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	NAB1927332462
District RP	2RP-5634
Facility ID	
Application ID	pAB1927332000

Release Notification

SYEB0-190905-C-1410

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # *(assigned by OCD)* NAB1927332462
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.271080° Longitude -103.931242°

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Remuda Frac Recycle Pond Facility	Site Type Frac Water Recycling Facility
Date Release Discovered 8/21/2019	API# *(if applicable)* N/A ~~30-015-30794 (Remuda Basin St 10 nearby well)~~ AB

Unit Letter	Section	Township	Range	County
P	25	23S	29E	Eddy

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

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)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 354.67	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

The automated water transfer system experienced a level transmitter failure and caused an overflow of fluids at the frac pond. The anomalous failure did not allow the automated safeguards to prevent the overflow in this case. The pumps were manually stopped. Fluids were released to the facility pad and pasture to the south of the facility. The transmitter failure is being addressed and further safeguards installed. Additional third party resources have been retained to assist with remediation.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAB1927332462
District RP	2RP-5634
Facility ID	
Application ID	pAB1927332000

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? An unauthorized release of a volume of 25 barrels or more
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice provided by Amy Ruth to Mike Bratcher, Rob Hamlet, Victoria Venegas (NMOCD), and Ryan Mann (SLO) on 8/22/2019 by email	

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:

No secondary containment .
No free liquids remained to be removed and managed.

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: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 9/5/2019

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Amalia Bustamante Date: 9/30/2019

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	NAB1927332462
District RP	2RP-5634
Facility ID	
Application ID	pAB1927332000

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

State of New Mexico
Oil Conservation Division

Incident ID	NAB1927332462
District RP	2RP-5634
Facility ID	
Application ID	pAB1927332000

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.

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: _____Kyle Littrell_____ Title: _____SH&E Supervisor_____

Signature:_____ _____ Date: ____1/20/2021_____

email: _____ Kyle_Littrell@xtoenergy.com _____ Telephone: ____(432)-221-7331_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1927332462
District RP	2RP-5634
Facility ID	
Application ID	pAB1927332000

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date: 1-20-2021

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Chad Hensley Date: 04/14/2021

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

Closure Approved by: Chad Hensley Date: 04/14/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

WSP USA
3300 North "A" Street
Building 1, Unit 222
Midland, Texas 79705
432.704.5178

March 5, 2021

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

RE: Closure Request Addendum
Remuda Frac Recycle Pond Facility
Remediation Permit Number 2RP-5634
Incident Number NAB1927332462
Eddy County, New Mexico

To Whom it May Concern:

WSP USA, Inc. (WSP) (formerly LT Environmental, Inc.), on behalf of XTO Energy, Inc. (XTO), presents the following Addendum to the Closure Request submitted March 19, 2020. This Addendum provides a description of the depth to groundwater determination activities at the Remuda Frac Recycle Pond Facility (Site), located in Unit P, Section 25, Township 23 South, Range 29 East, in Eddy County, New Mexico (Figure 1), in response to the denial of the Closure Request by the New Mexico Oil Conservation Division (NMOCD). In the denial, NMOCD expressed concern that the depth to groundwater assessment may not be sufficient. Based on the additional depth to groundwater determination activities described below, XTO is requesting no further action (NFA) for Incident Number NAB1927332462.

BACKGROUND

On August 21, 2019, a level transmitter failed on an automated water transfer system at the frac pond, resulting in the release of approximately 354.67 (bbls) of produced water onto the facility pad and pasture area south of the facility. No released fluids were recovered. XTO reported the release to NMOCD on a Release Notification and Corrective Action Form C-141 (Form C-141) on September 5, 2019 and was subsequently assigned RP Number 2RP-5634 and Incident Number NAB1927332462. Access to disturb soils in the pasture was requested through a Right of Entry Request (ROE) for Remediation to the New Mexico State Land Office (NMSLO). Access was approved by the NMSLO on November 8, 2019.

XTO excavated the impacted soil and submitted a Closure Request on March 19, 2020 based on laboratory analytical results for the excavation and delineation soil samples indicating benzene, BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria or reclamation standards.

On May 5, 2020, NMOCD denied the Closure Request for Incident Number NAB1927332462 for the following reasons:

- *Depth to groundwater has been incorrectly assessed. The closest permitted well is over 1.2 miles from the release site. In addition, the last reported water level value for this well, in 2003, is 50.2 feet. OCD does not accept averaging data to determine DTGW.*
- *This was a 375 barrels of produced water release resulting in over 200 barrels of unrecovered produced water and needs to be delineated to 600 mg/kg for chlorides. Per rule 19.15.29.11.A.(c) (ii): if the release occurred outside of a lined containment area and is in an area where depth to groundwater is greater than 50 feet and less than or equal to 100 feet, the responsible party must delineate the vertical extent of the release to the greater of 600 mg/kg chloride or background chloride level, if: (ii) the release is of an unknown quantity or results in greater than 200 barrels of unrecovered produced water. More delineation/remediation efforts are needed at sample points SS01 and SS02.*

ADDITIONAL SITE ACTIVITIES

In an effort to confirm the depth to groundwater determination, WSP installed a soil boring within 0.5 miles of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring POD 1 (C-4494) was drilled to a depth of 105 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole lithologic/soil sampling log is included in Attachment 1. The location of the borehole is approximately 0.5 miles northwest of the Site and is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips.

Based on the site characterization and confirmed depth to water greater than 105 feet bgs, the following Closure Criteria apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

DELINEATION

The NMOCD stated that the vertical extent of the release needs to be delineated to 600 mg/kg for chloride. Depth to groundwater has been determined to be greater than 105 feet bgs and 19.15.29.11.A.(5)(c)(ii) no longer applies. However, the release footprint on-pad is vertically delineated by borehole delineation samples BH06@1' and BH06A@2', that were below 600 mg/kg for chloride. Borehole BH06 was placed between and equidistant from preliminary soil samples SS01 and SS02, which were referenced in the denial. The release is vertically delineated in the pasture by delineation samples collected from boreholes BH02 through BH05 and potholes PH01 through PH04, that were below 600 mg/kg for chloride. The delineation soil sample locations and analytical results are presented on the attached Figure 2.

CLOSURE REQUEST

Site assessment and excavation activities were completed at the Site to address the impacted soil resulting from the August 21, 2019 release of produced water. Laboratory analytical results for the excavation and delineation soil samples indicated that benzene, BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the Closure Criteria or reclamation standards.

Based on the confirmed depth to water greater than 105 feet bgs, laboratory analytical results below the Closure Criteria or reclamation standards in the excavation and delineation soil samples, and vertical delineation of chloride to below 600 mg/kg, XTO respectfully requests no further action for Incident Number NAB1927332462.

If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096 or Ashely.Ager@wsp.com.

Sincerely,
WSP USA, INC.

Benjamin J. Belill
Associate Geologist

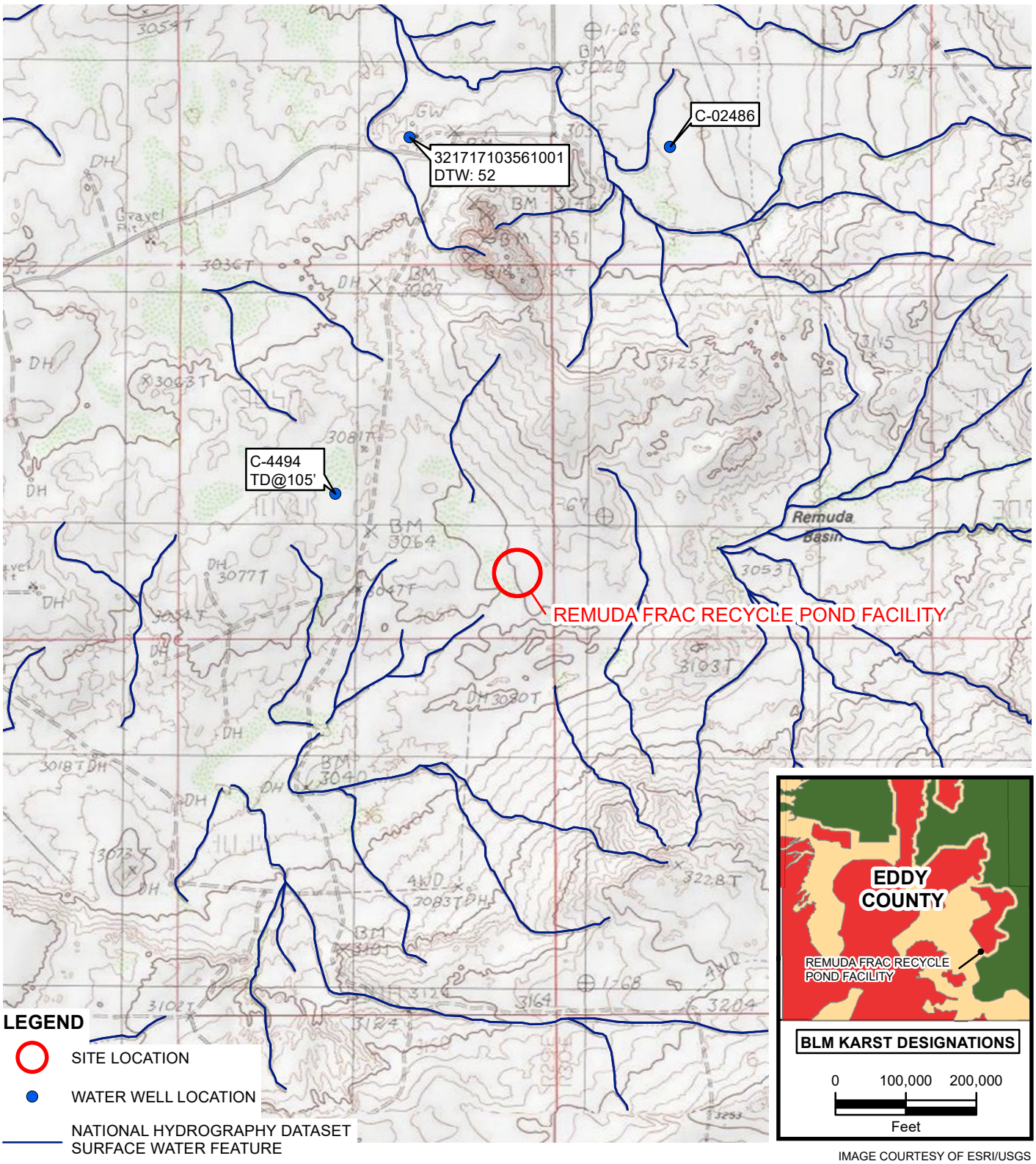
Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Kyle Littrell, XTO
Ryan Mann, New Mexico State Land Office

Attachments:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Attachment 1	Lithologic / Soil Sample Log

FIGURES



LEGEND

- SITE LOCATION
- WATER WELL LOCATION
- NATIONAL HYDROGRAPHY DATASET SURFACE WATER FEATURE
- NATIONAL WETLANDS INVENTORY SURFACE WATER FEATURE
- LOW KARST
- MEDIUM KARST
- HIGH KARST

NOTE: REMEDIATION PERMIT NUMBER 2RP-5634
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET

FIGURE 1
SITE LOCATION MAP
REMUDA FRAC RECYCLE POND FACILITY
UNIT P SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919195_REMUDA FRAC POND\012919195_FIG01_SL_RECEPTOR_2020.mxd

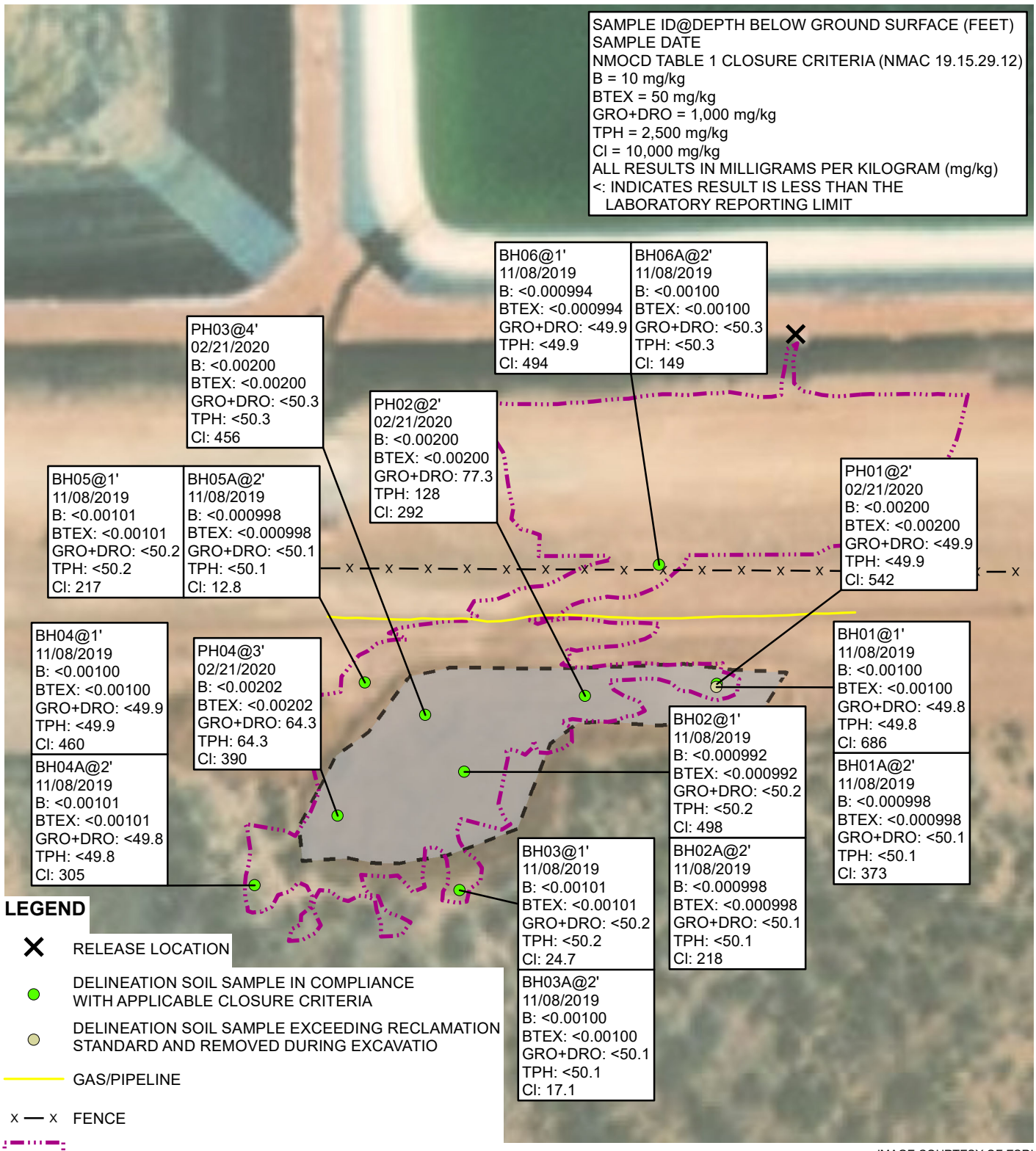


FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
REMUDA FRAC RECYCLE POND FACILITY
UNIT P SEC 25 T23S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012919195_REMUDA FRAC POND\012919195_FIG02_DELINEATION_NA.mxd

ATTACHMENT 1: LITHOLOGIC/SAMPLING LOG

WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220	BH or MW Name: BH01 (POD 1, C-4494)	Date: 11/18/2020-12/02/2020
	Site Name: Remuda Frac Pond Facility	
	RP or Incident Number: NAB1927332462	
	WSP Job Number: TE012919195	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: BB, LD, FS	Method: Hollow Stem Auger
Lat/Long: 32.274194,-103.939575	Field Screening: N/A	Hole Diameter: 6.25", 4.25"
		Total Depth: 56.1 Depth to Water: DRY

Backfill or Well Construction Materials / Comments:
Lithology and descriptions only, no field screening. Borehole backfilled with drill cuttings from 56.1' to 10', hydrated bentonite from 10' to surface.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks	Backfill / Well Completion
						1	SP-SC	0-4', SAND w/ clay, dry brown, poorly graded, fine grained, 10% clay, some roots, no stain, no odor.	Hydrated Bentonite Chips from 10' to surface
							CCHE	4'-24', CALICHE, dry, light brown-tan, poorly consolidated, some sub-round caliche pebble and gravel, very silty, gradational transition, no stain, no odor.	
						10			
								19', moderately consolidated.	
						20	CL-S	24'-39', MUDSTONE, dry, reddish-brown, low plasticity, cohesive, well consolidated, trace sub-angular caliche pebbles, sharp transition, no stain, no odor.	
						30		34', tan-light brown sub-angular calcium carbonate gravel with dissolution features (1-3mm).	
								39'-56.1', air rotary, hole diameter to 4.25".	
							LS	39'-48', DOLOMITIC LIMESTONE, dry, tan-light brown, well consolidated, some dissolution features (1-3 mm), sharp transition, light reaction to HCL, no stain, no odor.	Drill Cuttings backfilled from 56.1' to 10'
						40		11/18/2020: air rotary refusal, TD@48' bgs. 12/02/2020: Continue drilling @ 48'bgs	
							DOLO	48'-56.1', DOLOMITE, dry, off white, moderately consolidated, thin dark gray laminations, no stain, no odor.	
						50			
								TD @ 56.1 feet bgs.	
						60			

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01 (cont) Date: 1-5-2021
Site Name: Remuda N 25 State
RP or Incident Number:
WSP Job Number: TE0129191260, TE0129191195, TE0129191039

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB F.S Method: Sonic
Lat/Long: 32.274194, -103.939575 Field Screening: NM Hole Diameter: 6" Total Depth: 105'

Comments: Borehole backfilled w/ drill cuttings from 105'-10', hydrated bentonite chips from 10'-surface, Lithology descriptions only, no field screening.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						51	DOL	
						52		
						53		
						54		
						55		@ 55'
						56		1/5/2021
						57		55'-65' DOLOMITE, dry, light gray-gray, well consolidated, some calcite crystalline veins (<1mm), some dissolution features (2mm) with fine calcite crystalline, trace orange oxidation staining within dissolution features, no stain, no odor.
						58		
						59		
						60		
						61		
						62		62', brown-pale yellow coarse crystalline dolomitic limestone stringer (2cm).
						63		
						64		63'-65' Abundant calcite crystalline veins (<1mm)
						65		63'-65 Pale green-gray, poorly consolidated.
						66	CH-S	65'-69' MUDSTONE, moist, reddish brown, poorly consolidated, high plasticity, cohesive, abundant coarse crystalline gypsum, few pale green-gray mottling, no stain, no odor.
						67		
						68		
						69		
						70	GYP	69'-81' GYPSUM w/ Anhydrite, dry, greenish gray, some pale yellow, well consolidated, fine crystalline, 20% anhydrite, no stain, no odor.
						71		
						72		
						73		
						74		
						75		

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01 (cmt) | Date: 1-5-2021
Site Name: Remuda N 25 State
RP or Incident Number:
WSP Job Number: TE01291916260, TE01291916S, TE01291903J

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB, FS | Method: Soil
Lat/Long: 32.274194, -103.939575 | Field Screening: NA | Hole Diameter: 6" | Total Depth: 105'

Comments: Lithology descriptions only, no field screening. Borehole backfilled with drill cuttings from 105'-10', hydrated bentonite chips from 10'-surface.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						76	GYP	
						77		81'-98' Mudstone, moist, dark reddish brown, moderately consolidated, high plasticity, cohesive, trace coarse crystalline gypsum inclusions, no stain, no odor.
						78		
						79		
						80		
						81		85'-86.5' greenish-gray well consolidated coarse crystalline gypsum/anhydrite stringer.
						82	CH-S	90'-98' Some fine grain brown sand.
						83		97' dark gray-gray gypsum stringer (4cm).
						84		98'-95.5' GYPSUM, dark gray-gray, some brown, dry, well consolidated, fine-coarse crystalline, no stain, no odor.
						85		
						86		
						87		95.5'-105' Sandy SILTSTONE, moist, brown, some gray-dark gray, poorly consolidated, 20% very fine grained sand, no stain, no odor.
						88		
						89		
						90		
						91		102' thin (1mm) laminated gray well consolidated shale stringer.
						92		
						93		
						94		
						95		
						96		
						97		
						98	GYP	
						99		
						100	ML-S	

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01 (cont)	Date: 1-5-2021
Site Name: Remuda N 25 State	
RP or Incident Number:	
WSP Job Number: TE01291976O, TE01291919S, TE07919039	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: BB, FS	Method: Sonic		
Lat/Long: 32.27411944, -107.939575	Field Screening: N/A	Hole Diameter: 6"	Total Depth: 105'

Comments: Lithology descriptions only, no field screening. Borehole backfilled with drill cuttings from 105'- 10', hydrated bentonite chips from 10'- surface.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						101	ML-S	102', thin (1mm) laminated black/gray well consolidated shale stringer (4cm thick)
						102		
						103		
						103		
						104		
						105		TD @ 105' bgs.
						106	TD@105'	
						107		
						108		
						109		
						110		
						112		
						113		
						114		
						115		
						116		
						117		
						118		
						119		
						120		
						121		
						122		
						123		
						124		
						125		

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 22378

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
XTO ENERGY, INC 6401 Holiday Hill Road Building #5 Midland, TX79707	5380	22378	C-141

OCD Reviewer	Condition
chensley	None