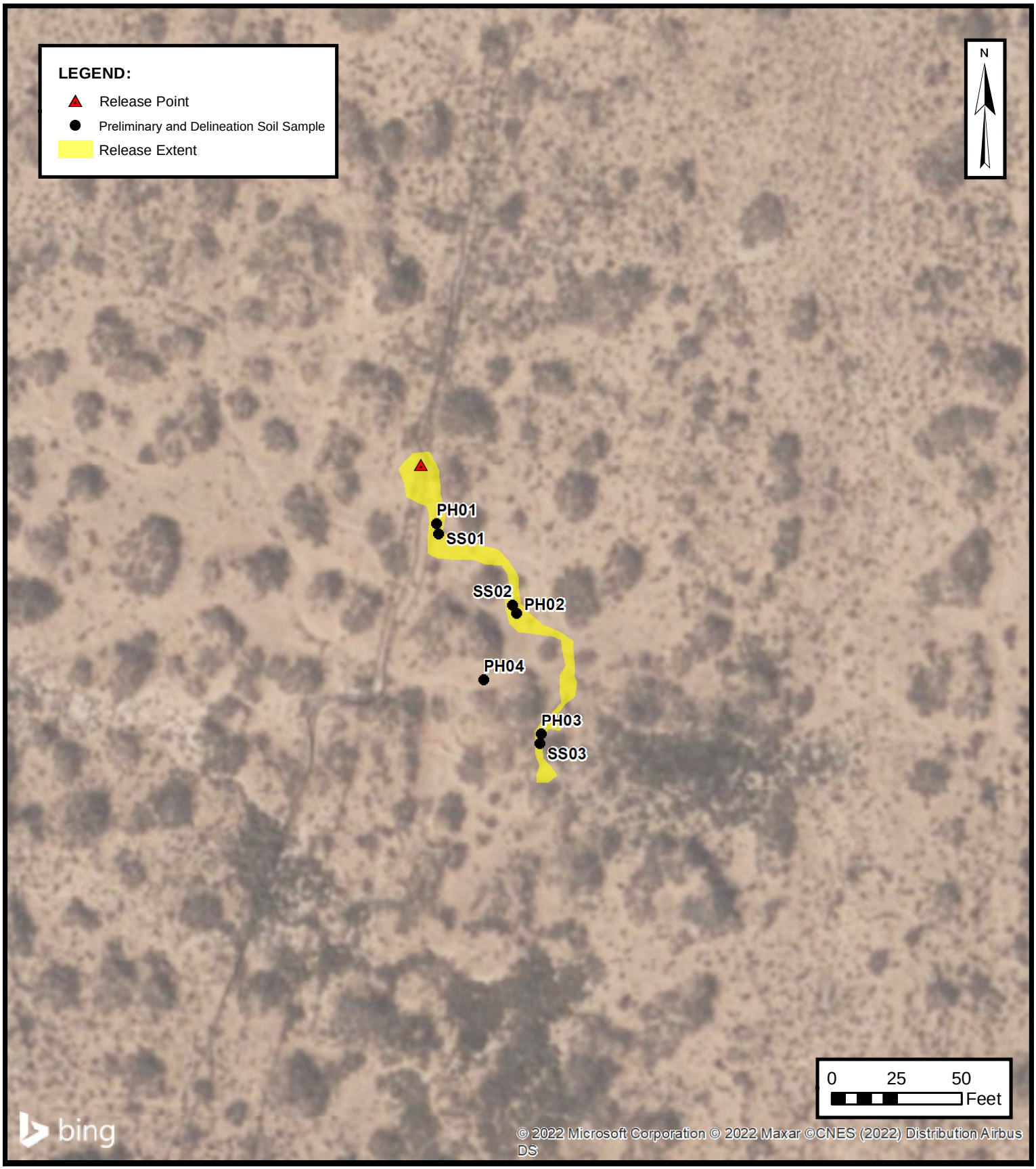
Environmental & Hydrogeologic Consultants

SITE RECEPTOR MAP

XTO ENERGY, INC
AVALON DELAWARE UNIT 624
NAPP2123634554
Unit D, Sec 32, T20S, R28E
Eddy County, New Mexico

FIGURE
1



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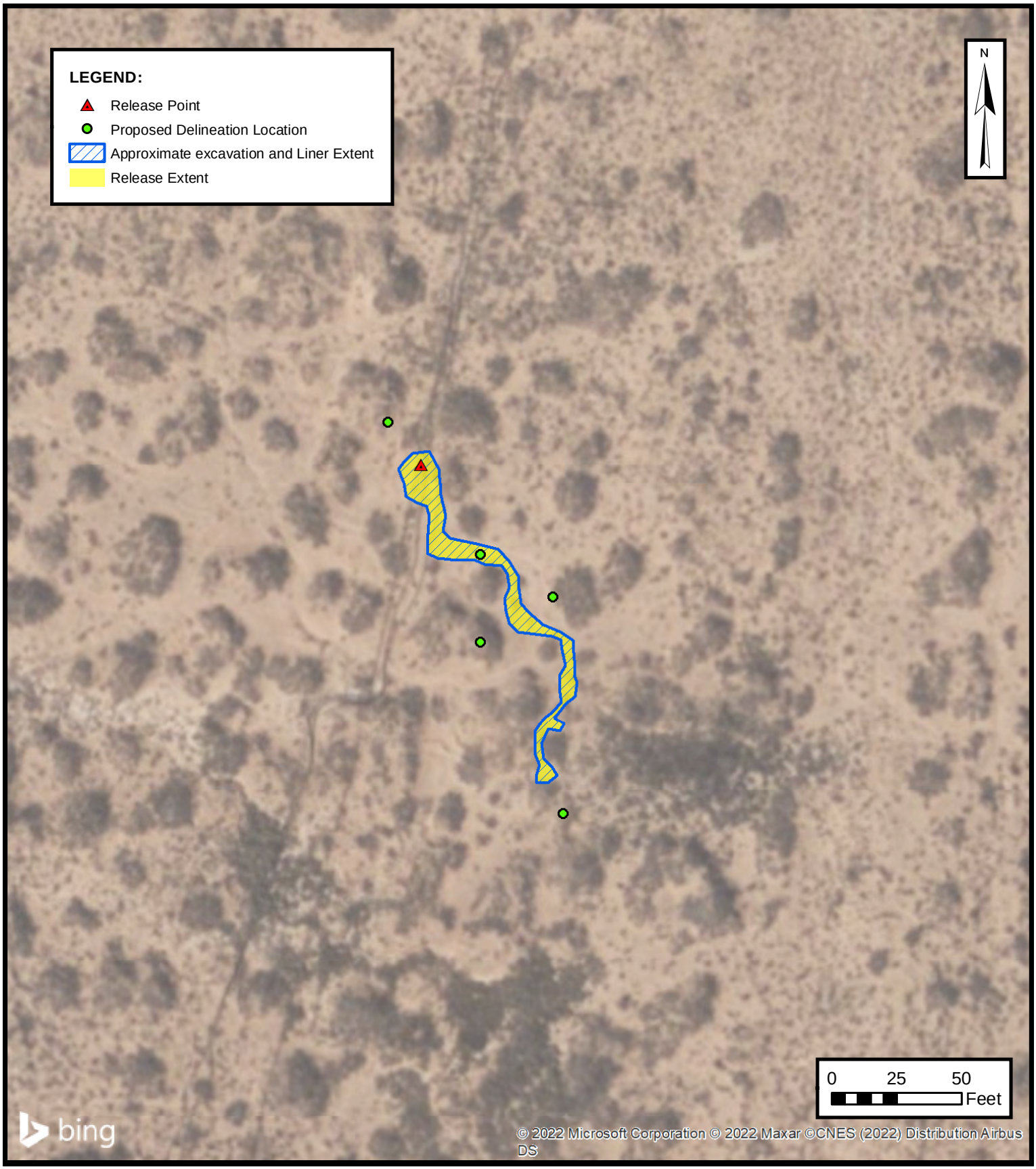
Environmental & Hydrogeologic Consultants

PRELIMINARY AND DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
AVALON DELAWARE UNIT 624
NAPP2123634554
Unit D, Sec 32, T20S, R28E
Eddy County, New Mexico

FIGURE
2



ENSOLUM
Environmental & Hydrogeologic Consultants

PROPOSED DELINEATION LOCATIONS AND ESTIMATED EXCAVATION AND LINER EXTENT
XTO ENERGY, INC
AVALON DELAWARE UNIT 624
NAPP2123634554
Unit D, Sec 32, T20S, R28E
Eddy County, New Mexico

FIGURE
3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Avalon Delaware Unit 624
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Preliminary Assessment Soil Samples										
SS01	08/26/2021	0.5	<0.100	20.2	1,340	6,840	<249	8,180	**8,180**	42.6
SS02	08/26/2021	0.5	<0.0200	<0.0400	<50.0	338	<50.0	338	**338**	252
SS03	08/26/2021	0.5	0.0893	19.5	1,550	7,510	<250	9,060	**9,060**	355

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

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APPENDIX A

Referenced Well Records

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: CP 00851 **Subbasin:** CP **Cross Reference:** -

Primary Purpose: SAN 72-12-1 SANITARY IN CONJUNCTION WITH A COMMERCIAL USE

Primary Status: PMT PERMIT

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 3 **Cause/Case:** -

Owner: EXXON CORPORATION

Contact: ALEX M CORREA

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	476246	72121	1996-09-12	PMT	MTR	CP 00851	T		3	
get images	476231	72121	1995-08-17	PMT	LOG	CP 00851	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
CP 00851		Shallow	4	1	2	31	20S	28E	573791	3599940*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 00851	4	1	2	31	20S	28E	573791	3599940*

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY" (LD)

Drill Start Date:	09/14/1995	**Drill Finish Date:**	09/14/1995	**Plug Date:**	
Log File Date:	09/21/1995	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	12 GPM
Casing Size:	6.63	**Depth Well:**	255 feet	**Depth Water:**	115 feet

Water Bearing Stratifications:	Top	Bottom	Description
	205	230	Limestone/Dolomite/Chalk

Casing Perforations:	Top	Bottom
	181	255

Meter Number:	8675	**Meter Make:**	HALLIBURTON
Meter Serial Number:	1STA4383	**Meter Multiplier:**	1.0000
Number of Dials:	5	**Meter Type:**	Diversion
Unit of Measure:	Barrels 42 gal.	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
01/01/2005	2005	724	A	jw		0	
04/01/2005	2005	1214	A	jw		0.063	
07/12/2005	2005	1853	A	jw		0.082	
10/07/2005	2005	2775	A	jw		0.119	
01/01/2006	2005	4074	A	RPT		0.167	
04/03/2006	2006	5539	A	RPT		0.189	
04/01/2010	2010	917	R	RPT	Meter Rollover	12.294	

**YTD Meter Amounts:	Year	Amount
	2005	0.431
	2006	0.189
	2010	12.294

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

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc.
Avalon Delaware Unit 624
Incident Number NAPP2123634554

Photograph 1
Date: August 26, 2021
Description: Photo of release area during initial visit.

Photograph 2
Date: August 26, 2021
Description: Photo of release area during initial visit.

Photograph 3
Date: August 26, 2021
Description: Photo of release area during initial visit.

Photograph 4
Date: August 26, 2021
Description: Photo of release area during initial visit.

ENSOLUM

APPENDIX C

Lithologic / Soil Sampling Logs

ENSOLUM

	Sample Name: **PH01**	Date: **02/02/2022**
	Site Name: **Avalon Delaware Unit 624**	
	Incident Number: **NAPP2123634554**	
	Job Number: 03E1558026	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: **Backhoe**
Coordinates:	Hole Diameter: NA	Total Depth: **15'**

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
M	268.8	442.3	Y				SW-SM	SAND, abundant silt, fine grain, dark brown, strong odor, staining, moist, well sorted, noncohesive.
M	2,329.6	152.4	Y			2		
M	3,315.2	16.4	N			4		SAA, light brown color, medium to large gravel, some small to large subrounded to subangular caliche, moist, (2cm-5cm).
M	5,129.6	12.1	N			6		
M	5,566.4	11.2	N			8		
M	5,129.6	4.2	N			10		
M	3,964.8	11.2	N			12	SP-SM	SAND with gravel, poorly graded, fine grain, no odor, noncohesive.
M	2,492	11.9	N			14		
M	2,329.6	6.7	N			15		

TD @ 15 feet bgs

ENSOLUM

	Sample Name: **PH02**	Date: **02/02/2022**
	Site Name: **Avalon Delaware Unit 624**	
	Incident Number: **NAPP2123634554**	
	Job Number: 03E1558026	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: **Backhoe**
Coordinates:	Hole Diameter: NA	Total Depth: **5'**

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
M	1,764	124.4	Y			1	SW-SM	SAND, abundant silt, fine grain, dark brown, strong odor, staining, moist, well sorted.
M	6,036.8	74.6	Y			2		SAA
M	3,304	40.2	N			3		SAA
M	3,572.8	62.1	N			4		SAA, slight odor.
M	2,850.4	44.8	N			5		SAA

TD @ 5 feet bgs

ENSOLUM

	Sample Name: **PH03**	Date: **02/02/2022**
	Site Name: **Avalon Delaware Unit 624**	
	Incident Number: **NAPP2123634554**	
	Job Number: 03E1558026	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: **Backhoe**
Coordinates:	Hole Diameter: NA	Total Depth: **5'**

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
M	896	502.2	Y			1	SW-SM	SAND, abundant silt, fine grain, dark brown, strong odor, staining, moist, well sorted.
M	1,327.4	608.4	Y			2		SAA
M	2,654.4	613.8	N			3		SAA
M	3,572.8	284.6	N			4		SAA
M	5,129.4	85.1	N			5		SAA, slight odor.

TD @ 5 feet bgs

ENSOLUM

	Sample Name: **PH04**	Date: **02/04/2022**
	Site Name: **Avalon Delaware Unit 624**	
	Incident Number: **NAPP2123634554**	
	Job Number: 03E1558026	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: MR	Method: **Backhoe**
Coordinates:	Hole Diameter: NA	Total Depth: **4'**

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
M	<132	0.1	Y			1	SW-SM	SAND, light brown, poorly graded, moist, medium grain, no stain, no odor.
M	<132	0.1	Y			2		SAA
M	<132	0.1	N			3		SAA
M	<1322	0.1	N			4		SAA

TD @ 4 feet bgs

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-1175-1
Laboratory Sample Delivery Group: Eddy County
Client Project/Site: ADU 624

For:
WSP USA Inc.
2777 N. Stemmons Freeway
Suite 1600
Dallas, Texas 75207

Attn: Kalei Jennings

JKramer

Authorized for release by:
9/1/2021 3:30:02 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: WSP USA Inc.
Project/Site: ADU 624

Laboratory Job ID: 890-1175-1
SDG: Eddy County

Table of Contents

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Job ID: 890-1175-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-1175-1

Receipt
The samples were received on 8/26/2021 1:38 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7158 and analytical batch 880-7183 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS02 (890-1175-2) and SS03 (890-1175-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Client Sample ID: SS01

Lab Sample ID: 890-1175-1
Matrix: Solid
Date Collected: 08/26/21 12:25
Date Received: 08/26/21 13:38
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.100	U	0.100		mg/Kg		08/27/21 10:33	08/28/21 11:26	50
Toluene	**4.82**		0.100		mg/Kg		08/27/21 10:33	08/28/21 11:26	50
Ethylbenzene	**0.348**		0.100		mg/Kg		08/27/21 10:33	08/28/21 11:26	50
m-Xylene & p-Xylene	**9.60**		0.200		mg/Kg		08/27/21 10:33	08/28/21 11:26	50
o-Xylene	**5.40**		0.100		mg/Kg		08/27/21 10:33	08/28/21 11:26	50
Xylenes, Total	**15.0**		0.200		mg/Kg		08/27/21 10:33	08/28/21 11:26	50
Total BTEX	**20.2**		0.200		mg/Kg		08/27/21 10:33	08/28/21 11:26	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*08/27/21 10:33*	*08/28/21 11:26*	*50*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*08/27/21 10:33*	*08/28/21 11:26*	*50*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**1340**		249		mg/Kg		08/27/21 13:35	08/28/21 06:06	5
Diesel Range Organics (Over C10-C28)	**6840**		249		mg/Kg		08/27/21 13:35	08/28/21 06:06	5
Oil Range Organics (Over C28-C36)	<249	U	249		mg/Kg		08/27/21 13:35	08/28/21 06:06	5
Total TPH	**8180**		249		mg/Kg		08/27/21 13:35	08/28/21 06:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*08/27/21 13:35*	*08/28/21 06:06*	*5*
o-Terphenyl	*92*		*70 - 130*	*08/27/21 13:35*	*08/28/21 06:06*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.6**		5.02		mg/Kg			08/31/21 19:20	1

Client Sample ID: SS02

Lab Sample ID: 890-1175-2
Matrix: Solid
Date Collected: 08/26/21 12:38
Date Received: 08/26/21 13:38
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		08/27/21 10:33	08/28/21 11:54	10
Toluene	<0.0200	U	0.0200		mg/Kg		08/27/21 10:33	08/28/21 11:54	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		08/27/21 10:33	08/28/21 11:54	10
m-Xylene & p-Xylene	<0.0400	U	0.0400		mg/Kg		08/27/21 10:33	08/28/21 11:54	10
o-Xylene	<0.0200	U	0.0200		mg/Kg		08/27/21 10:33	08/28/21 11:54	10
Xylenes, Total	<0.0400	U	0.0400		mg/Kg		08/27/21 10:33	08/28/21 11:54	10
Total BTEX	<0.0400	U	0.0400		mg/Kg		08/27/21 10:33	08/28/21 11:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*08/27/21 10:33*	*08/28/21 11:54*	*10*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*08/27/21 10:33*	*08/28/21 11:54*	*10*

Client Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Client Sample ID: SS02

Lab Sample ID: 890-1175-2
Matrix: Solid
Date Collected: 08/26/21 12:38
Date Received: 08/26/21 13:38
Sample Depth: 0.5

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/28/21 06:50	1
Diesel Range Organics (Over C10-C28)	**338**		50.0		mg/Kg		08/27/21 13:35	08/28/21 06:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/28/21 06:50	1
Total TPH	**338**		50.0		mg/Kg		08/27/21 13:35	08/28/21 06:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*08/27/21 13:35*	*08/28/21 06:50*	*1*
o-Terphenyl	*113*		*70 - 130*	*08/27/21 13:35*	*08/28/21 06:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**252**		5.05		mg/Kg			08/31/21 19:25	1

Client Sample ID: SS03

Lab Sample ID: 890-1175-3
Matrix: Solid
Date Collected: 08/26/21 12:35
Date Received: 08/26/21 13:38
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0893**		0.0399		mg/Kg		08/27/21 10:33	08/28/21 12:21	20
Toluene	**6.20**		0.0399		mg/Kg		08/27/21 10:33	08/28/21 12:21	20
Ethylbenzene	**0.353**		0.0399		mg/Kg		08/27/21 10:33	08/28/21 12:21	20
m-Xylene & p-Xylene	**7.50**		0.0798		mg/Kg		08/27/21 10:33	08/28/21 12:21	20
o-Xylene	**5.33**		0.0399		mg/Kg		08/27/21 10:33	08/28/21 12:21	20
Xylenes, Total	**12.8**		0.0798		mg/Kg		08/27/21 10:33	08/28/21 12:21	20
Total BTEX	**19.5**		0.0798		mg/Kg		08/27/21 10:33	08/28/21 12:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*342*	*S1+*	*70 - 130*	*08/27/21 10:33*	*08/28/21 12:21*	*20*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*08/27/21 10:33*	*08/28/21 12:21*	*20*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**1550**		250		mg/Kg		08/27/21 13:35	08/28/21 06:28	5
Diesel Range Organics (Over C10-C28)	**7510**		250		mg/Kg		08/27/21 13:35	08/28/21 06:28	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		08/27/21 13:35	08/28/21 06:28	5
Total TPH	**9060**		250		mg/Kg		08/27/21 13:35	08/28/21 06:28	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*08/27/21 13:35*	*08/28/21 06:28*	*5*
o-Terphenyl	*98*		*70 - 130*	*08/27/21 13:35*	*08/28/21 06:28*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**355**		4.98		mg/Kg			08/31/21 19:30	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-5513-A-1-A MS	Matrix Spike	122	126
880-5513-A-1-B MSD	Matrix Spike Duplicate	94	98
890-1175-1	SS01	111	76
890-1175-2	SS02	141 S1+	82
890-1175-3	SS03	342 S1+	87
LCS 880-7158/1-A	Lab Control Sample	107	118
LCSD 880-7158/2-A	Lab Control Sample Dup	118	121
MB 880-7146/5-A	Method Blank	71	103
MB 880-7158/5-A	Method Blank	70	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid | **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-5484-A-5-D MS	Matrix Spike	92	99
880-5484-A-5-E MSD	Matrix Spike Duplicate	92	99
890-1175-1	SS01	116	92
890-1175-2	SS02	104	113
890-1175-3	SS03	123	98
LCS 880-7193/2-A	Lab Control Sample	95	102
LCSD 880-7193/3-A	Lab Control Sample Dup	91	98
MB 880-7193/1-A	Method Blank	98	115

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7146/5-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7146

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/26/21 15:44	08/27/21 18:33	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/26/21 15:44	08/27/21 18:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*08/26/21 15:44*	*08/27/21 18:33*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/26/21 15:44*	*08/27/21 18:33*	*1*

Lab Sample ID: MB 880-7158/5-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7158

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 07:57	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		08/27/21 10:33	08/28/21 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*08/27/21 10:33*	*08/28/21 07:57*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/27/21 10:33*	*08/28/21 07:57*	*1*

Lab Sample ID: LCS 880-7158/1-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7158

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1009		mg/Kg		101	70 - 130		
Toluene			0.100	0.09915		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.1007		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2017		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.09923		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-7158/2-A
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7158

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1021		mg/Kg		102	70 - 130	1	35
Toluene			0.100	0.09516		mg/Kg		95	70 - 130	4	35
Ethylbenzene			0.100	0.1036		mg/Kg		104	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2081		mg/Kg		104	70 - 130	3	35
o-Xylene			0.100	0.1038		mg/Kg		104	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

Lab Sample ID: 880-5513-A-1-A MS
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7158

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U F1	0.101	0.05222	F1	mg/Kg		52	70 - 130		
Toluene	<0.00200	U F1	0.101	0.05001	F1	mg/Kg		50	70 - 130		
Ethylbenzene	<0.00200	U F1	0.101	0.04375	F1	mg/Kg		43	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.08514	F1	mg/Kg		42	70 - 130		
o-Xylene	<0.00200	U F1	0.101	0.04188	F1	mg/Kg		42	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*

Lab Sample ID: 880-5513-A-1-B MSD
Matrix: Solid
Analysis Batch: 7183

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7158

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.101	0.06023	F1	mg/Kg		60	70 - 130	14	35
Toluene	<0.00200	U F1	0.101	0.05872	F1	mg/Kg		58	70 - 130	16	35
Ethylbenzene	<0.00200	U F1	0.101	0.05223	F1	mg/Kg		52	70 - 130	18	35
m-Xylene & p-Xylene	<0.00399	U F1	0.201	0.1003	F1	mg/Kg		50	70 - 130	16	35
o-Xylene	<0.00200	U F1	0.101	0.04742	F1	mg/Kg		47	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-7193/1-A
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7193

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1
Total TPH	<50.0	U	50.0		mg/Kg		08/27/21 13:35	08/27/21 22:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/27/21 13:35*	*08/27/21 22:03*	*1*
o-Terphenyl	*115*		*70 - 130*	*08/27/21 13:35*	*08/27/21 22:03*	*1*

Lab Sample ID: LCS 880-7193/2-A
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7193

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	881.0		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1015		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-7193/3-A
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 7193

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	873.2		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	997.7		mg/Kg		100	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: 880-5484-A-5-D MS
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	995	840.2		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	995	895.5		mg/Kg		90	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-5484-A-5-D MS
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 7193

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 880-5484-A-5-E MSD
Matrix: Solid
Analysis Batch: 7166

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 7193

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	813.7		mg/Kg		82	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	909.9		mg/Kg		91	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	99		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7258/1-A
Matrix: Solid
Analysis Batch: 7352

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/31/21 18:48	1

Lab Sample ID: LCS 880-7258/2-A
Matrix: Solid
Analysis Batch: 7352

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	266.8		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-7258/3-A
Matrix: Solid
Analysis Batch: 7352

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	265.2		mg/Kg		106	90 - 110	1	20

Lab Sample ID: 890-1178-A-5-D MS
Matrix: Solid
Analysis Batch: 7352

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	214		250	475.1		mg/Kg		104	90 - 110		

QC Sample Results

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-1178-A-5-E MSD
Matrix: Solid
Analysis Batch: 7352

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	214		250	473.8		mg/Kg		104	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

GC VOA

Prep Batch: 7146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7146/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 7158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1175-1	SS01	Total/NA	Solid	5035	
890-1175-2	SS02	Total/NA	Solid	5035	
890-1175-3	SS03	Total/NA	Solid	5035	
MB 880-7158/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7158/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7158/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5513-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-5513-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 7183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1175-1	SS01	Total/NA	Solid	8021B	7158
890-1175-2	SS02	Total/NA	Solid	8021B	7158
890-1175-3	SS03	Total/NA	Solid	8021B	7158
MB 880-7146/5-A	Method Blank	Total/NA	Solid	8021B	7146
MB 880-7158/5-A	Method Blank	Total/NA	Solid	8021B	7158
LCS 880-7158/1-A	Lab Control Sample	Total/NA	Solid	8021B	7158
LCSD 880-7158/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7158
880-5513-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	7158
880-5513-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	7158

GC Semi VOA

Analysis Batch: 7166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1175-1	SS01	Total/NA	Solid	8015B NM	7193
890-1175-2	SS02	Total/NA	Solid	8015B NM	7193
890-1175-3	SS03	Total/NA	Solid	8015B NM	7193
MB 880-7193/1-A	Method Blank	Total/NA	Solid	8015B NM	7193
LCS 880-7193/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7193
LCSD 880-7193/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7193
880-5484-A-5-D MS	Matrix Spike	Total/NA	Solid	8015B NM	7193
880-5484-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	7193

Prep Batch: 7193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1175-1	SS01	Total/NA	Solid	8015NM Prep	
890-1175-2	SS02	Total/NA	Solid	8015NM Prep	
890-1175-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-7193/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7193/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7193/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5484-A-5-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-5484-A-5-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

HPLC/IC

Leach Batch: 7258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1175-1	SS01	Soluble	Solid	DI Leach	
890-1175-2	SS02	Soluble	Solid	DI Leach	
890-1175-3	SS03	Soluble	Solid	DI Leach	
MB 880-7258/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7258/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7258/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1178-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1178-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 7352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1175-1	SS01	Soluble	Solid	300.0	7258
890-1175-2	SS02	Soluble	Solid	300.0	7258
890-1175-3	SS03	Soluble	Solid	300.0	7258
MB 880-7258/1-A	Method Blank	Soluble	Solid	300.0	7258
LCS 880-7258/2-A	Lab Control Sample	Soluble	Solid	300.0	7258
LCSD 880-7258/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7258
890-1178-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	7258
890-1178-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	7258

Lab Chronicle

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Client Sample ID: SS01
Date Collected: 08/26/21 12:25
Date Received: 08/26/21 13:38

Lab Sample ID: 890-1175-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		50	7183	08/28/21 11:26	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		5	7166	08/28/21 06:06	AJ	XEN MID
Soluble	Leach	DI Leach			7258	08/30/21 09:52	CH	XEN MID
Soluble	Analysis	300.0		1	7352	08/31/21 19:20	CH	XEN MID

Client Sample ID: SS02
Date Collected: 08/26/21 12:38
Date Received: 08/26/21 13:38

Lab Sample ID: 890-1175-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		10	7183	08/28/21 11:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7166	08/28/21 06:50	AJ	XEN MID
Soluble	Leach	DI Leach			7258	08/30/21 09:52	CH	XEN MID
Soluble	Analysis	300.0		1	7352	08/31/21 19:25	CH	XEN MID

Client Sample ID: SS03
Date Collected: 08/26/21 12:35
Date Received: 08/26/21 13:38

Lab Sample ID: 890-1175-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7158	08/27/21 10:33	MR	XEN MID
Total/NA	Analysis	8021B		20	7183	08/28/21 12:21	MR	XEN MID
Total/NA	Prep	8015NM Prep			7193	08/27/21 13:35	DM	XEN MID
Total/NA	Analysis	8015B NM		5	7166	08/28/21 06:28	AJ	XEN MID
Soluble	Leach	DI Leach			7258	08/30/21 09:52	CH	XEN MID
Soluble	Analysis	300.0		1	7352	08/31/21 19:30	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: WSP USA Inc.
Project/Site: ADU 624

Job ID: 890-1175-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1175-1	SS01	Solid	08/26/21 12:25	08/26/21 13:38	0.5
890-1175-2	SS02	Solid	08/26/21 12:38	08/26/21 13:38	0.5
890-1175-3	SS03	Solid	08/26/21 12:35	08/26/21 13:38	0.5

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	KALEI JENNINGS	Bill to: (if different)	ADRIAN BAKER
Company Name:	WSP USA	Company Name:	XTO ENERGY
Address:	3300 N A ST	Address:	3104 E. GREENE ST
City, State ZIP:	MIDLAND, TX 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	817-683-2503	Email:	anna.byers@wsp.com

Work Order Comments

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

Project Name:	ADU 624	Turn Around	
Project Number:	3140323236.022.0129	☒ Routine ☐ Rush	
Project Location:	EDDY COUNTY	Due Date:	
Sampler's Name:	ANNA BYERS	TAT starts the day received by the lab, if received by 4:30pm	
PO#: CC	113615100 1		

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	THM-005	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.4	
Total Containers:	3	Corrected Temperature:	1.2	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH (EPA 8015 Mod)	BTEX (EPA 8021 B)	Chloride (EPA 300.0)
SS01	S	8/24/21	1225	0.5'	Grab	1		X	X	X
SS02	S	8/26/21	1230	0.5'	↓	1		X	X	X
SS03	S	8/26/21	1235	0.5'	↓	1		X	X	X

890-1175 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

NAPP212362455-1

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anna Byers	N. Ellis	8/26/21 1:38	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020 2

Eurofins Xenco, Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-372 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-1175-1
Address: 1211 W Florida Ave	Due Date Requested: 9/1/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: ADU 624	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Z	other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/6035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SS01 (890-1175-1)	8/26/21	12 25 Mountain		Solid			X	X	X	1	
SS02 (890-1175-2)	8/26/21	12 38 Mountain		Solid			X	X	X	1	
SS03 (890-1175-3)	8/26/21	12 35 Mountain		Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Xenco LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Xenco LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Xenco LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Xenco LLC.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Relinquished by: 8-26-21	Date/Time	Company	Received by:	Date/Time: 8-27-21 11:00	Company
2	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time.	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 2.3 / 2.8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1175-1
SDG Number: Eddy County

Login Number: 1175
List Number: 1
Creator: Olivas, Nathaniel

List Source: Eurofins Xenco, Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1175-1
SDG Number: Eddy County

Login Number: 1175
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 08/27/21 10:51 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3 / 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

ENSOLUM

APPENDIX E

NMOCD Notifications

Collins, Melanie

From: Collins, Melanie
Sent: Friday, October 29, 2021 12:39 PM
To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us
Cc: DelawareSpills /SM; Cole, Aimee; Ager, Ashley; Jennings, Kalei
Subject: XTO-Extension Request - Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

All,

XTO is requesting an extension to the 90-day deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Avalon Delaware Unit 624 (Incident Number NAPP2123634554). The release was discovered August 10, 2021 and an initial site assessment was conducted. A Right of Entry (ROE) Permit was submitted to the State Land Office (SLO) on October 7, 2021. The executed permit is still pending. XTO will begin remediation activities as soon as the executed permit is received. In order to conduct further site assessment, complete the remediation work, and submit a remediation work plan or closure report XTO requests an extension of this deadline until February 6, 2022.

Thank you,

Melanie Collins
SSHE Technician
XTO ENERGY
An **ExxonMobil** Subsidiary
6401 Holiday Hill Rd, Bldg 5
Midland, TX 79707
432-218-3709

Collins, Melanie

From: Collins, Melanie
Sent: Friday, January 7, 2022 12:35 PM
To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us
Cc: DelawareSpills /SM; Cole, Aimee; Ager, Ashley; Jennings, Kalei
Subject: XTO Extension Request: Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

All,

Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

XTO is requesting an extension to the 90-day deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Avalon Delaware Unit 624 (Incident Number NAPP2123634554). The release was discovered August 10, 2021 and an initial site assessment was conducted. A Right of Entry (ROE) Permit was submitted to the State Land Office (SLO) on October 7, 2021. The executed permit is still pending. XTO will begin remediation activities as soon as the executed permit is received. In order to conduct further site assessment, complete the remediation work, and submit a remediation work plan or closure report XTO requests an extension of this deadline until May 7, 2022.

Thank you,

Melanie Collins
SSHE Technician
XTO ENERGY
An **ExxonMobil** Subsidiary
6401 Holiday Hill Rd, Bldg 5
Midland, TX 79707
432-218-3709

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

Action 104853

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 104853
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is conditionally approved: The release will need to be remediated to the strictest closure criteria standards due to high karst potential. Please collect confirmation samples, representing no more than 200 ft2. The liner installation is only approved at 4 feet bgs if all floor samples show TPH less than 100 mg/kg. Floor samples must be excavated to the strictest closure criteria, backfilled to 4 feet bgs with clean material, and then the liner installed. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The work will need to occur in 90 days after the work plan has been approved.	7/20/2022