Form 3160-3 (June 2015)

# Carlsbad Field Office OCD Artesia

**UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

S. Lease Serial No.

FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018

APPLICATION FOR PERMIT TO	DRILL OR	REENTER		6. If Indian, Allotee	or Tribe	Name
	· · · · · · · · · · · · · · · · · · ·	APR % 5 20	10	,		
la. Type of work:	REENTER	710-11	I.ÿ	7. If Unit or CA Agr POKER LAKE / NI		
1b. Type of Well: Oil Well Gas Well	Other DISI	RICT II-ARTESIA	10.C.D.	8. Lease Name and	Well No.	
1c. Type of Completion: Hydraulic Fracturing	Single Zone	✓ Multiple Zone	·	POKER LAKE UN	I <b>T</b> 17 TV	<b>VR</b>
				901H 325	46	9
Name of Operator     XTO PERMIAN OPERATING LLC	•	373076	5	9. API Well No. 30-01	15-	4593/
3a. Address	,	No. (include area coa	le)	10. Field and Pool,	_	
6401 Holiday Hill Road, Bldg 5 Midland TX 79707	(432)682-8	3873		WILDCAT BONE	3PRING	779
4. Location of Well (Report location clearly and in accordance	e with any State	requirements.*)		11. Sec., T. R. M. or		-
At surface NWNW / 283 FNL / 533 FWL / LAT 32.20	9291 / LONG	-103.806671		SEC 20 / T24S / R	31E / NI	MP ·
At proposed prod. zone SWNW / 2440 FNL / 335 FWL	/ LAT 32.174	324 / LONG -103.8	07229			
14. Distance in miles and direction from nearest town or post of	office*			12. County or Parisl EDDY	1 .	13. State NM
15. Distance from proposed* 330 feet	16. No of a	cres in lease	17. Spacir	ng Unit dedicated to t	nis well	
location to nearest property or lease line, ft.  (Also to nearest drig, unit line, if any)	1730.31		400			
18. Distance from proposed location*	19. Propose	d Depth	20. BLM/	BIA Bond No. in file		
to nearest well, drilling, completed, 35 feet applied for, on this lease, ft.	11488 feet	/ 24512 feet	FED: CO	B000050		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3493 feet	22: Approxi 03/01/2019	imate date work will	start*	23. Estimated durati 90 days	on	•
	24. Attac	hments		<u> </u>		
The following, completed in accordance with the requirements (as applicable)	of Onshore Oil	and Gas Order No. 1	, and the H	lydraulic Fracturing r	ıle per 43	3 CFR 3162.3-3
Well plat certified by a registered surveyor.     A Drilling Plan.		4. Bond to cover the Item 20 above).	e operation	s unless covered by ar	existing	, bond on file (see
3. A Surface Use Plan (if the location is on National Forest Syst SUPO must be filed with the appropriate Forest Service Office	•	5. Operator certific 6. Such other site sp BLM.		mation and/or plans as	may be r	equested by the
25. Signature (Electronic Submission)		: (Printed/Typed) Kardos / Ph: (432)6	20-4374		Date 08/27/2	2018
Title Regulatory Coordinator						
Approved by (Signature)	Name	(Printed/Typed)			Date	
(Electronic Submission)		Layton / Ph: (575)2	234-5959		03/21/2	:019
Title Assistant Field Manager Lands & Minerals	Office CARL	SBAD .				
Application approval does not warrant or certify that the application	ant holds legal (	or equitable title to th	ose rights i	n the subject lease wh	nich wou	ld entitle the

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



\*(Instructions on page 2)

applicant to conduct operations thereon. Conditions of approval, if any, are attached

# **Additional Operator Remarks**

#### Location of Well

1. SHL: NWNW / 283 FNL / 533 FWL / TWSP: 24S / RANGE: 31E / SECTION: 20 / LAT: 32.209291 / LONG: -103.806671 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 330 FNL / 335 FWL / TWSP: 24S / RANGE: 31E / SECTION: 29 / LAT: 32.19497 / LONG: -103.80743 (TVD: 11488 feet, MD: 17119 feet)

PPP: NWNW / 330 FNL / 335 FWL / TWSP: 24S / RANGE: 31E / SECTION: 20 / LAT: 32.209161 / LONG: -103.80731 (TVD: 11488 feet, MD: 11839 feet)

BHL: SWNW / 2440 FNL / 335 FWL / TWSP: 24S / RANGE: 31E / SECTION: 32 / LAT: 32.174324 / LONG: -103.807229 (TVD: 11488 feet, MD: 24512 feet)

#### **BLM Point of Contact**

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: 5752342224 Email: tortiz@blm.gov

(Form 3160-3, page 3)

**Approval Date: 03/21/2019** 

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | XTO Permian Operating, LLC.

**LEASE NO.: NMLC-0061705B** 

WELL NAME & NO.: | Poker Lake Unit 17 TWR 901H

SURFACE HOLE FOOTAGE: | 0283' FNL & 0533' FWL

BOTTOM HOLE FOOTAGE | 2440' FNL & 0335' FWL Sec. 32, T. 24 S., R 31 E.

LOCATION: | Section 20, T. 24 S., R 31 E., NMPM

COUNTY: | County, New Mexico

# **Commercial Well Determination**

A commercial well determination shall be submitted after production has been established for at least six months.

#### **Unit Wells**

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

# A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

# ☐ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of water flows in the Salado and Castile.

Possibility of lost circulation in the Red Beds, Rustler, and Delaware.

Abnormal pressure may be encountered in the 3rd Bone Spring and all subsequent formations.

- 1. The 18-5/8 inch surface casing shall be set at approximately 920 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 18-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

13-3/8" Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

2. The minimum required fill of cement behind the 13-3/8 inch intermediate casing is:

prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. Excess calculates to 20% Additional cement may be required.
- 5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

#### C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

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All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**JAM 030619** 

# I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

# II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

# III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

# IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

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Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

A leak detection plan will be submitted to the BLM Carlsbad Field Office for approval prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Electric Lines: Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion.

# Range

The operator must contact the allotment holder prior to construction to identify the location of the pipeline. The operator must take measures to protect the pipeline from compression or other damages. If the pipeline is damaged or compromised in any way near the proposed project as a result of oil and gas activity, the operator is responsible for repairing the pipeline immediately. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

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#### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### G. ON LEASE ACCESS ROADS

#### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

#### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

#### Ditching

Ditching shall be required on both sides of the road.

# **Turnouts**

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

#### Drainage

# **Construction Steps**

- 1. Salvage topsoil
- 3. Redistribute topsoil
- 2. Construct road
- 4. Revegetate slopes

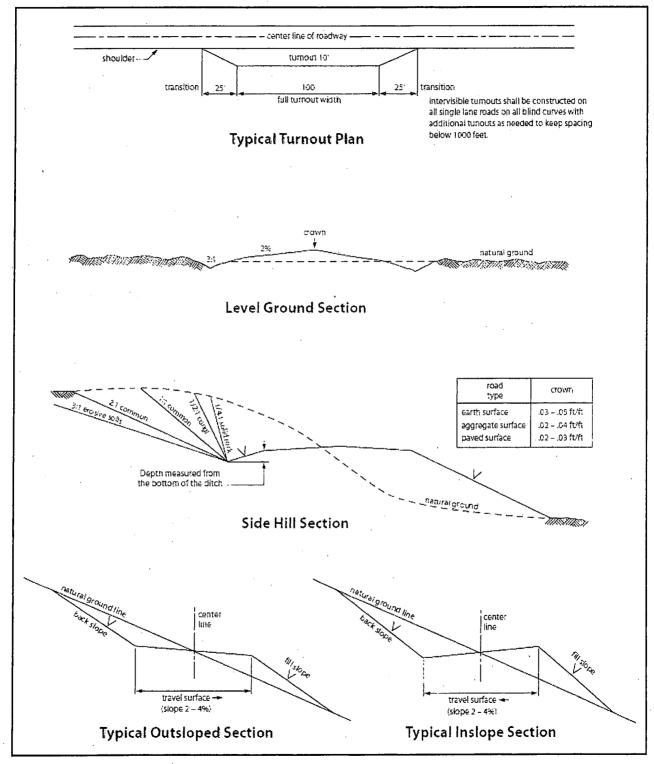


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

#### B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 et seq. (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without

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writing by the Authorized Officer.

- 8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.
- 9. The pipeline shall be buried with a minimum of <u>24</u> inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
- 15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible

Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.
- 5. All construction and maintenance activity will be confined to the authorized right-of-way.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in this right-of-way will be  $\underline{30}$  feet:
  - Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (Blading is defined as the complete removal of brush and ground vegetation.)

- 13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2.
- 14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.
- 16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
- 17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 18. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

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**Approval Date: 03/21/2019** 

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

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than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

# VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

# IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

Page 20 of 22

#### Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

Species	<u>lb/acre</u>
Plains Bristlegrass Sand Bluestem Little Bluestem Big Bluestem Plains Coreopsis Sand Dropseed	5lbs/A 5lbs/A 3lbs/A 6lbs/A 2lbs/A 1lbs/A
1	

<sup>\*</sup>Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



Department of the Interior BUREAU OF LAND MANAGEMENT

APD ID: 10400033495

Submission Date: 08/27/2018

Highlighted data reflects the most

Well Name: POKER LAKE UNIT 17 TWR

Operator Name: XTO PERMIAN OPERATING LLC

Weil Number: 901H

recent changes

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

#### Section 1 - General

APD ID:

10400033495

Tie to previous NOS?

Submission Date: 08/27/2018

**BLM Office: CARLSBAD** 

User: Kelly Kardos

Title: Regulatory Coordinator

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMLC0061705B

Lease Acres: 1730.31

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? YES

Federal or Indian agreement: FEDERAL

Agreement number: NMNM071016X

Agreement name:

Keep application confidential? NO

**Permitting Agent? NO** 

APD Operator: XTO PERMIAN OPERATING LLC

Operator letter of designation:

#### **Operator Info**

Operator Organization Name: XTO PERMIAN OPERATING LLC

Operator Address: 6401 Holiday Hill Road, Bldg 5

Zip: 79707

**Operator PO Box:** 

Operator City: Midland

State: TX

**Operator Phone:** (432)682-8873

**Operator Internet Address:** 

#### Section 2 - Well Information

Well in Master Development Plan? NO

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WILDCAT BONE

**Pool Name:** 

SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER, NATURAL GAS, OIL

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

·	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP Leg #1	330	FNL	335	FWL	248	31E	29	Aliquot NWN W	32.19497	- 103.8074 3	EDD Y	1	NEW MEXI CO		NMNM 000050 6A	- 799 5	171 19	114 88
EXIT Leg #1	231 0	FNL	335	FWL	248	31E	32	Aliquot SWN W	32.17468 1	- 103.8072 3	EDD Y	NEW MEXI CO	—	S	STATE	- 799 5	243 82	114 88
BHL Leg #1	244 0	FNL	335	FWL	248	31E	32	Aliquot SWN W	32.17432 4	- 103.8072 29	ı	NEW MEXI CO		S	STATE .	- 799 5	245 12	114 88



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

# Drilling Plan Data Report

Submission Date: 08/27/2018

Highlighted data reflects the most

. .

Operator Name: XTO PERMIAN OPERATING LLC

recent changes

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

**Show Final Text** 

Well Type: OIL WELL

APD ID: 10400033495 .

Well Work Type: Drill

# **Section 1 - Geologic Formations**

Formation	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	PERMIAN	3493	0	0	OTHER : Quaternary	NONE	No
2	RUSTLER	2929	564	564	SILTSTONE	USEABLE WATER	No
3	TOP SALT	2547	946	946	SALT	OTHER : Produced Water	No
4	BASE OF SALT	-604	4097	4097	SALT .	OTHER : Produced Water	No
5	DELAWARE	-836	4329	4329	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	No
6	BONE SPRING	-4643	8136	8136	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	Yes
7	BONE SPRING 1ST	-5755	9248	9248	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	Yes
8	BONE SPRING 2ND	-6379	9872	9872	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	Yes
9	BONE SPRING 3RD	-7626	11119	11119	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	Yes

# Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 11488

**Equipment:** Once the permanent WH is installed on the 13-3/8 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 4358 psi.

Requesting Variance? YES

**Variance request:** A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

**Testing Procedure:** All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 5000psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

#### **Choke Diagram Attachment:**

Well Name: POKER LAKE UNIT 17 TWR Well Number: 901H **Casing Attachments** String Type: INTERMEDIATE Casing ID: 2 **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): PLU\_17\_TWR\_901H\_Csg\_20180827083510.pdf Casing ID: 3 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): PLU\_17\_TWR\_901H\_Csg\_20180827083521.pdf Casing ID: 4 String Type: PRODUCTION **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): PLU\_17\_TWR\_901H\_Csg\_20180827083532.pdf

Section 4 - Cement

Operator Name: XTO PERMIAN OPERATING LLC

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

						7					
Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	HH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1081	2451	OIL-BASED MUD	10.5	.12							A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system
4120	1081	OTHER : FW / Cut Brine	8.7	10		٧,					A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system
0	920	OTHER : FW/Native	8.4	8.8							A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system
920	4120	OTHER : Brine	9.8	10.2	-	·					A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

# Section 8 - Other Information

# Proposed horizontal/directional/multi-lateral plan submission:

PLU\_17\_TWR\_901H\_DD\_20180827084501.pdf

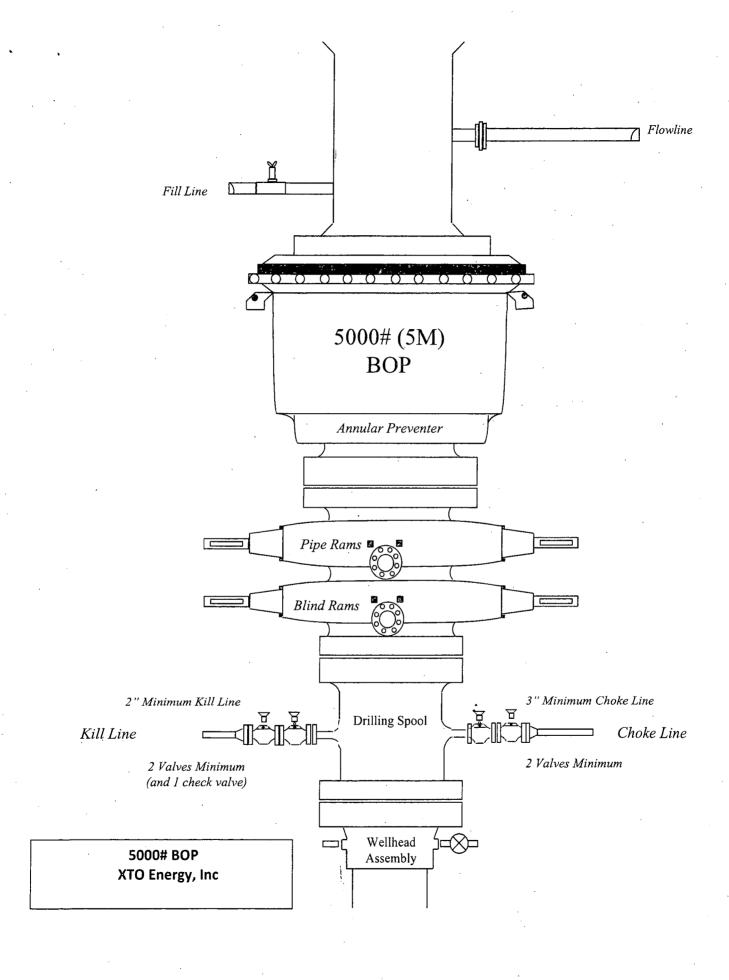
Other proposed operations facets description:

# Other proposed operations facets attachment:

PLU\_17\_TWR\_GCPE\_20180827084536.pdf PLU\_17\_TWR\_GCPW\_20180827084550.pdf

# Other Variance attachment:

PLU\_17\_TWR\_FH\_20180827084607.pdf PLU\_17\_TWR\_5M10M\_BOP\_20180827084619.pdf



# Poker Lake Unit 17 TWR 901H Projected TD: 24512' MD / 11488' TVD

SHL: 283' FNL & 533' FWL , Section 20, T24S, R31E

BHL: 2440' FNL & 335' FWL , Section 32, T24S, R31E Eddy County, NM

#### Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
24"	0' – 920'	18-5/8"	87.5	STC	J-55	New	1.76	1.96	9.37
17-1/2"	0' - 4120'	13-3/8"	68	STC	J-55	New	1.14	1.50	2.41
12-1/4"	0' - 10810'	9-5/8"	40	LTC	HCL-80	New	1.32	1.38	1.94
8-3/4"	0' - 24512'	5-1/2"	20	втс	P-110	New	1.33	1.61	1.97

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 18-5/8" Collapse analyzed using 75% evacuation. Casing to be filled while running.
- 13-3/8" & 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

#### WELLHEAD:

# Permanent Wellhead - GE RSH Multibowl System

- A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom
- B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
  - Wellhead will be installed by manufacturer's representatives.
  - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
  - Operator will test the 9-5/8" casing per BLM Onshore Order 2
  - Wellhead manufacturer representative will not be present for BOP test plug installation

# Poker Lake Unit 17 TWR 901H

Projected TD: 24512' MD / 11488' TVD SHL: 283' FNL & 533' FWL , Section 20, T24S, R31E

BHL: 2440' FNL & 335' FWL, Section 32, T24S, R31E

Eddy County, NM

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12-1/4"	0' - 10810'	9-5/8"	40	LTC	HCL-80	New	1.32	1.38	1.94
8-3/4"	0' - 24512'	5-1/2"	20	BTC	P-110	New	1.33	1.61	1.97

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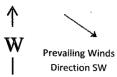
#### WELLHEAD:

# Permanent Wellhead - GE RSH Multibowl System

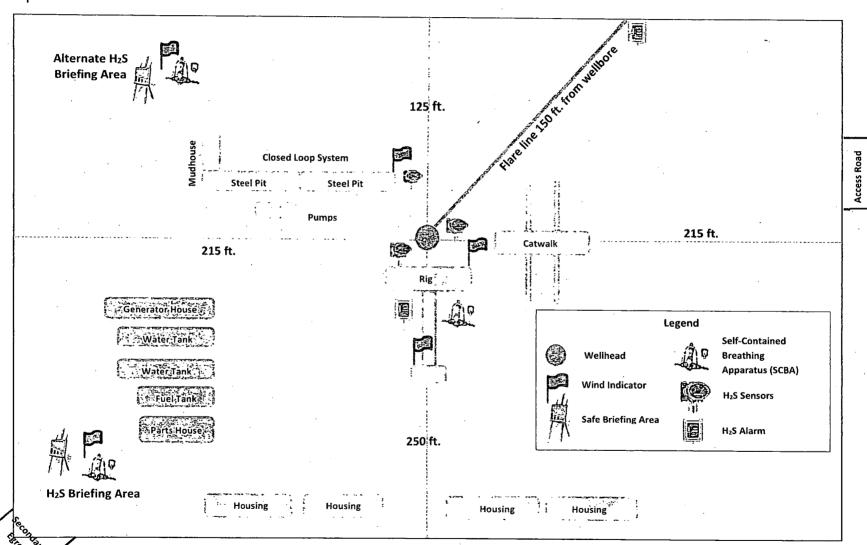
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# **CARLSBAD OFFICE – EDDY & LEA COUNTIES**

3104 E. Greene St., Carlsbad, NM 88220 Carlsbad, NM	575-887-7329
BOPCO, L.P. PERSONNEL: Kendall Decker, Drilling Manager Milton Turman, Drilling Superintendent Jeff Raines, Construction Foreman Toady Sanders, EH & S Manager Wes McSpadden, Production Foreman	903-521-6477 817-524-5107 432-557-3159 903-520-1601 575-441-1147
SHERIFF DEPARTMENTS: Eddy County Lea County	575-887-7551 575-396-3611
NEW MEXICO STATE POLICE:	575-392-5588
FIRE DEPARTMENTS: Carlsbad Eunice Hobbs Jal Lovington  HOSPITALS: Carlsbad Medical Emergency Eunice Medical Emergency Hobbs Medical Emergency Jal Medical Emergency Lovington Medical Emergency	911 575-885-2111 575-394-2111 575-397-9308 575-396-2359 911 575-885-2111 575-394-2112 575-397-9308 575-395-2221 575-396-2359
AGENT NOTIFICATIONS: For Lea County: Bureau of Land Management – Hobbs New Mexico Oil Conservation Division – Hobbs	575-393-3612 575-393-6161
For Eddy County: Bureau of Land Management - Carlsbad New Mexico Oil Conservation Division - Artesia	575-234-5972 575-748-1283



# H<sub>2</sub>S Briefing Areas and Alarm Locations



ENERGY

-1000.

1000

1000 0 1000 2000 3000

The customer should only rely on this document after independently verifying all paths, targets, coordinates, least and hard lines represented Any decisions made or wells diffield utilizing this or any other information supplied by Prototype are at the sole risk and responsibility of the customer.

2000

4000

Vertical Section at 179.61° (2000 usft/in)

Project: Eddy County, NM (NAD-27) Site: Poker Lake Unit 17 TWR Well: #901H Wellbors: OH Design: PERMIT Rev1 PROJECT DETAILS: Eddy County, NM (NAD-27)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

PLU-17-TWR #901: PBHL(2440' FNL & 335 FWL)

11000

Plan: PERMIT Rev1 (#901H/OH)

Created By: Prototype Well Planning, LLC Date: 9:07, June 12 2018

12000

13000

10000

8000

9000

WELL DETAILS: #901H

Rig Name: RKB = 25' @ 3518.00usft Ground Level: 3493.00

	Name	Northing Easting Latitude Longitude Shape 440214.50 663041.70 32.209168 -103.806186 Point 440166.30 662844.30 32.209038 -103.806825 Point
Sec 1 2 3 4 5 6 7	SECTION DETAILS  C MD Inc Azi TVD +N/-S +E/-W Dieg TFace VSect - 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	West(-)/East(+) (1700 usft/in) -1700 -850 0 850 1700 2550  PLU-17-TWR #901: SHL(283' FNL & 533 FWL) -1700 -850 0 850 1700 2550  PLU-17-TWR #901: SHL(283' FNL & 533 FWL) -1700 -850 0 850 1700 2550 -1700 -850 0 850 1700 2550
	FORMATION TOP DETAILS  TVDPath Formation 564.00 Rustler 946.00 Top Salt 4097.00 Base Salt 4329.00 Delaware 8136.00 Bone Spring 9248.00 1st Bone Spring Ss 9872.00 2nd Bone Spring Ss 10347.00 3rd Bone Spring Lm 11119.00 3rd Bone Spring Ss	Sec 20
100	0	-4250
300		Sec 29
epth (2000 usfVin)	000	
	Bone Spring  1st Bone Spring Ss  2nd Bone Spring Ss  3rd Bone Spring Lm  Start DLS 10.00 TFO -160.95	Sec 32
1100 1200	3rd Bone Spring Ss Wolfcamp	PLU-17-TWR #991:1TP



Planning Report

Database EDM 5000.1 Single User Db Company XTO Energy
Project: Eddy County, NM (NAD-27)
Site: Poker Lake Unit 17 TWR
Well #901H
Wellbore OH
Design PERMIT Rev1

Local Co-ordinate Reference
TVD Reference
MD Reference
North Reference Well #901H RKB = 25' @ 3518.00usft RKB = 25' @ 3518.00usft

Survey Calculation Method: Minimum Curvature

Eddy County, NM (NAD-27)

Map System: Geo Datum:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001 System Datum:

Mean Sea Level

Poker Lake Unit 17 TWR

Site Position:

Northing: Easting:

440,828.50 usft 663,224.90 usft Latitude:

Longitude:

32.210853

**Position Uncertainty:** 

0.00 usft

Slot Radius:

13-3/16 "

**Grid Convergence:** 

-103.805585 0.28

Well

From:

#901H +N/-S

+E/-W

**Well Position** 

-614.00 usft -183.20 usft Northing: Easting:

440,214.50 usft 663,041.70 usft Latitude:

32.209168

**Position Uncertainty** 

0.00 usft

Wellhead Elevation:

0.00 usft

Longitude: **Ground Level:** 

-103.806187 3,493.00 usft

Magnetics · Model Name Sample Date

Declination (°)

Dip Angle (°)

Field Strenath

(nT)

IGRF2015

4/24/2018

6.97

60.00

47,816

Design

Wellbore

PERMIT Rev1

**Audit Notes:** 

Version:

Phase:

PLAN

Tie On Depth:

0.00

**Vertical Section:** 

Depth From (TVD)

+N/-S

+E/-W

Direction

(usft) 0.00

(usft).

(usft) 0.00

· (°) 179.61

**Plan Sections** 

,	Measured Depth, (usft)	Inclination (°)	Azimuth;;; (°);	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft) 🥡 (	Dogleg Rate °/100usft) (	Build Rate /100usft) (	Turn Rate /100usft)	TFO (°)	M. & Target
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	•
	4,410.00	0.00	0.00	4,410.00	0.00	0.00	0.00	0.00	0.00	0.00	
	4,659.83	5.00	340.62	4,659.51	10.27	-3.61	2.00	2.00	0.00	340.62	•
ļ	10,892.10	5.00	340.62	10,868.11	522.33	-183.69	0.00	0.00	0.00	0.00	·
1	11,838.76	89.94	179.61	11,488.00	-48.20	-197.40	10.00	8.97	-17.01	-160.95	PLU-17-TWR #901
	24,382.06	89.94	179.61	11,500.87	-12,591.20	-111.69	0.00	0.00	0.00	0.00	PLU-17-TWR #901
	24 512 06	80 04	170 61	11 501 00	-12 721 20	-110.80	0.00	0.00	0.00	0.00	PLLI-17-TWR #901



Planning Report

Database:

Company

Type Project:

Site:

Poker Lake Unit 17 TWR

Well:

Wellbore:

PERMIT Rev1

Local Co-ordinate Reference:

TVD Reference:

MD) Reference:

North Reference:

Nort

Planned Survey	e रुप्तर स्थानक, रुप्तर
一句,我们就没有是我的最大,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是这个人的,我们就是这个人的,我们就	M. Chr. Souls Grace dist.
。""我们就是我们的是我们的,我们就是我们的,我们就是我们的,我们的的一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一	<b>库克斯拉斯拉拉拉斯</b>
Measured Vertical Vertical Dogleg Build  Depth Inclination Azimuth Depth +N/-S +E/-W Section Rate Rate	Rate
Depth inclination Azimuth Depth +N/-S +E/-W, Section Rate Rate (ush) (ush) (ush) (ush) (100ush) (100ush)	
在1000分钟的高级的 1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,1000分子,	W. Longsith.
5,200.00 5.00 340.62 5,197.63 54.65 -19.22 -54.78 0.00 0.00	0.00
5,300.00 5.00 340.62 5,297.25 62.87 -22.11 -63.02 0.00 0.00	0.00
5,400.00 5.00 340.62 5,396.87 71.08 -25.00 -71.25 0.00 0.00	
5,500.00 5.00 340.62 5,496.49 79.30 -27.89 -79.49 0.00 0.00	•
5,600.00 5.00 340.62 5,596.11 87.52 -30.78 -87.72 0.00 0.00 5,700.00 5.00 340.62 5,695.73 95.73 -33.67 -95.96 0.00 0.00	
5,800.00 5.00 340.62 5,795.35 103.95 -36.56 -104.20 0.00 0.00 5.900.00 5.00 340.62 5,894.97 112.17 -39.45 -112.43 0.00 0.00	
5,900.00 5.00 340.62 5,894.97 112.17 -39.45 -112.43 0.00 0.00 6,000.00 5.00 340.62 5,994.59 120.38 -42.33 -120.67 0.00 0.00	
6,100.00 5.00 340.62 6,094.21 128.60 -45.22 -128.90 0.00 0.00	
6,200.00 5.00 340.62 6,193.83 136.81 -48.11 -137.14 0.00 0.00	0.00
6,300.00 5.00 340.62 6,293.45 145.03 -51.00 -145.37 0.00 0.00	0.00
6,400.00 5.00 340.62 6,393.07 153.25 -53.89 -153.61 0.00 0.00	
6,500.00 5.00 340.62 6,492.69 161.46 -56.78 -161.85 0.00 0.00	
6,600.00 5.00 340.62 6,592.31 169.68 -59.67 -170.08 0.00 0.00	
6,700.00 5.00 340.62 6,691.93 177.90 -62.56 -178.32 0.00 0.00	0.00
6,800.00 5.00 340.62 6,791.55 186.11 -65.45 -186.55 0.00 0.00	
6,900.00 5.00 340.62 6,891.17 194.33 -68.34 -194.79 0.00 0.00	
7,000.00 5.00 340.62 6,990.79 202.54 -71.23 -203.03 0.00 0.00 7,100.00 5.00 340.62 7,090.41 210.76 -74.12 -211.26 0.00 0.00	
7,100.00 5.00 340.62 7,090.41 210.76 -74.12 -211.26 0.00 0.00 7,200.00 5.00 340.62 7,190.03 218.98 -77.01 -219.50 0.00 0.00	
7,300.00 5.00 340.62 7,289.65 227.19 -79.90 -227.73 0.00 0.00 7,400.00 5.00 340.62 7,389.27 235.41 -82.79 -235.97 0.00 0.00	
7,500.00 5.00 340.62 7,389.27 233.41 -82.79 -233.57 0.00 0.00 7,500.00 5.00 340.62 7,488.89 243.63 -85.68 -244.20 0.00 0.00	
7,600.00 5.00 340.62 7,588.51 251.84 -88.56 -252.44 0.00 0.00	
7,700.00 5.00 340.62 7,688.13 260.06 -91.45 -260.68 0.00 0.00	0.00
7,800.00 5.00 340.62 7,787.75 268.28 -94.34 -268.91 0.00 0.00	0.00
7,900.00 5.00 340.62 7,887.37 276.49 -97.23 -277.15 0.00 0.00	
8,000.00 5.00 340.62 7,986.99 284.71 -100.12 -285.38 0.00 0.00	
8,100.00 5.00 340.62 8,086.61 292.92 -103.01 -293.62 0.00 0.00 8.200.00 5.00 340.62 8.186.23 301.14 -105.90 -301.85 0.00 0.00	
, , , , , , , , , , , , , , , , , , , ,	
8,300.00 5.00 340.62 8,285.85 309.36 -108.79 -310.09 0.00 0.00	
8,400.00 5.00 340.62 8,385.47 317.57 -111.68 -318.33 0.00 0.00 8,500.00 5.00 340.62 8,485.09 325.79 -114.57 -326.56 0.00 0.00	
8,600.00 5.00 340.62 8,584.71 334.01 -117.46 -334.80 0.00 0.00	
8,700.00 5.00 340.62 8,684.33 342.22 -120.35 -343.03 0.00 0.00	
8,800.00 5.00 340.62 8,783.95 350.44 -123.24 -351.27 0.00 0.00	0.00
8,900.00 5.00 340.62 8,883.57 358.65 -126.13 -359.50 0.00 0.00	
9,000.00 5.00 340.62 8,983.19 366.87 -129.02 -367.74 0.00 0.00	
9,100.00 5.00 340.62 9,082.81 375.09 -131.91 -375.98 0.00 0.00	
9,200.00 5.00 340.62 9,182.43 383.30 -134.80 -384.21 0.00 0.00	
9,300.00 5.00 340.62 9,282.05 391.52 -137.68 -392.45 0.00 0.00	
9,400.00 5.00 340.62 9,381.67 399.74 -140.57 -400.68 0.00 0.00 9,500.00 5.00 340.62 9,481.29 407.95 -143.46 -408.92 0.00 0.00	
9,500.00 5.00 340.62 9,481.29 407.95 -143.46 -408.92 0.00 0.00 9,600.00 5.00 340.62 9,580.91 416.17 -146.35 -417.15 0.00 0.00	
9,700.00 5.00 340.62 9,680.53 424.38 -149.24 -425.39 0.00 0.00	
9,800.00 5.00 340.62 9,780.15 432.60 -152.13 -433.63 0.00 0.00 9,900.00 5.00 340.62 9,879.77 440.82 -155.02 -441.86 0.00 0.00	
10,000.00 5.00 340.62 9,979.39 449.03 -157.91 -450.10 0.00 0.00	
10,100.00 5.00 340.62 10,079.01 457.25 -160.80 -458.33 0.00 0.00	
10,200.00 5.00 340.62 10,178.63 465.47 -163.69 -466.57 0.00 0.00	
10,300.00 5.00 340.62 10,278.25 473.68 -166.58 -474.80 0.00 0.00	0.00
10,400.00 5.00 340.62 10,377.87 481.90 -169.47 -483.04 0.00 0.00	0.00 .
10,500.00 5.00 340.62 10,477.49 490.11 -172.36 -491.28 0.00 0.00	0.00



Planning Report

Project Site: Well: Wellbore: a Design	PERMIT Rev	NM (NAD-2) nit 17 TWR	Ob	MDR MORN North Surve	Co-ordinate Reference eference Reference y Calculation	i Method:	Well #901H RKB = 25' @ 3 RKB = 25' @ 3 Grid Minimum Curv	3518.00usft	
Planned Survey Measured Depth	Inclination	Azimuth	Vertical u Depth	+N/-S	+E/-W (usft)	Vertical Section	Dogleg Rate (*/100usty) (*/	Build Rate	Turn Rate //100usft)
14,900.00	89.94	179.61	11,491.14	-3,109.37	-176.48	3,108.10	0.00	0.00	0.00
15,000.00	89.94	179.61	11,491.24	-3,209.37	-175.80	3,208.10	0.00	0.00	0.00
15,100.00	89.94	179.61	11,491.35	-3,309.36	-175.12	3,308.10	0.00	0.00	0.00
15,200.00	89.94	179.61	11,491.45	-3,409.36	-174.43	3,408.10	0.00	0.00	0.00
15,300.00	89.94	179.61	11,491.55	-3,509.36	-173.75	3,508.10	0.00	0.00	0.00
15,400.00	89.94	179.61	11,491.65	-3,609.36	-173.07	3,608.10	0.00	0.00	0.00
15,500.00	89.94	179.61	11,491.76	-3,709.35	-172.38	3,708.10	0.00	0.00	0.00
15,600.00	89.94	179.61	11,491.86	-3,809.35	-171.70	3,808.10	0.00	0.00	0.00
15,700.00	89.94	179.61	11,491.96	-3,909.35	-171.02	3,908.10	0.00	0.00	0.00
15,800.00	89.94	179.61	11,492.06	-4,009.35	-170.33	4,008.10	0.00	0.00	0.00
15,900.00	89.94	179.61	11,492.17	-4,109.35	-169.65	4,108.10	0.00	0.00	0.00
16,000.00	89.94	179.61	11,492.27	-4,209.34	-168.97	4,208.10	0.00	0.00	0.00
16,100.00	89.94	179.61	11,492.37	-4,309.34	-168.28	4,308.10	0.00	0.00	0.00
16,200.00	89.94	179.61	11,492.47	-4,409.34	-167.60	4,408.10	0.00	0.00	0.00
16,300.00	89.94	179.61	11,492.58	-4,509.34	-166.92	4,508.10	0.00	0.00	0.00
16,400.00	89.94	179.61	11,492.68	-4,609.33	-166.23	4,608.10	0.00	0.00	0.00
16,500.00	89.94	179.61	11,492.78	-4,709.33	-165.55	4,708.09	0.00	0.00	0.00
16,600.00	89.94	179.61	11,492.88	-4,809.33	-164.87	4,808.09	0.00	0.00	0.00
16,700.00	89.94	179.61	11,492.99	-4,909.33	-164.18	4,908.09	0.00	0.00	0.00
16,800.00	89.94	179.61	11,493.09	-5,009.32	-163.50	5,008.09	0.00	0.00	0.00
16,900.00	89.94	179.61	11,493.19	-5,109.32	-162.82	5,108.09	0.00	0.00	0.00
17,000.00	89.94	179.61	11,493.29	-5,209.32	-162.13	5,208.09	0.00	0.00	0.00
17,100.00	89.94	179.61	11,493.40	-5,309.32	-161.45	5,308.09	0.00	0.00	0.00
17,200.00	89.94	179.61	11,493.50	-5,409.31	-160.77	5,408.09	0.00	0.00	0.00
17,300.00	89.94	179.61	11,493.60	-5,509.31	-160.08	5,508.09	0.00	0.00	0.00
17,400.00	89.94	179.61	11,493.70	-5,609.31	-159.40	5,608.09	0.00	0.00	0.00
17,500.00	89.94	179.61	11,493.81	-5,709.31	-158.72	5,708.09	0.00	0.00	0.00
17,600.00	89.94	179.61	11,493.91	-5,809.30	-158.03	5,808.09	0.00	0.00	0.00
17,700.00	89.94	179.61	11,494.01	-5,909.30	-157.35	5,908.09	0.00	0.00	0.00
17,800.00	89.94	179.61	11,494.12	-6,009.30	-156.67	6,008.09	0.00	0.00	0.00
17,900.00	89.94	179.61	11,494.22	-6,109.30	-155.98	6,108.09	0.00	0.00	0.00
18,000.00	89.94	179.61	11,494.32	-6,209.30	-155.30	6,208.09	0.00	0.00	0.00
18,100.00	89.94	179.61	11,494.42	-6,309.29	-154.62	6,308.09	0.00	0.00	0.00
18,200.00	89.94	179.61	11,494.53	-6,409.29	-153.93	6,408.09	0.00	0.00	0.00
18,300.00	89.94	179.61	11,494.63	-6,509.29	-153.25	6,508.09	0.00	0.00	0.00
18,400.00	89.94	179.61	11,494.73	-6,609.29	-152.57	6,608.09	0.00	0.00	0.00
18,500.00	89.94	179.61	11,494.83	-6,709.28	-151.88	6,708.09	0.00	0.00	0.00
18,600.00	89.94	179.61	11,494.94	-6,809.28	-151.20	6,808.09	0.00	0.00	0.00
18,700.00	89.94	179.61	11,495.04	-6,909.28	-150.52	6,908.09	0.00	0.00	0.00
18,800.00	89.94	179.61	11,495.14	-7,009.28	-149.83	7,008.09	0.00	0.00	0.00
18,900.00	89.94	179.61	11,495.24	-7,109.27	-149.15	7,108.09	0.00	0.00	0.00
19,000.00	89.94	179.61	11,495.35	-7,209.27	-148.47	7,208.09	0.00	0.00	0.00
19,100.00	89.94	179.61	11,495.45	-7,309.27	-147.78	7,308.09	0.00	0.00	0.00
19,200.00	89.94	179.61	11,495.55	-7,409.27	-147.10	7,408.09	0.00	0.00	0.00
19,300.00	89.94	179.61	11,495.65	-7,509.26	-146.42	7,508.09	0.00	0.00	0.00
19,400.00	89.94	179.61	11,495.76	-7,609.26	-145.73	7,608.09	0.00	0.00	0.00
19,500.00	89.94	179.61	11,495.86	-7,709.26	-145.05	7,708.09	0.00	0.00	0.00
19,600.00	89.94	179.61	11,495.96	-7,809.26	-144.37	7,808.09	0.00	0.00	0.00
19,700.00	89.94	179.61	11,496.06	-7,909.25	-143.68	7;908.09	0.00	0.00	0.00
19,800.00	89.94	179.61	11,496.17	-8,009.25	-143.00	8,008.09	0.00	0.00	0.00
19,900.00	89.94	179.61	11,496.27	-8,109.25	-142.32	8,108.09	0.00	0.00	0.00
20,000.00	89.94	179.61	11,496.37	-8,209.25	-141.63	8,208.09	0.00	0.00	0.00
20,100.00	89.94	179.61	11,496.47	-8,309.25	-140.95	8,308.09	0.00	0.00	0.00
20,200.00	89.94	179.61	11,496.58	-8,409.24	-140.27	8,408.09	0.00	0.00	0.00



Planning Report

EDM 5000.1 Single User Db

Database: Company Project: XTO Energy

Eddy County, NM (NAD-27)

Site: Poker Lake Unit 17 TWR
Well: #901H
Wellibore: OH
Design: PERMIT Rev1

Local Co-ordinate Reference
TVD Reference
MD Reference
North Reference
Survey Calculation Method:

Well#901H

RKB = 25' @ 3518.00usft RKB = 25' @ 3518.00usft

Grid

Minimum Curvature

Design Targets

TargetiName hit/miss target Dip	Angle (°)	10.00	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitüde
PLU-17-TWR #901: S - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	440,214.50	663,041.70	32.209168	-103.806187
PLU-17-TWR #901: F - plan hits target center - Point	0.00	0.00 11	,488.00	-48.20	-197.40	440,166.30	662,844.30	32.209038	-103.806826
PLU-17-TWR #901: L - plan misses target cer - Point	0.00 nter by 0			-12,591.20 sft MD (1150	-111.80 00.87 TVD, -1	427,623.30 2591.20 N, -111.	662,929.90 69 E)	32.174557	-103.806747
PLU-17-TWR #901: P	0.00	0.00 11	501.00	-12,721.20	-110.80	427,493.30	662,930.90	32.174200	-103.806746

#### **Formations**

plan hits target centerPoint

Measured Depth (usft)	Vertical Depth (usft)	Name		Lithology	Dip (°)	Dip Direction (°)	,
564.00	564.00	Rustler					
946.00	946.00	Top Salt					
4,097.00	4,097.00	Base Salt					
4,329.00	4,329.00	Delaware					
8,149.58	8,136.00	Bone Spring					
9,265.82	9,248.00	1st Bone Spring Ss					
9,892.20	9,872.00	2nd Bone Spring Ss					
10,369.01	10,347.00	3rd Bone Spring Lm					
11,147.72	11,119.00	3rd Bone Spring Ss					
11,838.76	11,488.00	LP	·				

#### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <u>Lucid</u> and will be connected to <u>Lucid</u> low/high pressure gathering system located in <u>Eddy</u> County, New Mexico. It will require <u>653.67'</u> of pipeline to connect the facility to low/high pressure gathering system. <u>BOPCO</u> provides (periodically) to <u>Lucid</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>BOPCO</u> and <u>Lucid</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Red Hills Plant</u>, <u>Sec. 13</u>, <u>T24S</u>, <u>R33E</u> or <u>Roadrunner</u>, <u>Sec. 32</u>, <u>T32S</u>, <u>R28E</u>, <u>Eddy County</u>. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>Lucid</u> system at that time. Based on current information, it is <u>BOPCO's</u> belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

# **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

#### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to <u>Lucid</u> and will be connected to <u>Lucid</u> low/high pressure gathering system located in <u>Eddy</u> County, New Mexico. It will require <u>300.04'</u> of pipeline to connect the facility to low/high pressure gathering system. <u>BOPCO</u> provides (periodically) to <u>Lucid</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>BOPCO</u> and <u>Lucid</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Red Hills Plant</u>, <u>Sec. 13</u>, <u>T24S</u>, <u>R33E</u> or <u>Roadrunner</u>, <u>Sec. 32</u>, <u>T32S</u>, <u>R28E</u>, <u>Eddy County</u>. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

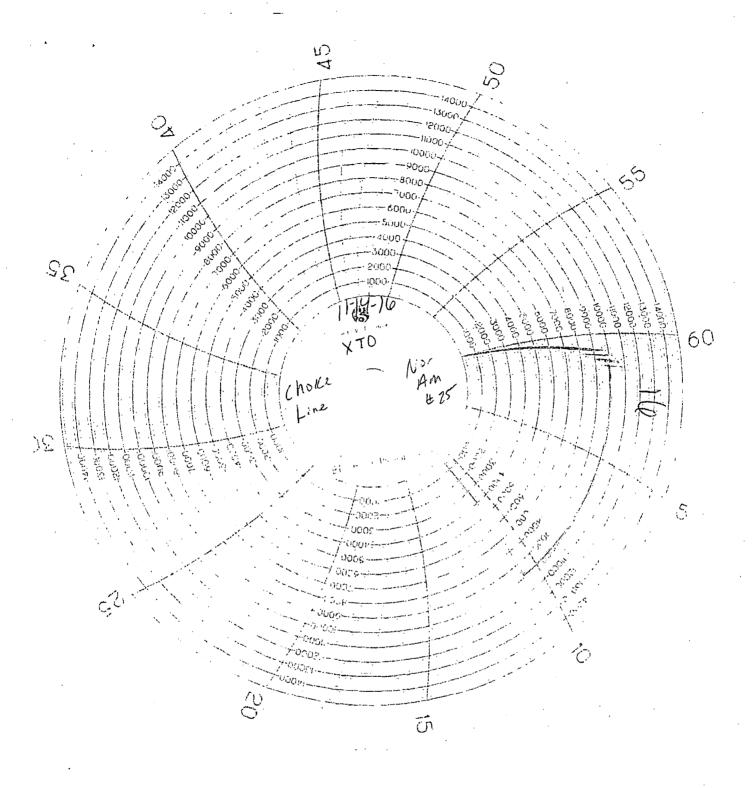
After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on <u>Lucid</u> system at that time. Based on current information, it is <u>BOPCO's</u> belief the system can take this gas upon completion of the well(s).

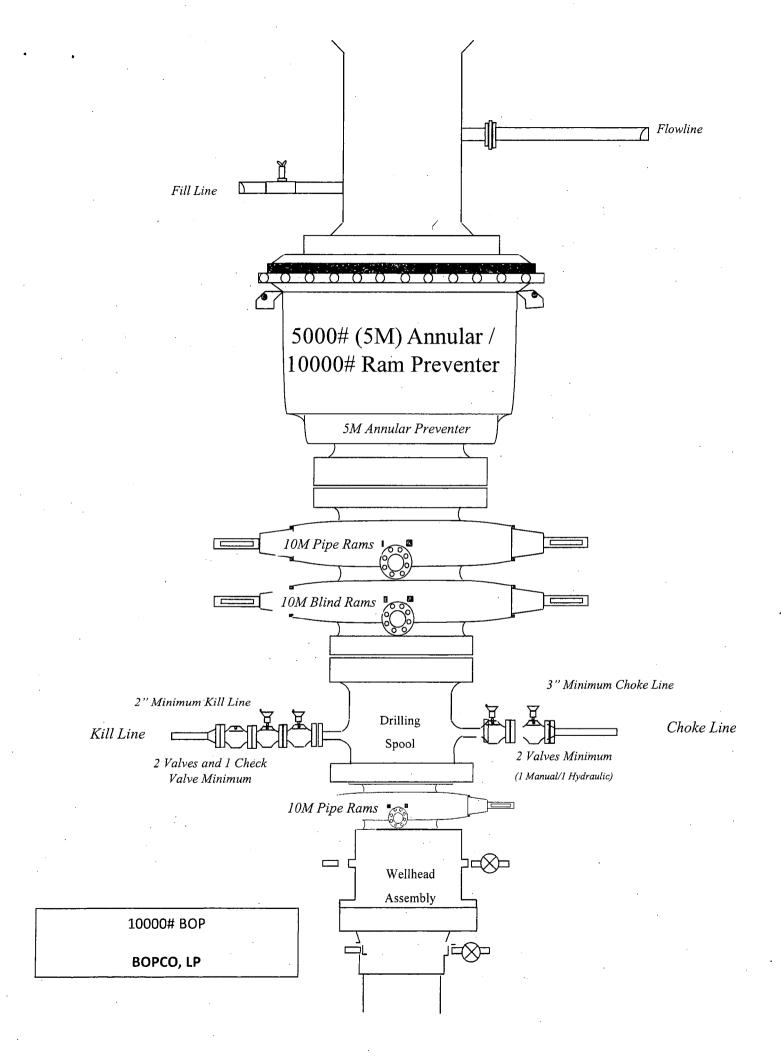
Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

#### **Alternatives to Reduce Flaring**

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- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines





Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Surface material will be native caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Approximately 6 inches of topsoil (root zone) will be stripped from the proposed access road prior to any further construction activity. The topsoil that was stripped will be spread along the edge of the road and within the ditch. The topsoil will be seeded with the proper seed mix designated by the BLM.

Access other construction information: Construction, reclamation, and/or routine maintenance will not be conducted during periods when the soil conditions for construction could lead to impacts to the surrounding environment, or when watershed damage is likely to occur as a result of these activities.

Access miscellaneous information: The Poker Lake Unit 17 Twin Wells Ranch area is accessed by existing U.S. Hwy 128 and Buck Jackson Rd. Go Southwest on Buck Jackson Rd (gravel) approx. 5.5 miles. Turn right, (North) on lease road and go approx. 1.9 miles. Turn left (West) on lease road and go approx. 0.4 miles. Location is to the south. Transportation Plan identifying existing roads that will be used to access the project area is included from Frank's Surveying marked as, 'Topographical and Access Road Map.' All equipment and vehicles will be confined to the routes shown on the "Vicinity Map" as provided by Frank's Surveying. Maintenance of the access roads will continue until abandonment and reclamation of the well pads is completed. The project is located approximately 12.5 miles to the town of Malaga.

Number of access turnouts: 0

Access turnout map:

### **Drainage Control**

New road drainage crossing: OTHER

**Drainage Control comments:** The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

Road Drainage Control Structures (DCS) description: No drainage control structures were identified at onsite. Drainage control structures will be applied for as-needed and be in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition and/or BLM Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

Road Drainage Control Structures (DCS) attachment:

## **Access Additional Attachments**

Additional Attachment(s):

# Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

PLU\_17\_TWR\_1\_Mile\_20180827084802.pdf

Well Name: POKER LAKE UNIT 17 TWR Well Number: 901H

Water source use type: INTERMEDIATE/PRODUCTION CASING.

STIMULATION, SURFACE CASING

Describe type: Fresh Water, in Section 6, T25S-R29E

Source latitude:

Source longitude:

Water source type: OTHER

Water source type: OTHER

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT, PRIVATE

CONTRACT, PRIVATE CONTRACT Source land ownership: FEDERAL

Water source transport method: TRUCKING, TRUCKING, TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 335000 Source volume (acre-feet): 43.179188

Source volume (gal): 14070000

Water source use type: INTERMEDIATE/PRODUCTION CASING,

STIMULATION, SURFACE CASING

Describe type: Fresh Water; Section 27, T25S-R30E

Source latitude:

Source datum:

Water source permit type: PRIVATE CONTRACT, PRIVATE CONTRACT, PRIVATE CONTRACT, PRIVATE CONTRACT

Source land ownership: FEDERAL

Water source transport method:

TRUCKING, TRUCKING, TRUCKING Source transportation land ownership: FEDERAL

Water source volume (barrels): 335000

Source volume (gal): 14070000

Source volume (acre-feet): 43.179188

Water source and transportation map:

PLU\_17\_TWR\_901H\_Wtr\_20180827090217.pdf

Water source comments: The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from a 3rd party vendor and hauled to the anticipated pit in Section 7 by transport truck using the existing and proposed roads depicted in the attached exhibits. No water well will be drilled on the location. Water for drilling, completion and dust control will be purchased from the following company: Texas Pacific Water Resources Water for drilling, completion and dust control will be supplied by Texas Pacific Water Resources for sale to XTO, from Section 27, T25S-R30E, Eddy County, New Mexico, In the event that Texas Pacific Water Resources does not have the appropriate water for XTO at time of drilling and completion, then XTO water will come from Intrepid Potash Company with the location of the water being in Section 6, T25S-R29E, Eddy County, New Mexico. Anticipated water usage for drilling includes an estimated 35,000 barrels of water to drill a horizontal well in a combination of fresh water and brine as detailed in the mud program in the drilling plans. These volumes are calculated for ~1.5bbls per foot of hole drilled with excess to accommodate any lost circulation or wash out that may occur. Actual water volumes used during operations will depend on the depth of the well, length of horizontal sections, and the losses that may occur during the operation. Temporary water flowlines will be permitted via ROW approval letter and proper grants as-needed based on drilling and completion schedules as needed. Well completion is expected to require approximately 300,000 barrels of water per horizontal well. Actual water volumes used during operations will depend on the depth of the well and length of horizontal sections. New water well? NO

Well Name: POKER LAKE UNIT 17 TWR Well Number: 901H

Disposal location description: R360 Environmental Solutions 4507 W Carlsbad Hwy, Hobbs, NM 88240 (575) 393-1079

Waste type: SEWAGE

Waste content description: Human Waste

Amount of waste: 250 gallons

Waste disposal frequency: Weekly

**Safe containment description:** Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Disposal location description: A licensed 3rd party contractor will be used to haul and dispose of human waste.

Waste type: DRILLING

Waste content description: Fluid

Amount of waste: 500 - barrels

Waste disposal frequency : One Time Only

Safe containment description: Steel mud pits

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Disposal location description: R360 Environmental Solutions 4507 W Carlsbad Hwy, Hobbs, NM 88240 (575) 393-1079

Waste type: GARBAGE

Waste content description: Garbage, junk and non-flammable waste materials

Amount of waste: 250 pounds

Waste disposal frequency: Weekly

Safe containment description: All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approve sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

**FACILITY** 

Disposal type description:

Well Name: POKER LAKE UNIT 17 TWR Well Number: 901H

# Section 9 - Well Site Layout

### Well Site Layout Diagram:

PLU\_17\_TWR\_901H\_Layout\_20180827090403.pdf

Comments: This is a multi-well pad.

# Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: POKER LAKE UNIT 17 TWR

Multiple Well Pad Number: 1

### Recontouring attachment:

PLU\_17\_TWR\_Int\_Rec\_Pad1\_20180827090427.pdf
PLU\_17\_TWR\_Int\_Rec\_Pad2\_20180827090444.pdf
PLU\_17\_TWR\_Int\_Rec\_Pad3\_20180827090459.pdf
PLU\_17\_TWR\_Int\_Rec\_Pad4\_20180827090513.pdf

**Drainage/Erosion control construction:** All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil. Prior to seeding, the seedbed will be scarified to a depth of no less than 4-6 inches.

**Drainage/Erosion control reclamation:** Erosion features are equal to or less than surrounding area and erosion control is sufficient so that water naturally infiltrates into the soil and gullying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.

Well pad proposed disturbance

(acres): 22.84

Road proposed disturbance (acres):

5.29

Powerline proposed disturbance

(acres): 0

Pipeline proposed disturbance

(acres): 2.4

Other proposed disturbance (acres):

16.52

Total proposed disturbance: 47.05

Well pad interim reclamation (acres):

7.56

Road interim reclamation (acres): 0

Powerline interim reclamation (acres):

0

Pipeline interim reclamation (acres):

2.4

Other interim reclamation (acres): 0

Total interim reclamation: 9.96

Well pad long term disturbance

(acres): 15.28

Road long term disturbance (acres):

5.29

Powerline long term disturbance

(acres): 0

Pipeline long term disturbance

(acres): 0

Other long term disturbance (acres):

16.52

Total long term disturbance: 37.09

### **Disturbance Comments:**

**Reconstruction method:** The original stock piled topsoil will be spread over the areas being reclaimed and the original landform will be restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors as close as possible to the original topography. The location will then be ripped and seeded.

**Topsoil redistribution:** The original stock piled topsoil will be spread over the areas being reclaimed and the original landform will be restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors as close as possible to the original topography. The location will then be ripped and seeded.

**Soil treatment:** A self-sustaining, vigorous, diverse, native (or otherwise approved) plan community will be established on the site with a density sufficient to control erosion and invasion by non-native plants and to re-establish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation.

**Existing Vegetation at the well pad:** Environmental Setting. The Berino component makes up 60 percent of the map unit. Slopes are 0 to 3 percent. This component is on fan piedmonts, uplands. The parent material consists of mixed alluvium and/or eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth)

Page 8 of 15

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

# **Seed Management**

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

**Seed Summary** 

Total pounds/Acre:

Seed Type

Pounds/Acre

### Seed reclamation attachment:

# Operator Contact/Responsible Official Contact Info

First Name: Jeff

Last Name: Raines

Phone: (432)620-4349

Email: jeffrey\_raines@xtoenergy.com

**Seedbed prep:** Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard. All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil. Prior to seeding, the seedbed will be scarified to a depth of no less than 4-6 inches. If the site is to be broadcast seeded, the surface will be left rough enough to trap seed and snow, control erosion, and increase water infiltration.

**Seed BMP:** If broadcast seeding is to be used and is delayed, final seedbed preparation will consist of contour cultivating to a depth of 4-6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

**Seed method:** Seeding will be conducted no more than two weeks following completion of final seedbed preparation. A certified weed-free seed mix designed by the BLM to meet reclamation standards will be used. If the site is harrowed or dragged, seed will be covered by no more than 0.25 inch of soil.

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Operator Name: XTO PERMIAN OPERATING LLC Well Name: POKER LAKE UNIT 17 TWR Well Number: 901H Disturbance type: OTHER Describe: Flowline Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: **BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office: NPS Local Office: State Local Office:** Military Local Office: **USFWS Local Office:** Other Local Office: **USFS** Region: **USFS** Forest/Grassland: **USFS** Ranger District: Disturbance type: WELL PAD Describe: Surface Owner: BUREAU OF LAND MANAGEMENT Other surface owner description: **BIA Local Office: BOR Local Office: COE Local Office:** DOD Local Office: **NPS Local Office:** State Local Office: Military Local Office: **USFWS Local Office:** Other Local Office: **USFS** Region:

**USFS** Ranger District:

**USFS** Forest/Grassland:

Well Name: POKER LAKE UNIT 17 TWR

Well Number: 901H

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

**BOR Local Office:** 

**COE Local Office:** 

**DOD Local Office:** 

**NPS Local Office:** 

State Local Office:

Military Local Office:

**USFWS Local Office:** 

Other Local Office:

**USFS** Region:

USFS Forest/Grassland:

**USFS** Ranger District:

# Section 12 - Other Information

### Right of Way needed? YES

Use APD as ROW? YES

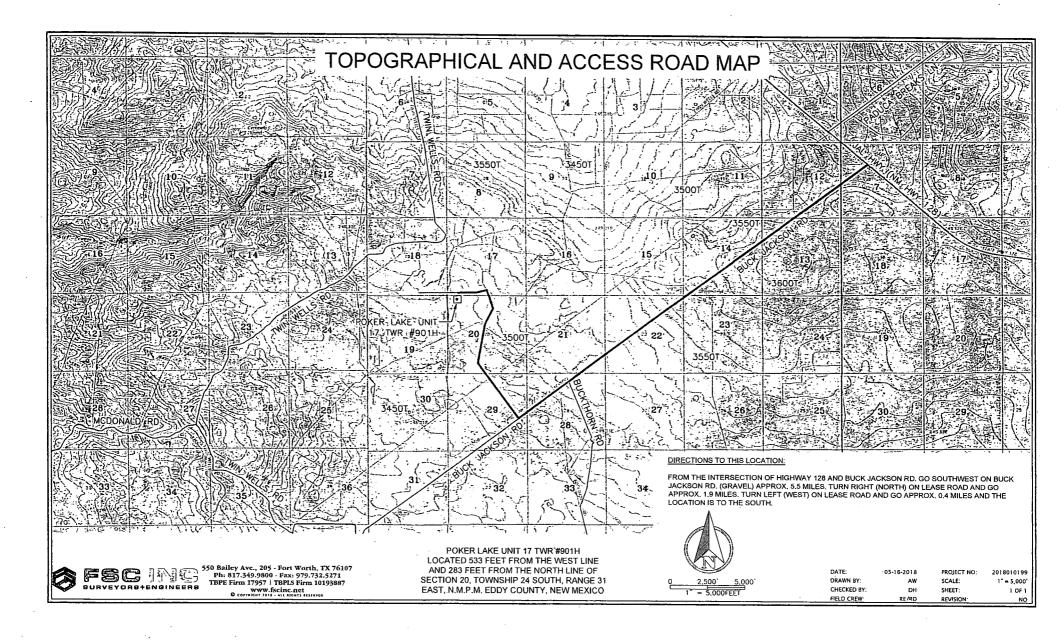
**ROW Type(s):** 281001 ROW - ROADS,288100 ROW - O&G Pipeline,288101 ROW - O&G Facility Sites,288103 ROW - Salt Water Disposal Pipeline/Facility,288104 ROW - Salt Water Disposal ApIn/Fac-FLPMA,289001 ROW- O&G Well Pad,FLPMA (Powerline)

**ROW Applications** 

**SUPO Additional Information:** XTO requests a variance from interim reclamation until all drilling and completion activities have been finished on the pads as these are multi-well pads where drilling and completion will be consecutive with the other wells on the pad. Once activities are completed, XTO. will coordinate interim reclamation with the appropriate BLM personnel. The proposed project is within the PA. A MOA payment has been submitted to the Bureau of Land Management. **Use a previously conducted onsite?** YES

**Previous Onsite information:** Well pad locations have been staked. Surveys of the proposed access roads and well pad locations have been completed by Frank Surveying, a registered professional land surveyor. Center stake surveys with access roads have been completed on Federal lands with Fernando Banos, Bureau of Land Management Natural Resource Specialist in attendance. Re-staked pads on lease 5/10/18 with Colleen Cepero-Rios.

**Other SUPO Attachment** 



LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 00'21'19" W	472.94'

LINE TABLE "B"

L2	S 00'20'35" E	190.40

LINE TABLE "C"

L3 N 00'22'13" W 473.4						
LG N 00 22 13 W 4/3.4	2'	W 473.42'	2'13" W	N 00'22	LJ.	i

LINE TABLE "D"

L4	N 89'39'22" E	2015.26
L5	N 34 17 11 E	377.53
L6	N 89'39'34" E	131.70'

LINE TABLE "E"

L7	N	00'14'51	" W	94.51

LINE TABLE "F"

ı	L8	N 00°25'10" W	75.03

LINE TABLE "G" L9 S 00°04'35" E

> TOTAL LENGTH = 3.840.95 FEET OR 232,78 RODS

### POKER LAKE UNIT 17 TWR PROPOSED ACCESS ROADS DESCRIPTION:

SURVEY OF A STRIP OF LAND 60.0 FEET WIDE AND 3,840.95 FEET, 232.78 RODS, OR 0.73 MILES IN LENGTH CROSSING SECTION 20, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO AND BEING 30.0 FEET RIGHT AND 30.0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE OF ROAD SURVEY, COMPRISING OF 5.20 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

NW/4 NW/4 SECTION 20 = 472.94 FEET = 28.66 RODS = 0.65 ACRES NE/4 NW/4 SECTION 20 = 663.82 FEET = 40.23 RODS = 0.91 ACRES NW/4 NE/4 SECTION 20 = 1,133.88 FEET = 68.72 RODS = 1.52 ACRES NE/4 NE/4 SECTION 20 = 1,560.15 FEET = 94.55 RODS = 2.11 ACRES SE/4 NE/4 SECTION 20 = 10.16 FEET = 0.62 RODS = 0.01 OF AN ACRE



#### **GENERAL NOTES**

- 1. BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.
- 2. LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATUM (NAD83).





550 Bailey Ave., 205 - Fort Worth, TX 76107 PROJECT NO: Ph: 817.349.9800 - Fax: 979.732.5271 SCALE:

TBPE Firm 17957 | TBPLS Firm 10193887 www.fscinc.net

08-20-2018 DRAWN BY: AW/Ai CHECKED BY: DL/MB 2018010197 1" = 500"

2 OF 2

SHEET:

### PLAT OF:

PROPOSED CENTERLINE OF ACCESS ROAD FOR:

XTO PERMIAN OPERATING, LLC.

POKER LAKE UNIT 17 TWR

SITUATED IN SECTION 20, TOWNSHIP 24 SOUTH, RANGE 31 EAST, NEW MEXICO PRIME MERIDIAN. EDDY COUNTY, NEW MEXICO

I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HERCEBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

MARK DILLON HARP REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 23786

# SECTION 20

TOWNSHIP 24 SOUTH, RANGE 31 EAST NEW MEXICO PRIME MERIDIAN

#### POKER LAKE UNIT 17 TWR PROPOSED FACILITY PAD DESCRIPTION:

Description of a proposed facility pad totaling 8.26 acres and being situated in Section 20, Township 24 South, Range 31 East, New Mexico Prime Meridian, Eddy County, New Mexico and being more particularly described as follows:

BEGINNING at the southeast corner of the proposed facility pad from which a found 3/4" iron pipe with a brass cap, being the east quarter-corner of said Section 20, bears N 83°39'46" E 1,091.80 feet;

THENCE over and across said Section 20, the following courses and distances:

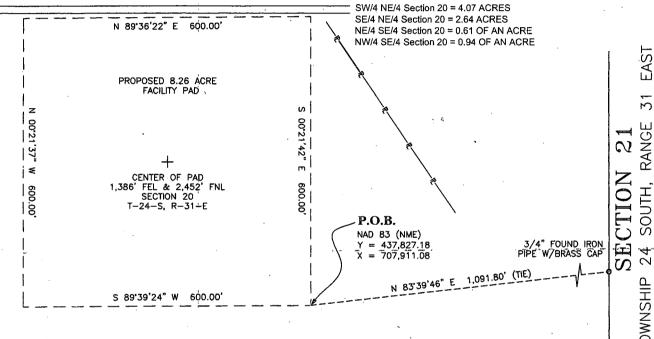
S 89°39'24" W, a distance of 600.00 feet to a point;

N 00°21'37" W, a distance of 600.00 feet to a point;

N 89°36'22" E, a distance of 600.00 feet to a point;

S 00°21'42" E. a distance of 600.00 feet to the POINT OF BEGINNING containing a total of 8.26 acres, more or less.

Said pad is divided in each quarter-quarter section as follows



200 FEET

FA WEXICO

23786

WAY DILLOW

### **GENERAL NOTES**

- BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.
- LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE 2. RELATIVE TO THE NORTH AMERICAN DATUM (NAD83).

MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



MARK DILLON HARP REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 23786



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LEGEND

SECTION LINE PROPOSED FACILITY PAD **EXISTING PIPELINE** EXISTING ROAD

MERI

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8

MEX

P.O.B. POINT OF BEGINNING

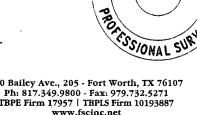
FOUND MONUMENT AS NOTED

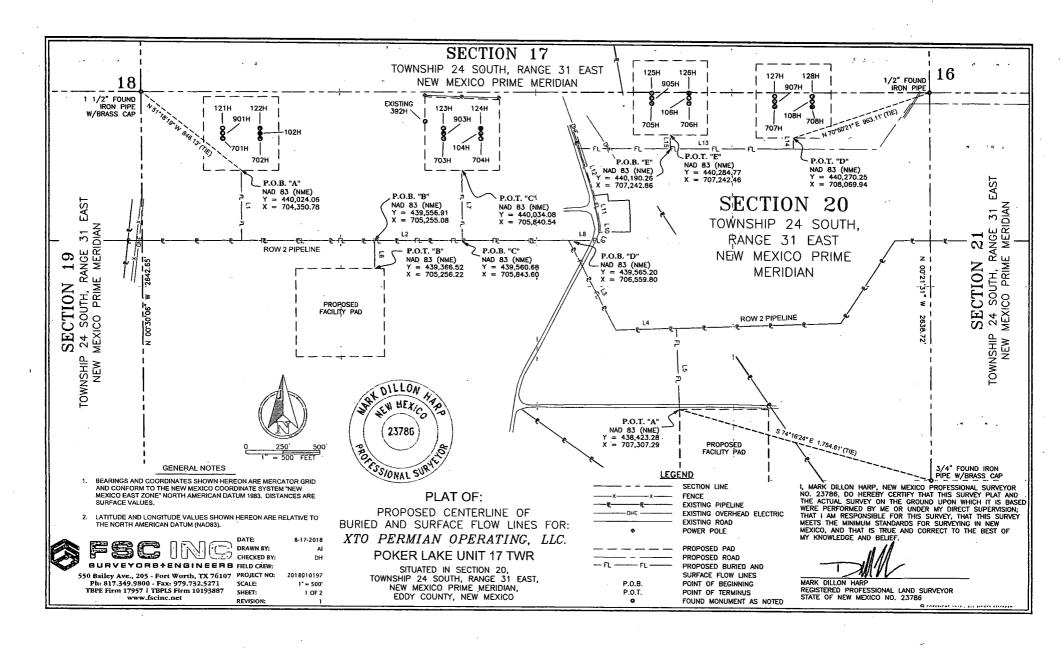


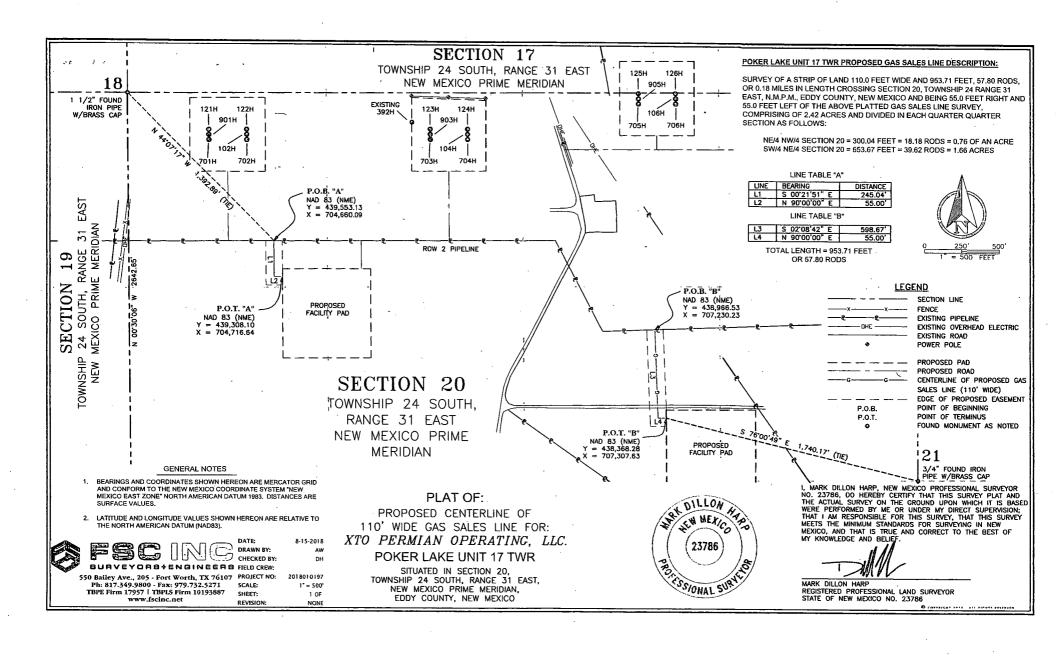
PROPOSED FACILITY PAD *POKER LAKE UNIT 17 TWR* 

SURVEY FOR A PROPOSED FACILITY PAD SITUATED IN THE NE/4 & SE/4 OF SECTION 20, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

DATE:	06-18-2018	PROJECT NO:	2018010197
DRAWN BY:	AW	SCALE:	1" = 200'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	NO







#### LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 00°21′19" W	472.94
	LINE TABLE "B"	
L2	S 00°20'35" E	190.40
	LINE TABLE "C"	
L3	N 00'58'44" W	485.10
	LINE TABLE "D"	

L4 S 02°19'14" E LINE TABLE "E"

L5	N 25'55'02" E	60.92
L6	N 02°11'40" W	58.49'
L7	N 10°52'03" W	196.71
L8	N 17'49'11" W	333.64
L9	N 89°39'22" E	1439.41
110	N 00°25'10" W	75.03'

LINE TABLE "F"

L11 N 00"14'51" W 94.51

> TOTAL LENGTH = 3,952.91 FEET OR 239.57 RODS

### POKER LAKE UNIT 17 TWR PROPOSED OVERHEAD ELECTRIC LINES DESCRIPTION:

SURVEY OF A STRIP OF LAND 3,952.91 FEET, 239.57 RODS, OR 0.75 MILES IN LENGTH CROSSING SECTION 20, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY. NEW MEXICO AND THE ABOVE PLATTED CENTERLINE OF ELECTRIC LINE SURVEY DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

NW/4 NW/4 SECTION 20 = 472.94 FEET = 28.66 RODS NE/4 NW/4 SECTION 20 = 675.50 FEET = 40.94 RODS NW/4 NE/4 SECTION 20 = 1,773.11 FEET = 107.46 RODS NE/4 NE/4 SECTION 20 = 485.60 FEET = 29.43 RODS SW/4 NE/4 SECTION 20 = 545.76 FEET = 33.08 RODS



#### **GENERAL NOTES**

- BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE
- 2. LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO





BURVEYORS+ENGINEERS FIELD CREW:

Ph: 817.349.9800 - Fax: 979.732.5271 TBPE Firm 17957 | TBPLS Firm 10193887 www.fscinc.net

8-17-2018 DRAWN BY: 550 Bailey Ave., 205 - Fort Worth, TX 76107 PROJECT NO: 2018010197 SCALE: 1" = 500"

SHEET:

2 OF 2

### PLAT OF:

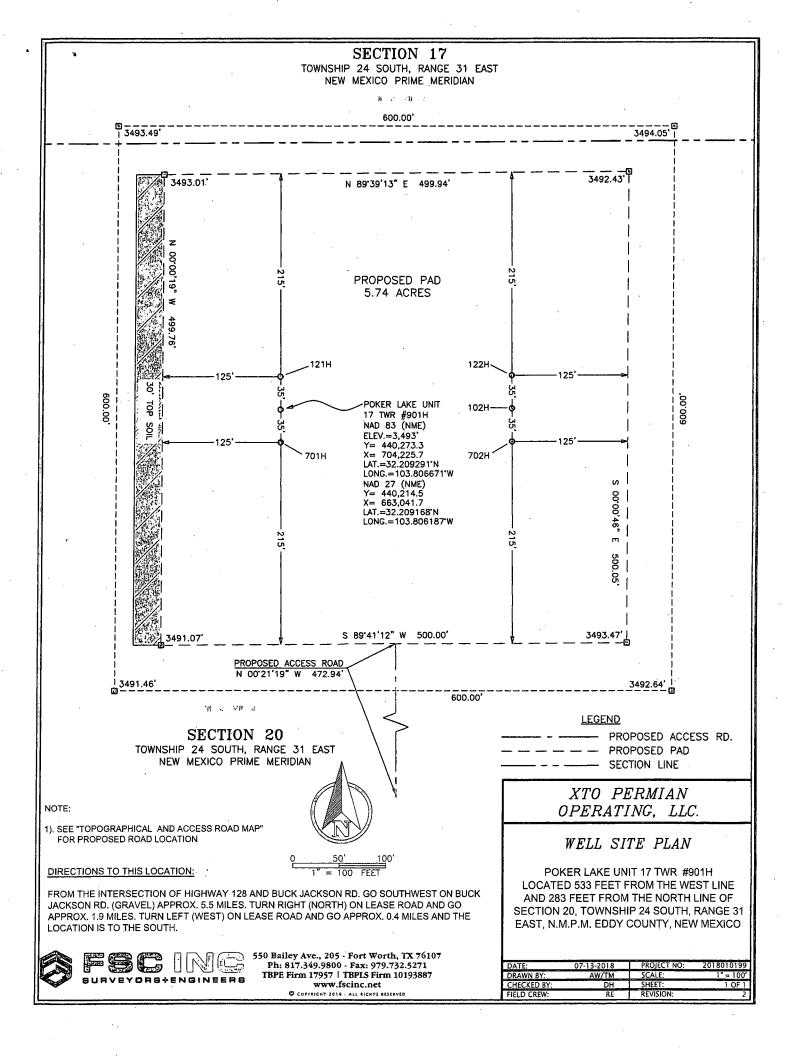
PROPOSED CENTERLINE OF OVERHEAD ELECTRIC LINES FOR: XTO PERMIAN OPERATING, LLC.

POKER LAKE UNIT 17 TWR

SITUATED IN SECTION 20, TOWNSHIP 24 SOUTH, RANGE 31 EAST, NEW MEXICO PRIME MERIDIAN. EDDY COUNTY, NEW MEXICO

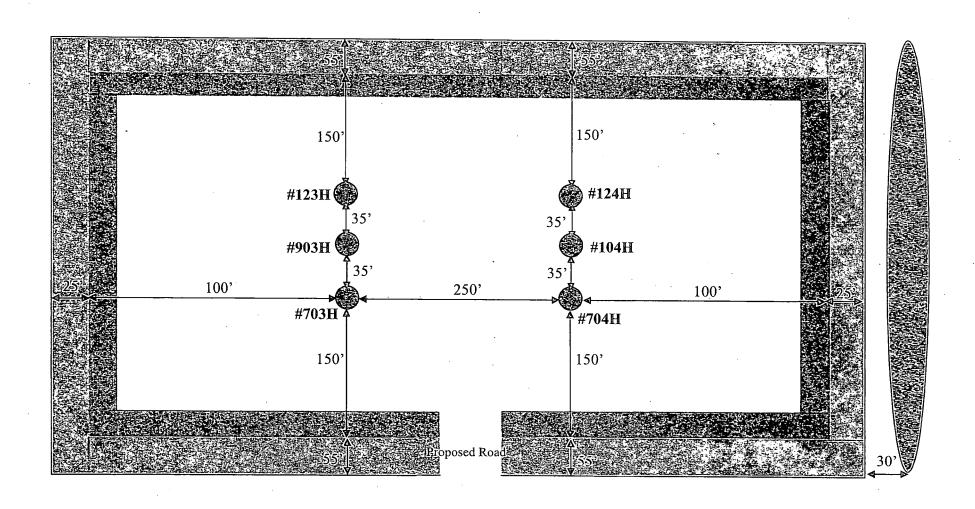
I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

MARK DILLON HARP REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 23786



# **Interim Reclamation Diagram**

Poker Lake Unit 17 TWR 703H, 903H, 123H, 704H, 104H, 124H V-Door North: 703H, 903H, 123H; V-Door South: 704H, 104H, 124H



# **LEGEND**





Wellbore

Interim Reclamation



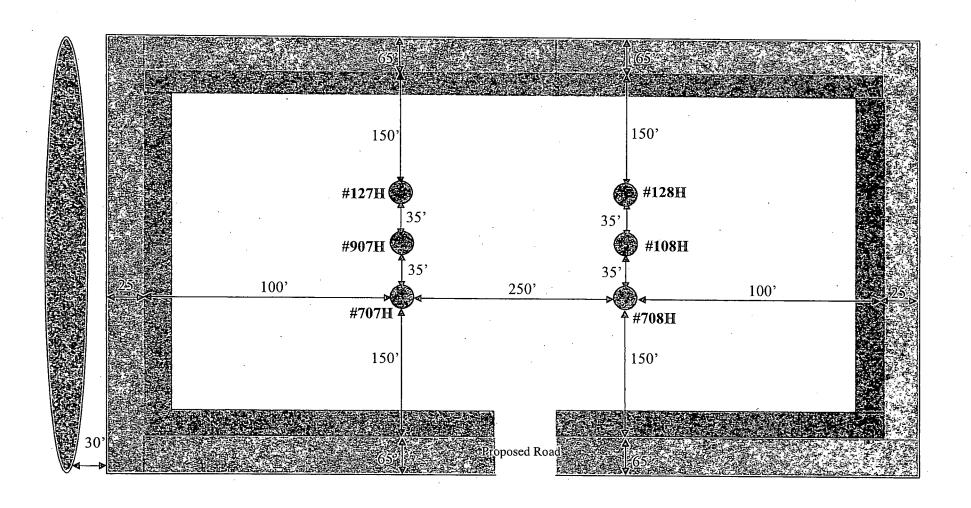
Ditch & Berm



Topsoil

# **Interim Reclamation Diagram**

Poker Lake Unit 17 TWR 707H, 907H, 127H, 708H, 108H, 128H V-Door North: 707H, 907H, 127H; V-Door South: 708H, 108H, 128H



# **LEGEND**





Wellbore

Interim Reclamation



Ditch & Berm



Topsoil

# **Level Ground Section**

- F. **Surface Material**. Surface material will be native caliche. The average grade of all roads will be approximately 3%.
- G. Fence Cuts: No.
- H. Fences: No.
- I. Cattle Guards: No.
- J. Turnouts: No.
- K. Culverts: No.
- L. Cuts and Fills: Not significant.
- M. **Topsoil**. Approximately 6 inches of topsoil (root zone) will be stripped from the proposed access road prior to any further construction activity. The topsoil that was stripped will be spread along the edge of the road and within the ditch. The topsoil will be seeded with the proper seed mix designated by the BLM.
- N. **Maintenance**. The access road will be constructed and maintained as necessary to prevent soil erosion and accommodate all-weather traffic. The road will be crowned and ditched with water turnouts installed as necessary to provide for proper drainage along with access road route.
- O. **Drainage**. The access road and associated drainage structures will be constructed and maintained in accordance with road guidelines contained in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, The Gold Book, Fourth Edition and/or BLM. Manual Section 9113 concerning road construction standards on projects subject to federal jurisdiction.

### 3. Location of Existing Wells

A. See attached 1-mile radius well map.

### 4. Ancillary Facilities

A. **Ancillary Facilities**. No off-pad ancillary facilities are planned during the exploration phase including, but not limited to: campsites, airstrips or staging areas.

### 5. Location of Proposed Production Facilities

- A. **Production Facilities**. Two 600' x 600' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB). The Western most facility is the PLU 17 TWR West CTB and the Eastern most facility is the PLU 17 TWR East CTB. The pads are located in Section 20-T24S-R31E NMPM, Eddy County, New Mexico. Plats of the proposed facilities are attached. Only the area necessary to maintain facilities will be disturbed. Due to air permitting timeframes and anticipated reserves, two facilities are anticipated to be necessary for full area development. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment.
- B. Flowlines. In the event the wells are found productive, 24-6" composite flexpipe or steel flowlines with a maximum safety pressure rating of 750psi (operating pressure: 125psi) will be buried within proposed lease road corridors from the proposed wells to the PLU 17 TWR East CTB and the PLU 17 TWR West CTB where the oil, gas, and water will be metered and appropriately separated. An additional 24-6" high pressure gas lines will be buried within the proposed lease road corridors for gas lift, fuel gas, and water. The distance of proposed flowlines per well will be approximately

Temporary water flowlines will be permitted via ROW approval letter and proper grants as-needed based on drilling and completion schedules as needed. Well completion is expected to require approximately 300,000 barrels of water per horizontal well. Actual water volumes used during operations will depend on the depth of the well and length of horizontal sections.

### 7. Construction Activities

- A. Construction, reclamation, and/or routine maintenance will not be conducted during periods when the soil conditions for construction could lead to impacts to the surrounding environment, or when watershed damage is likely to occur as a result of these activities.
- B. Any construction material that may be required for surfacing of the drill pad and access road will be from a contractor having a permitted source of materials within the general area. No construction materials will be removed from federal lands without prior approval from the appropriate surface management agency. All roads and well pads will be constructed of 6" rolled and compacted caliche.
- C. Anticipated Caliche Locations:
  - a. Pit 1: Federal Caliche Pit, Section 17-T25S-R30E
  - b. Pit 2: Federal Caliche Pit, Section 34-T25S-R29E

### 8. Methods for Handling Waste

- Cuttings. The well will be drilled utilizing a closed-loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site.
- **Drilling Fluids**. These will be contained in steel mud pits and then taken to a NMOCD approved commercial disposal facility.
- **Produced Fluids**. Water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility. Oil produced during operations will be stored in tanks until sold.
- Sewage. Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- Garbage and Other Waste Materials. All garbage, junk and non-flammable waste materials will be
  contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed
  and deposited in an approve sanitary landfill. Immediately after drilling all debris and other waste
  materials on and around the well location not contained in the trash cage will be cleaned up and removed
  from the location. No potentially adverse materials or substances will be left on the location.
- **Debris**. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned and removed from the well location. No potential adverse materials or substances will be left on location.

## Hazardous Materials.

- i. All drilling wastes identified as hazardous substances by the Comprehensive Environmental Response Compensation Liability Act (CERCLA) removed from the location and not reused at another drilling location will be disposed of at a hazardous waste facility approved by the U.S. Environmental Protection Agency (EPA).
- ii. XTO. and its contractors will comply with all applicable Federal, State and local laws and regulations, existing or hereafter enacted promulgated, with regard to any hazardous material, as defined in this paragraph, that will be used, produced, transported or stored on the oil and gas lease. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the CERCLA of 1980, as amended, 42 U.S.C 9601 et seq., and its regulation. The definition of hazardous substances under CERLCA includes any 'hazardous waste" as defined in

Definition: Reclamation includes disturbed areas where the original landform and a natural vegetative community will be restored and it is anticipated the site will not be disturbed for future development.

### Reclamation Standards:

The portions of the pad not essential to production facilities or space required for workover operations will be reclaimed and seeded as per BLM requirements for interim reclamation. (See Interim Reclamation plats attached).

All equipment and trash will be removed, and the surfacing material will be removed from the well pad and road and transported to the original caliche pit or used to maintain other roads. The location will then be ripped and seeded.

The original stock piled topsoil will be spread over the areas being reclaimed and the original landform will be restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors as close as possible to the original topography. The location will then be ripped and seeded

A self-sustaining, vigorous, diverse, native (or otherwise approved) plan community will be established on the site with a density sufficient to control erosion and invasion by non-native plants and to re-establish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation.

Erosion features are equal to or less than surrounding area and erosion control is sufficient so that water naturally infiltrates into the soil and gullying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.

The site will be free of State-or County-listed noxious weeds, oil field debris and equipment, and contaminated soil. Invasive and non-native weeds will be controlled.

### Seeding:

- <u>Seedbed Preparation</u>: Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard. All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil. Prior to seeding, the seedbed will be scarified to a depth of no less than 4-6 inches. If the site is to be broadcast seeded, the surface will be left rough enough to trap seed and snow, control erosion, and increase water infiltration.
- If broadcast seeding is to be used and is delayed, final seedbed preparation will consist of contour cultivating to a depth of 4-6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.
- <u>Seed Application</u>. Seeding will be conducted no more than two weeks following completion of final seedbed preparation. A certified weed-free seed mix designed by the BLM to meet reclamation standards will be used.
- If the site is harrowed or dragged, seed will be covered by no more than 0.25 inch of soil.

### 11. Surface Ownership

- A. Within the Poker Lake Unit 17 Twin Wells Ranch: 100% of the surface is under the administrative jurisdiction of the Bureau of Land Management.
- B. The surface is multiple-use with the primary uses of the region for grazing and for the production of oil and gas.

### 12. Other Information

Changes from Notice of Staking / Onsite

# **13.** Bond Coverage

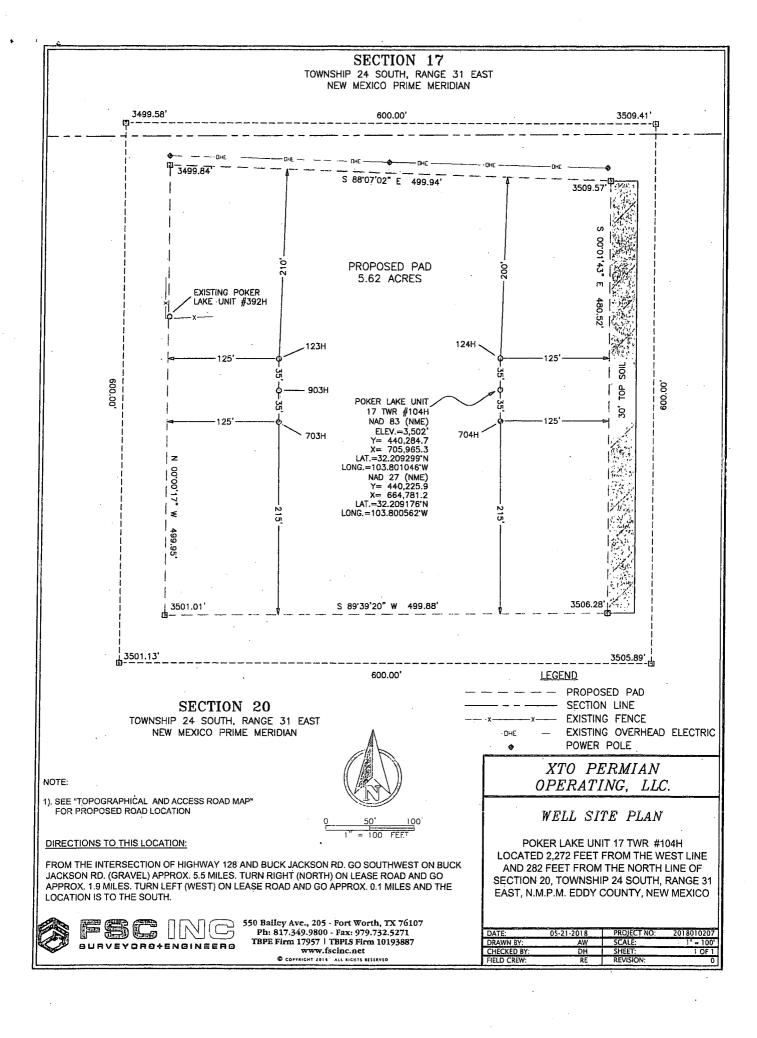
Bond Coverage is Nationwide. Bond Number: COB000050Operator's Representatives:

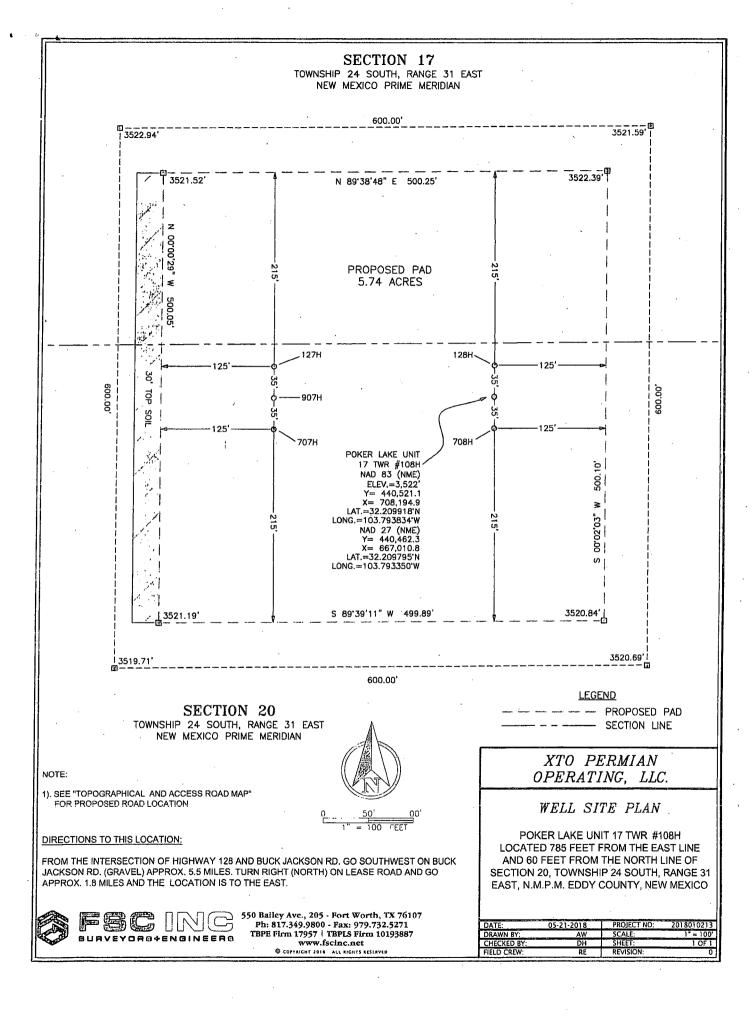
The XTO representatives for ensuring compliance of the surface use plan are listed below:

# Surface:

Jimie Scott
Contract Construction Lead
XTO Energy, Incorporated
500 W. Illinois St., Suite 100
Midland, Texas 79701
432-488-9955
james\_scott@xtoenergy.com

Jeff Raines Construction Superintendent XTO Energy, Incorporated 500 W. Illinois St., Suite 100 Midland, Texas 79701 432-620-4349 jeff\_raines@xtoenergy.com





# Section 3 - Unlined Pits

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:	·
PWD surface owner:	PWD disturbance (acres):
Unlined pit PWD on or off channel:	
Unlined pit PWD discharge volume (bbl/day):	
Unlined pit specifications:	
Precipitated solids disposal:	
Decribe precipitated solids disposal:	
Precipitated solids disposal permit:	
Unlined pit precipitated solids disposal schedule:	
Unlined pit precipitated solids disposal schedule attachme	nt:
Unlined pit reclamation description:	
Unlined pit reclamation attachment:	
Unlined pit Monitor description:	
Unlined pit Monitor attachment:	
Do you propose to put the produced water to beneficial use	e?
Beneficial use user confirmation:	
Estimated depth of the shallowest aquifer (feet):	
Does the produced water have an annual average Total Disthat of the existing water to be protected?	solved Solids (TDS) concentration equal to or less than
TDS lab results:	
Geologic and hydrologic evidence:	
State authorization:	
Unlined Produced Water Pit Estimated percolation:	
Unlined pit: do you have a reclamation bond for the pit?	
Is the reclamation bond a rider under the BLM bond?	
Unlined pit bond number:	
Unlined pit bond amount:	,
Additional bond information attachment:	
Section 4 - Injection	
Would you like to utilize Injection PWD options? NO	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):

# **Bond Information**

Federal/Indian APD: FED

BLM Bond number: COB000050

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: