



U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

Date Printed:

APD ID:	Well Status:
APD Received Date:	Well Name:
Operator:	Well Number:

APD Package Report Contents

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
 - Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - Blowout Prevention Choke Diagram Attachment: 1 file(s)
 - Blowout Prevention BOP Diagram Attachment: 1 file(s)
 - Casing Spec Documents: 3 file(s)
 - Casing Taperd String Specs: 1 file(s)
 - Casing Design Assumptions and Worksheet(s): 1 file(s)
 - Hydrogen sulfide drilling operations plan: 1 file(s)
 - Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)
 - Other Facets: 4 file(s)
 - Other Variances: 5 file(s)
- SUPO Report
- SUPO Attachments
 - Existing Road Map: 1 file(s)
 - New Road Map: 1 file(s)
 - Attach Well map: 1 file(s)
 - Production Facilities map: 6 file(s)
 - Water source and transportation map: 1 file(s)
 - Well Site Layout Diagram: 2 file(s)
 - Recontouring attachment: 3 file(s)
 - Other SUPO Attachment: 1 file(s)
- PWD Report
- PWD Attachments

-- None

- Bond Report

- Bond Attachments

-- None

Form 3160-3
(October 2024)

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2027

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-015-58088
3b. Phone No. (include area code)		10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.



(Continued on page 2)

*(Instructions on page 2)

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to a new evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: NWNW / 84 FNL / 1020 FWL / TWSP: 26S / RANGE: 30E / SECTION: 20 / LAT: 32.03499 / LONG: -103.908746 (TVD: 0 feet, MD: 0 feet)
PPP: NWSE / 2657 FNL / 1664 FEL / TWSP: 26S / RANGE: 30E / SECTION: 29 / LAT: 32.013332 / LONG: -103.900176 (TVD: 10560 feet, MD: 19100 feet)
PPP: NWNE / 330 FNL / 1655 FEL / TWSP: 26S / RANGE: 30E / SECTION: 20 / LAT: 32.034335 / LONG: -103.90026 (TVD: 10560 feet, MD: 11453 feet)
PPP: NWNE / 0 FNL / 1668 FEL / TWSP: 26S / RANGE: 30E / SECTION: 29 / LAT: 32.020635 / LONG: -103.900206 (TVD: 10560 feet, MD: 16500 feet)
BHL: LOT 2 / 50 FSL / 1655 FEL / TWSP: 26S / RANGE: 30E / SECTION: 32 / LAT: 32.000263 / LONG: -103.900127 (TVD: 10560 feet, MD: 23397 feet)

BLM Point of Contact

Name: MARIAH HUGHES
Title: Land Law Examiner
Phone: (575) 234-5972
Email: MHUGHES@BLM.GOV

CONFIDENTIAL

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	XTO Permian Operating
LEASE NO.:	NMNM139998
COUNTY:	Eddy County, New Mexico

Wells:

- Dorthy 30-31 #103H
- Dorthy 30-31 #100H
- Dorthy 30-31 #105H
- Dorthy 30-31 #101H
- Dorthy 30-31 #106H
- Dorthy 30-31 #104H
- Ross 19-30-31 #209H
- Ross 19-30-31 #212H
- Ross 19-30-31 #205H
- Ross 19-30-31 #211H
- Ross 19-30-31 #210H
- Ross 19-30-31 #208H
- Ross 19-30-31 #213H
- Blanche 20-29-32 #200H
- Ross 19-30-31 # 207H
- Ross 19-30-31 #206H
- Blanche 20-29-32 #201H
- Sophia 20-29-32 #216H
- Ross 19-30-31 #204H
- Ross 19-30-31 #214H
- Sophia 20-29-32 # 217H
- Ross 19-30-31 #215H
- Ross 19-30-31 #218H
- Blanche 20-29-32 #203H
- Blanche 20-29-32 #317H
- Sophia 20-29-32 #302H
- Sophia 20-29-32 #300H

Blanche 20-29-32 #315H
Blanche 20-29-32 #313H
Sophia 20-29-32 #308H
Blanche 20-29-32 #321H
Sophia 20-29-32 #303H
Sophia 20-29-32 #304H
Blanche 20-29-32 # 319H
Sophia 20-29-32 #310H
Blanche 20-29-32 # 314H
Sophia 20-29-32 #307H
Sophia 20-29-32 #305H
Blanche 20-29-32 #320H
Sophia 20-29-32 #311H
Sophia 20-29-32 #309H
Blanche 20-29-32 #318H
Sophia 20-29-32 #306H
Blanche 20-29-32 #316H

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1. GENERAL PROVISIONS

The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the operator, or any person working on the operator's behalf, on the public or federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area (within 100ft) 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, in conjunction with a BLM Cultural Resource Specialist, to determine appropriate actions to prevent the loss of significant scientific values. The operator shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

Traditional Cultural Properties (TCPs) are protected by NHPA as codified in 36 CFR 800 for possessing traditional, religious, and cultural significance tied to a certain group of individuals. Though there are currently no designated TCPs within the project area or within a mile of the project area, but it is possible for a TCP to be designated after the approval of this project. **If a TCP is designated in the project area after the project's approval, the BLM Authorized Officer will notify the operator of the following conditions and the duration for which these conditions are required.**

1. Temporary halting of all construction, drilling, and production activities to lower noise.
2. Temporary shut-off of all artificial lights at night.

The operator is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA), specifically NAGPRA Subpart B regarding discoveries, to protect human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered during project work. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and a BLM-CFO Authorized Officer will be notified immediately. The BLM will then be required to be notified, in writing, within 24 hours of the discovery. The written notification should include the geographic location by county and state, the contents of the discovery, and the steps taken to protect said discovery. You must also include any potential threats to the discovery and a conformation that all activity within 100ft of the discovery has ceased and work will not resume until written certification is issued. All work on the entire project must halt for a minimum of 3 days and work cannot resume until an Authorized Officer grants permission to do so.

Any paleontological resource discovered by the operator, or any person working on the operator's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The operator will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

1.2. RANGELAND RESOURCES

1.2.1. Cattleguards

Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

1.2.2. Fence Requirement

Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

1.2.3. Livestock Watering Requirement

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. 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.

1.3. 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, New Mexico Department of Agriculture, and BLM requirements and policies.

1.3.1 African Rue (*Peganum harmala*)

Spraying: The spraying of African Rue must be completed by a licensed or certified applicator. In order to attempt to kill or remove African Rue the proper mix of chemical is needed. The mix consists of 2% Arsenal (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM_NM_CFO_NoxiousWeeds@blm.gov.

Management Practices: In addition to spraying for African Rue, good management practices should be followed. All equipment should be washed off using a power washer in a designated containment area. The containment area shall be bermed to allow for containment of the seed to prevent it from entering any open areas of the nearby landscape. The containment area shall be excavated near or adjacent to the well pad at a depth of three feet and just large enough to get equipment inside it to be washed off. This will allow all seeds to be in a centrally located area that can be treated at a later date if the need arises.

1.4. LIGHT POLLUTION

1.4.1. Downfacing

All permanent lighting will be pointed straight down at the ground in order to prevent light spill beyond the edge of approved surface disturbance.

1.4.2. Shielding

All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source).

1.4.3. Lighting Color

Lighting shall be 3,500 Kelvin or less (Warm White) except during drilling, completion, and workover operations. No bluish-white lighting shall be used in permanent outdoor lighting.

2. SPECIAL REQUIREMENTS

2.1. WATERSHED

General Construction

Any water erosion that may occur due to the construction of ROW/surface site and during the life of the ROW/surface site will be quickly corrected and proper measures will be taken to prevent future erosion. Erosion control structures such as curled (plastic free and weed free) wood/straw fiber wattles/logs, silt fences, diversion berms, or other soil erosion controls to slow water migration across disturbed areas should be installed during construction and reclamation or as needed.

Regular monitoring of any erosion control structures placed in or along the ROW/surface site is recommended, both following precipitation events and regularly during monsoon season (June – September). Any spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

Overhead Cable(s)

A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

Pipeline(s)

When crossing ephemeral drainages (marked and unmarked), the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. In ephemeral flow paths, rivers, and streams excess soil is to be compacted, contoured, and level to ground surface, allowing water to flow in its natural state. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction, a leak detection plan will be developed. The method(s) 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 should incorporate an automatic shut-off system or manual shut-off valves with active monitoring to minimize the effects of an undesirable event.

A pipeline access road should not cross ephemeral drainages. Traffic should be diverted to a preexisting route. Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

Temporary Use Fresh Water Frac Line(s)

Once the temporary use exceeds the timeline of 180 days and/or with a 90-day extension status; further analysis will be required if the applicant pursues to turn the temporary ROW into a permanent ROW.

The pipeline is to not obstruct ephemeral drainages or streams, allowing water to flow in its natural state unobstructed.

Prior to pipeline installation/construction, a leak detection plan will be developed. The method(s) 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 should incorporate an automatic shut-off system or manual shut-off valves with active monitoring to minimize the effects of an undesirable event.

Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

Surface Site and/or Pad

The entire surface site/pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. No waterflow from the uphill side(s) of the pad shall be allowed to enter the well pad. Topsoil shall not be used to construct the berm. The compacted berm should be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.

Any water erosion that may occur due to the construction of the well pad during the life of the well will be immediately corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location with wattles (recommended minimum 9" height) surrounding the stockpiled soil to prevent soil loss due to water/wind erosion. The wattles are to be maintained throughout the life of the project. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state-approved facility.

Tank Battery

Tank battery locations will be lined and bermed. Tank battery berms should be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater. Liners should be permanently installed, at least 20 mil (0.20in) thick with a 4 oz. felt backing to prevent tears or punctures. 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.

2.2. CAVE/KARST

2.2.1. General Construction

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- This is a sensitive area and all spills or leaks will be reported to the BLM immediately for their immediate and proper treatment, as defined in NTL 3A for Major Undesirable Events.

2.2.2. Pad Construction

- The pad will be constructed and leveled by adding the necessary fill and caliche. No blasting will be used for any construction or leveling activities.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).

- Following a rain event, all fluids will be vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

2.2.3. Road Construction

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

2.2.4. Buried Pipeline/Cable Construction

- Rerouting of the buried line(s) may be required if a subsurface void is encountered during construction to minimize the potential subsidence/collapse of the feature(s) as well as the possibility of leaks/spills entering the karst drainage system.

2.2.5. Powerline Construction

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

2.2.6. Surface Flowlines Installation

- Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

2.2.7. Production Mitigation

- Tank battery locations and facilities will be bermed and lined with a 20-mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity).
- Implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check valves, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

2.2.8. Residual and Cumulative Mitigation

The operator will perform annual pressure monitoring on all casing annuli. If the test results indicate a casing failure has occurred, contact a BLM Engineer immediately, and take remedial action to correct the problem.

2.2.9. Plugging and Abandonment Mitigation

Upon well abandonment in high cave karst areas, additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

WILDLIFE

Oil and Gas Zone D - CCA Boundary requirements:

- Implement erosion control measures in accordance with the Reasonable and Prudent Practices for Stabilization ("RAPPS")

- Comply with SPCC requirements in accordance with 40 CFR Part 112;
- Comply with the United States Army Corp of Engineers (USACE) Nationwide 12 General Permit, where applicable;
- Utilize technologies (like underground borings for pipelines), where feasible;
- Educate personnel, agents, contractors, and subcontractors about the requirements of conservation measures, COAs, Stips and provide direction in accordance with the Permit.

Desert Heronries Proposed ACEC:

Surface disturbance will not be allowed within up to 200 meters of active heronries or by delaying activity for up to 120 days, or a combination of both.

Exhaust noise from engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

SPECIAL STATUS PLANT SPECIES

2.3.1 Fencing

Scheers Beehive Cactus will be spanned by Overhead electric line and will need temporary fencing.

2.3 VISUAL RESOURCE MANAGEMENT

2.5.1 VRM IV

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

3. CONSTRUCTION REQUIREMENTS

3.1 CONSTRUCTION NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at BLM_NM_CFO_Construction_Reclamation@blm.gov at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and COAs on the well site and they shall be made available upon request by the Authorized Officer.

3.2 TOPSOIL

The operator shall strip the topsoil (the A horizon) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. No more than the top 6 inches of topsoil shall be removed. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (the B horizon and below) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

3.3 CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No reserve pits will be used for drill cuttings. The operator shall properly dispose of drilling contents at an authorized disposal site.

3.4 FEDERAL MINERAL PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

3.5 WELL PAD & SURFACING

Any surfacing material used to surface the well pad will be removed at the time of interim and final reclamation.

3.6 EXCLOSURE FENCING (CELLARS & PITS)

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

The operator will also install and maintain mesh netting for all open well cellars to prevent access to smaller wildlife before and after drilling operations until the well cellar is free of fluids and the operator. Use a maximum netting mesh size of 1 ½ inches. The netting must not have holes or gaps.

3.7 ON LEASE ACCESS ROAD

3.7.1 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.

3.7.2 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 will 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.

3.7.3 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.

3.7.4 Ditching

Ditching shall be required on both sides of the road.

3.7.5 Turnouts

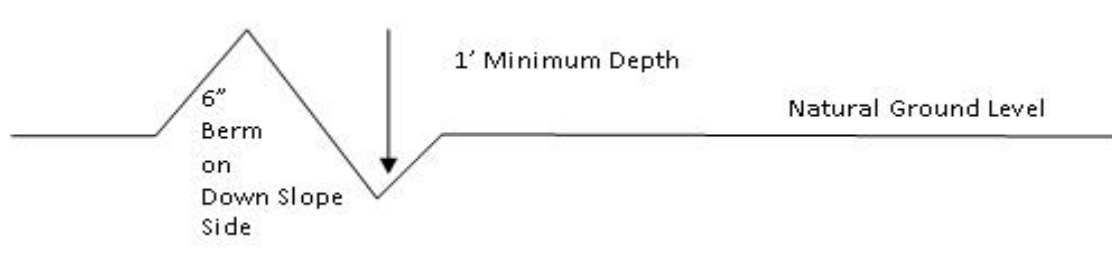
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

3.7.6 Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, leadoff ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4} + 100' = 200' \text{ lead-off ditch interval}$$

3.7.7 Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

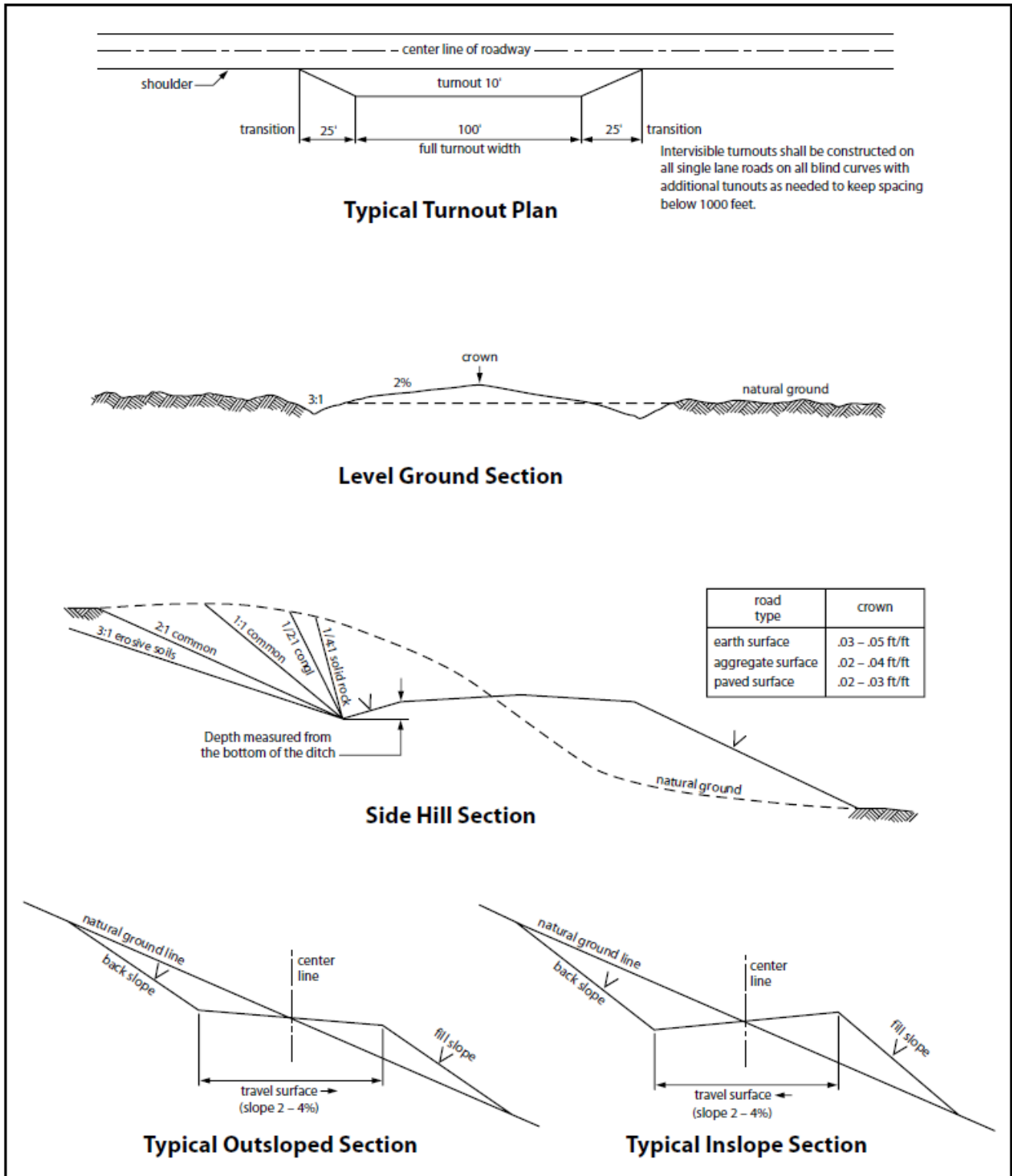


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

4. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- 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, siting values 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.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.1 BURIED PIPELINES

A copy of the application (APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.

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

1. The Operator 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 APD.
2. The Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator 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 pipeline corridor or on facilities authorized under this APD. (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 operator 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 Pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, 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 is 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 operator, regardless of fault. Upon failure of operator 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 operator. Such action by the Authorized Officer shall not relieve operator of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized pipeline corridor.
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 pipeline corridor will be 30 feet:
 - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
 - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
 - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)
8. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.
9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this pipeline corridor and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire pipeline corridor shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade.
10. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator'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.
11. The operator 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 operator before maintenance begins. The operator 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 operator to construct temporary deterrence structures.
12. 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.
13. Escape Ramps - 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:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.

14. Special Stipulations:

Karst:

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered, alignments may be rerouted to avoid the karst feature and lessen the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- 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 values 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.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.2 SURFACE PIPELINES

A copy of the APD 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.

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

1. Operator 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 APD.
2. Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Operator 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 pipeline corridor or on facilities authorized under this APD (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. Operator 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 Pipeline corridor (unless the release or threatened release is wholly unrelated to activity of the Operator's activity on the Pipeline

corridor), or resulting from the activity of the Operator on the pipeline corridor. This provision applies without regard to whether a release is caused by Operator, its agent, or unrelated third parties.

4. Operator shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Operator shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the pipeline corridor or permit area:
 - a. Activities of Operator including, but not limited to: construction, operation, maintenance, and termination of the facility;
 - b. Activities of other parties including, but not limited to:
 - (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting
 - (4) Vandalism and sabotage
 - c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Operator, regardless of fault. Upon failure of Operator 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 they deem 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 Operator. Such action by the Authorized Officer shall not relieve Operator of any responsibility as provided herein.
6. All construction and maintenance activity shall be confined to the authorized pipeline corridor width of 30-feet. If the pipeline route follows an existing road or buried pipeline corridor, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline corridor. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or pipeline corridors.
7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.
8. Operator 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 or dune 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 6 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 operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator 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 operator 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 operator 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 pipeline corridor and at all road crossings. At a minimum, signs will state the operator'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 operator 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 operator. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. 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, powerline 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.
16. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

4.3 RANGELAND MITIGATION FOR PIPELINES

4.5.1 Fence Requirement

Where entry is granted across a fence line, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment operator prior to crossing any fence(s).

4.5.2 Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at road-fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

4.5.3 Livestock Watering Requirement

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the

BLM office (575-234-5972) and the private surface landowner or the grazing allotment operator if any damage occurs to structures that provide water to livestock.

- Livestock operators will be contacted, and adequate crossing facilities will be provided as needed to ensure livestock are not prevented from reaching water sources because of the open trench.
- Wildlife and livestock trails will remain open and passable by adding soft plugs (areas where the trench is excavated and replaced with minimal compaction) during the construction phase. Soft plugs with ramps on either side will be left at all well-defined livestock and wildlife trails along the open trench to allow passage across the trench and provide a means of escape for livestock and wildlife that may enter the trench.
- Trenches will be backfilled as soon as feasible to minimize the amount of open trench. The Operator will avoid leaving trenches open overnight to the extent possible and open trenches that cannot be backfilled immediately will have escape ramps (wooden) placed at no more than 2,500 feet intervals and sloped no more than 45 degrees.

5. OVERHEAD ELECTRIC LINES

A copy of the APD 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.

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

1. The operator 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 APD.
2. The operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator 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 powerline corridor or on facilities authorized under this powerline corridor. (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 operator 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 Powerline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the powerline corridor), or resulting from the activity of the Operator on the powerline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
4. There will be no clearing or blading of the powerline corridor 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 operator 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 powerline corridor, should they be necessary to ensure the safety of large perching birds.

Such modifications and/or additions shall be made by the operator without liability or expense to the United States.

6. Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.
7. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator 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 the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
8. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
9. Upon cancellation, relinquishment, or expiration of this APD, the operator shall comply with those abandonment procedures as prescribed by the Authorized Officer.
10. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this APD, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
11. Special Stipulations:
 - For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed.
12. Karst stipulations for overhead electric lines
 - Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
 - The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
 - No further construction will be done until clearance has been issued by the Authorized Officer.
 - Special restoration stipulations or realignment may be required.

6. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 Placement of Production Facilities

Production facilities must be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

5.1.2 Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will

net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

5.1.3. Chemical and Fuel Secondary Containment and Enclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock enclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

5.1.4. Open-Vent Exhaust Stack Enclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended enclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

5.1.5. Containment Structures

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.

7. RECLAMATION

Stipulations required by the Authorized Officer on specific actions may differ from the following general guidelines

6.1 ROAD AND SITE RECLAMATION

Any roads constructed during the life of the well will have the caliche removed or linear burial. If contaminants are indicated then testing will be required for chlorides and applicable contaminate anomalies for final disposal determination (disposed of in a manner approved by the Authorized Officer within Federal, State and Local statutes, regulations, and ordinances) and seeded to the specifications in sections 6.5 and 6.6.

6.2 EROSION CONTROL

Install erosion control berms, windrows, and hummocks. Windrows must be level and constructed perpendicular to down-slope drainage; steeper slopes will require greater windrow density. Topsoil between windrows must be ripped to a depth of at least 12", unless bedrock is encountered. Any large boulders pulled up during ripping must be deep-buried on location. Ripping must be perpendicular to down-slope. The surface must be left rough in order to catch and contain rainfall on-site. Any trenches resulting from erosion cause by run-off shall be addressed immediately.

6.3 INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must 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 must work with BLM surface protection specialists (BLM_NM_CFO_Construction_Reclamation@blm.gov) to devise the best strategies to reduce the size of the location. Interim reclamation must allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche and any other surface material is required. 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 in section 6.6.

Upon completion of interim reclamation, the operator shall submit a Sundry Notice, Subsequent Report of Reclamation (Form 3160-5).

6.4 FINAL ABANDONMENT & RECLAMATION

Prior to surface abandonment, the operator shall submit a Notice of Intent Sundry Notice and reclamation plan.

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.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding will be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM. After earthwork and seeding is completed, the operator is required to submit a Sundry Notice, Subsequent Report of Reclamation.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (BLM_NM_CFO_Construction_Reclamation@blm.gov).

6.5 SEEDING TECHNIQUES

Seeds shall be hydro-seeded, mechanically drilled, or broadcast, with the broadcast-seeded area raked, ripped or dragged to aid in covering the seed. The seed mixture shall be evenly and uniformly planted over the disturbed area.

6.6 SOIL SPECIFIC SEED MIXTURE

The lessee/permittee 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 no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed land application will be accomplished by mechanical planting 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 tend to drop the bottom of the drill and are planted first; the operator 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. The seeding will be repeated until a satisfactory BLM or Soil Conservation

District stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding or until several months of precipitation have occurred, enabling a full four months of growth, with one or more seed generations being established

Seed Mixture 2, for Sandy Site

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

<u>Species</u>	<u>lb/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO
WELL NAME & NO.: Sophia 20-29-32 Fed State Com 302H
LOCATION: 20-26S-30E-NMP
COUNTY: <input style="width: 150px;" type="text" value="Eddy County, New Mexico"/>

Create COAs

<p style="text-align: center;">H₂S</p> <input style="width: 100%;" type="text" value="Not Reported"/>	<p style="text-align: center;">Cave / Karst</p> <input style="width: 100%;" type="text" value="Medium"/>	<p style="text-align: center;">Waste Prevention Rule</p> <input style="width: 100%;" type="text" value="Waste Minimization Plan"/>
<p style="text-align: center;">Potash</p> <input style="width: 100%;" type="text" value="None"/>	<p style="text-align: center;">R-111-Q Design</p> <input style="width: 100%;" type="text"/>	
<p style="text-align: center;">Wellhead</p> <input style="width: 100%;" type="text" value="Multibowl"/> <input checked="" type="checkbox"/> Flex Hose <input checked="" type="checkbox"/> Break Testing	<p style="text-align: center;">Casing</p> <input style="width: 100%;" type="text" value="4-String Well"/> <input type="checkbox"/> Liner <input type="checkbox"/> Fluid Filled <input checked="" type="checkbox"/> Casing Clearance	
	<p style="text-align: center;">Cementing</p> <input type="checkbox"/> DV Tool <input checked="" type="checkbox"/> Bradenhead <input checked="" type="checkbox"/> Echometer <input checked="" type="checkbox"/> Offline Cement <input type="checkbox"/> Open Annulus <input type="checkbox"/> Pilot Hole	
<p style="text-align: center;">Special Requirements</p> <input type="checkbox"/> Capitan Reef <input type="checkbox"/> Water Disposal <input checked="" type="checkbox"/> COM <input type="checkbox"/> Unit		

A. HYDROGEN SULFIDE

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 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **716** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater (including lead cement.)
 - 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.
2. The minimum required fill of cement behind the **9-5/8** inch 1st intermediate casing is **cement to surface**. If cement does not circulate, see B.1.a, c-d above.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst features.
 3. The minimum required fill of cement behind the **7-5/8** inch 2nd intermediate casing is at least **200 feet** into previous casing string. Operator shall provide method of verification.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst features.

Bradenhead Squeeze: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon**. **Excess calculates to 0%. Additional cement maybe required.**
- b. **Second stage:** Operator to squeeze and top-out. Cement to meet requirements listed for this casing string. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down **Intermediate 1 X Intermediate 2** annulus. Submit results to the BLM. If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified. ***If cement does not reach surface, the next casing string must come to surface.***

- Operator shall run a CBL from TD of the **Surface** casing to tieback requirements listed above after the second stage BH to verify TOC.
- **Operator shall run Echo-meter to verify Cement Slurry/Fluid top in the annulus.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.
 - Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.
 - No displacement fluid/wash out shall be utilized at the top of the cement slurry during second stage bradenhead when running Echo-meter if cement is required to surface.

- Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.
4. The minimum required fill of cement behind the **5-1/2** inch production casing is at least **200 feet** into previous casing string. Operator shall provide method of verification.
Excess calculates to 24%. Additional cement maybe required.

C. PRESSURE CONTROL

1. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.
2. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
3. Break testing has been approved for this well ONLY on those intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)** If in the event break testing is not utilized, then a full BOPE test would be conducted.
 - a. Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation. **BOPE Break Testing is NOT permitted to drilling the production hole section.**
 - b. While in transfer between wells, BOPE shall be secured by the hydraulic carrier or cradle.
 - c. A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
 - d. As a minimum, a full BOPE test shall be performed at 21-day intervals.
 - e. In the event any repairs or replacement of the BOPE is required, the BOPE shall

test as per **43 CFR 3172**. Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.

D. SPECIAL REQUIREMENT(S)

Communitization Agreement:

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

Offline Cementing

Offline cementing has been approved for **all hole sections**. Contact the BLM prior to the commencement of any offline cementing procedure.

Casing Clearance

String does not meet 0.422" clearance requirement per 43 CFR 3172. Cement tieback requirement increased 100' for Production casing tieback. Operator may contact approving engineer to discuss changing casing set depth or grade to meet clearance requirement.

GENERAL 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)

Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;
[BLM NM CFO DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or

- if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
 4. 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.
 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
 7. 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.
 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. 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.
3. 5M or higher 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.
 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve

- open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - v. The results of the test shall be reported to the appropriate BLM office.
 - vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
 - viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

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.

Approved by Zota Stevens on 9/8/2025
575-234-5998 / zstevens@blm.gov



Operator Certification Data Report

03/16/2026

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

Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: SIVAPRAKASH SELVAM

Signed on: 11/19/2024

Title: Regulatory Clerk

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING

State: TX

Zip: 77389

Phone: (720)539-1673

Email address: SIVAPRAKASH.SELVAM1@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:



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

Application Data

03/16/2026

APD ID: 10400101942

Submission Date: 11/19/2024

Highlighted data reflects the most recent changes
[Show Final Text](#)

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400101942

Tie to previous NOS? N

Submission Date: 11/19/2024

BLM Office: Carlsbad

User: SIVAPRAKASH SELVAM

Title: Regulatory Clerk

Federal/Indian APD: FED

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

Lease number: NMNM19612

Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO

APD Operator: XTO ENERGY INCORPORATED

Operator letter of

Operator Info

Operator Organization Name: XTO ENERGY INCORPORATED

Operator Address: 222777 SPRINGSWOODS VILLAGE PKWY

Zip: 77389

Operator PO Box:

Operator City: SPRING

State: TX

Operator Phone: (817)870-2800

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Field/Pool or Exploratory? Field and Pool

Field Name: PURPLE SAGE

Pool Name: WOLFCAMP (GAS)

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

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

Is the proposed well in a Helium production area? N

Use Existing Well Pad? N

New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name:
SOPHIA 20-29-32 FEDERAL
STATE COM

Number: C/D

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: CONVENTIONAL GAS WELL

Describe Well Type:

Well sub-Type: EVALUATION

Describe sub-type:

Distance to town:

Distance to nearest well: 30 FT

Distance to lease line: 84 FT

Reservoir well spacing assigned acres Measurement: 769.28 Acres

Well plat: 2024070333_XTO_SOPHIA_20_29_32_FEDERAL_STATE_COM_302H_C_102_FINAL_11_10_2025_11_11_2025_14_22_20251112100839.pdf

Well work start Date: 12/15/2026

Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

Reference Datum: GROUND LEVEL

Wellbore	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	Will this well produce from this
SHL Leg #1	84	FNL	1020	FWL	26S	30E	20	Aliquot NWNW	32.03499	-103.908746	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 19612	3123			Y
KOP Leg #1	65	FNL	1650	FEL	26S	30E	20	Aliquot NWNE	32.035065	-103.900248	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 19612	-6721	10328	9844	Y

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

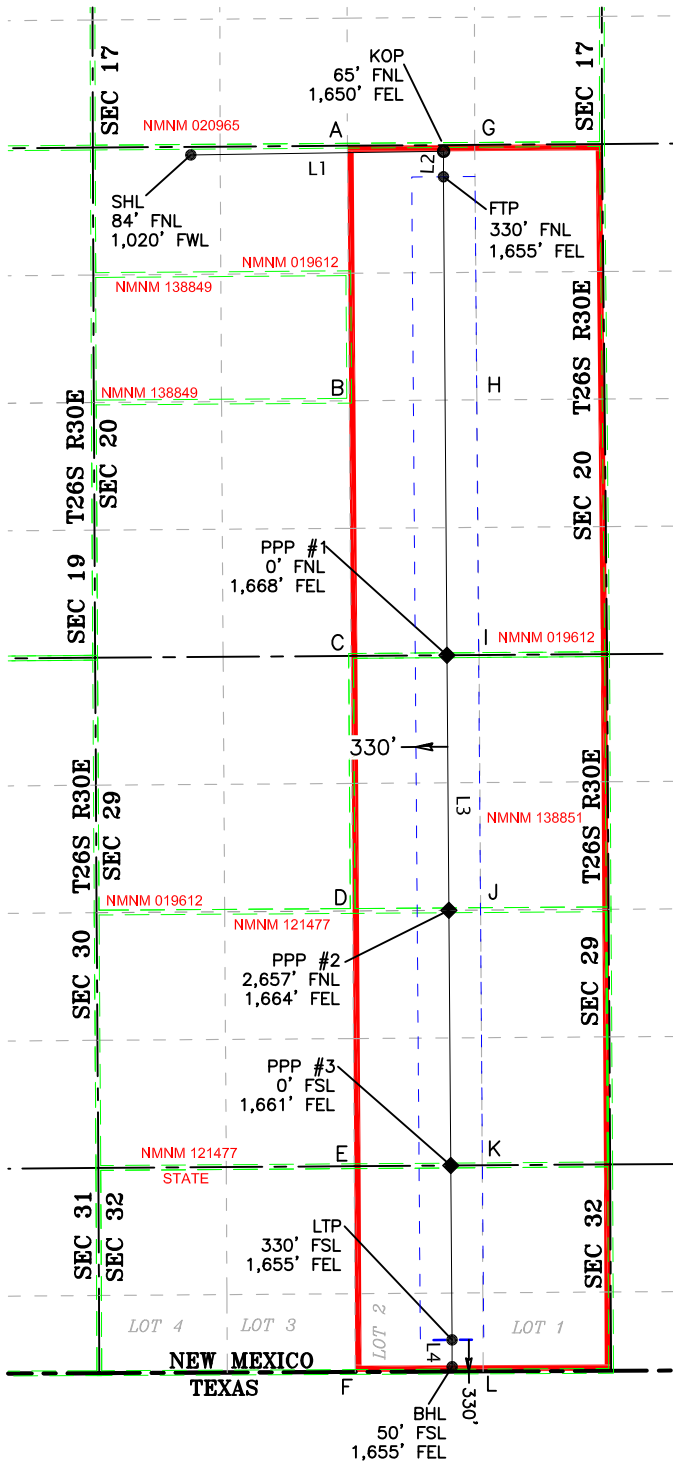
Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	330	FNL	1655	FEL	26S	30E	20	Aliquot NWNE	32.034335	-103.90026	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 19612	-7437	11453	10560	Y
PPP Leg #1-2	0	FNL	1668	FEL	26S	30E	29	Aliquot NWNE	32.020635	-103.900206	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 138851	-7437	16500	10560	Y
PPP Leg #1-3	2657	FNL	1664	FEL	26S	30E	29	Aliquot NWSE	32.013332	-103.900176	EDD Y	NEW MEXICO	NEW MEXICO	F	NMNM 121477	-7437	19100	10560	Y
EXIT Leg #1	330	FSL	1655	FEL	26S	30E	32	Lot 2	32.001033	-103.900127	EDD Y	NEW MEXICO	NEW MEXICO	S	STATE	-7437	23117	10560	Y
BHL Leg #1	50	FSL	1655	FEL	26S	30E	32	Lot 2	32.000263	-103.900127	EDD Y	NEW MEXICO	NEW MEXICO	S	STATE	-7437	23397	10560	Y

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is the closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

COORDINATE TABLE																																																																																												
SHL (NAD 83 NME)			FTP (NAD 83 NME)			BHL (NAD 83 NME)			PPP #2 (NAD 83 NME)																																																																																			
Y =	376,726.5	N	Y =	376,498.7	N	Y =	364,104.4	N	Y =	368,858.2	N																																																																																	
X =	672,904.9	E	X =	675,535.5	E	X =	675,626.5	E	X =	675,592.1	E																																																																																	
LAT. =	32.034990	°N	LAT. =	32.034335	°N	LAT. =	32.000263	°N	LAT. =	32.013332	°N																																																																																	
LONG. =	103.908746	°W	LONG. =	103.900260	°W	LONG. =	103.900127	°W	LONG. =	103.900176	°W																																																																																	
KOP (NAD 83 NME)			LTP (NAD 83 NME)			PPP #1 (NAD 83 NME)			PPP #3 (NAD 83 NME)																																																																																			
Y =	376,764.1	N	Y =	364,384.4	N	Y =	371,515.0	N	Y =	366,200.3	N																																																																																	
X =	675,538.2	E	X =	675,625.3	E	X =	675,572.4	E	X =	675,611.8	E																																																																																	
LAT. =	32.035065	°N	LAT. =	32.001033	°N	LAT. =	32.020635	°N	LAT. =	32.006025	°N																																																																																	
LONG. =	103.900248	°W	LONG. =	103.900127	°W	LONG. =	103.900206	°W	LONG. =	103.900147	°W																																																																																	
SHL (NAD 27 NME)			FTP (NAD 27 NME)			BHL (NAD 27 NME)			PPP #2 (NAD 27 NME)																																																																																			
Y =	376,668.9	N	Y =	376,441.1	N	Y =	364,047.2	N	Y =	368,800.8	N																																																																																	
X =	631,719.2	E	X =	634,349.7	E	X =	634,440.4	E </tr <tr> <td>LAT. =</td><td>32.034865</td><td>°N</td> <td>LAT. =</td><td>32.034210</td><td>°N</td> <td>LAT. =</td><td>32.000138</td><td>°N</td> <td>LAT. =</td><td>32.013206</td><td>°N</td> </tr> <tr> <td>LONG. =</td><td>103.908266</td><td>°W</td> <td>LONG. =</td><td>103.899780</td><td>°W</td> <td>LONG. =</td><td>103.899648</td><td>°W</td> <td>LONG. =</td><td>103.899697</td><td>°W</td> </tr> <tr> <th colspan="3">KOP (NAD 27 NME)</th> <th colspan="3">LTP (NAD 27 NME)</th> <th colspan="3">PPP #1 (NAD 27 NME)</th> <th colspan="3">PPP #3 (NAD 27 NME)</th> </tr> <tr> <td>Y =</td><td>376,706.5</td><td>N</td> <td>Y =</td><td>364,327.2</td><td>N</td> <td>Y =</td><td>371,457.6</td><td>N</td> <td>Y =</td><td>366,143.0</td><td>N</td> </tr> <tr> <td>X =</td><td>634,352.5</td><td>E</td> <td>X =</td><td>634,439.2</td><td>E</td> <td>X =</td><td>634,386.5</td><td>E</td> <td>X =</td><td>634,425.8</td><td>E</td> </tr> <tr> <td>LAT. =</td><td>32.034940</td><td>°N</td> <td>LAT. =</td><td>32.000908</td><td>°N</td> <td>LAT. =</td><td>32.020510</td><td>°N</td> <td>LAT. =</td><td>32.005900</td><td>°N</td> </tr> <tr> <td>LONG. =</td><td>103.899768</td><td>°W</td> <td>LONG. =</td><td>103.899649</td><td>°W</td> <td>LONG. =</td><td>103.899726</td><td>°W</td> <td>LONG. =</td><td>103.899668</td><td>°W</td> </tr>	LAT. =	32.034865	°N	LAT. =	32.034210	°N	LAT. =	32.000138	°N	LAT. =	32.013206	°N	LONG. =	103.908266	°W	LONG. =	103.899780	°W	LONG. =	103.899648	°W	LONG. =	103.899697	°W	KOP (NAD 27 NME)			LTP (NAD 27 NME)			PPP #1 (NAD 27 NME)			PPP #3 (NAD 27 NME)			Y =	376,706.5	N	Y =	364,327.2	N	Y =	371,457.6	N	Y =	366,143.0	N	X =	634,352.5	E	X =	634,439.2	E	X =	634,386.5	E	X =	634,425.8	E	LAT. =	32.034940	°N	LAT. =	32.000908	°N	LAT. =	32.020510	°N	LAT. =	32.005900	°N	LONG. =	103.899768	°W	LONG. =	103.899649	°W	LONG. =	103.899726	°W	LONG. =	103.899668	°W
LAT. =	32.034865	°N	LAT. =	32.034210	°N	LAT. =	32.000138	°N	LAT. =	32.013206	°N																																																																																	
LONG. =	103.908266	°W	LONG. =	103.899780	°W	LONG. =	103.899648	°W	LONG. =	103.899697	°W																																																																																	
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LONG. =	103.899768	°W	LONG. =	103.899649	°W	LONG. =	103.899726	°W	LONG. =	103.899668	°W																																																																																	



SEC 32 LOT ACREAGE TABLE	
LOT 1	24.69 ACRES
LOT 2	24.59 ACRES
LOT 3	24.49 ACRES
LOT 4	24.39 ACRES

- SECTION LINE
- PROPOSED WELLBORE
- NEW MEXICO MINERAL LEASE LINE
- 330' BUFFER
- DEDICATED ACREAGE

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	89° 10'55"	2,633.54'
L2	180° 35'08"	265.38'
L3	179° 34'31"	12,114.66'
L4	179° 45'22"	280.00'

CORNER COORDINATES (NAD83 NME)					
A - Y =	376,822.0	N	A - X =	674,535.4	E
B - Y =	374,165.7	N	B - X =	674,554.7	E
C - Y =	371,508.0	N	C - X =	674,574.0	E
D - Y =	368,851.6	N	D - X =	674,590.4	E
E - Y =	366,193.3	N	E - X =	674,606.8	E
F - Y =	364,049.9	N	F - X =	674,617.1	E
G - Y =	376,830.9	N	G - X =	675,861.3	E
H - Y =	374,175.0	N	H - X =	675,884.4	E
I - Y =	371,517.3	N	I - X =	675,907.1	E
J - Y =	368,860.3	N	J - X =	675,923.2	E
K - Y =	366,202.6	N	K - X =	675,939.7	E
L - Y =	364,055.9	N	L - X =	675,949.4	E

CORNER COORDINATES (NAD27 NME)					
A - Y =	376,764.4	N	A - X =	633,349.7	E
B - Y =	374,108.2	N	B - X =	633,368.9	E
C - Y =	371,450.6	N	C - X =	633,388.1	E
D - Y =	368,794.2	N	D - X =	633,404.5	E
E - Y =	366,136.0	N	E - X =	633,420.8	E
F - Y =	363,992.7	N	F - X =	633,431.0	E
G - Y =	376,773.3	N	G - X =	634,675.5	E
H - Y =	374,117.5	N	H - X =	634,698.6	E
I - Y =	371,459.9	N	I - X =	634,721.2	E
J - Y =	368,802.9	N	J - X =	634,737.2	E
K - Y =	366,145.3	N	K - X =	634,753.6	E
L - Y =	363,998.7	N	L - X =	634,763.3	E



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 Columbus, TX 78934
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 www.fscinc.net
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DATE: 11-10-2025 PROJECT NO: 2024070333
 DRAWN BY: WL SCALE: 1" = 2,000'
 CHECKED BY: LM SHEET: 2 OF 2
 FIELD CREW: IR REVISION: 0



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

Drilling Plan Data Report

03/16/2026

APD ID: 10400101942

Submission Date: 11/19/2024

Highlighted data reflects the most recent changes

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

[Show Final Text](#)

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
17641946	QUATERNARY	3123	0	0	ALLUVIUM	USEABLE WATER	N
17641947	RUSTLER	2461	662	662	ANHYDRITE, SANDSTONE	USEABLE WATER	N
17641948	SALADO	2187	936	936	SALT	NONE	N
17641945	BASE OF SALT	-190	3313	3313	SALT	NONE	N
17641949	DELAWARE	-364	3487	3487	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
17641950	BRUSHY CANYON	-2944	6067	6067	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
17641955	BONE SPRING	-4172	7295	7295	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
17641951	BONE SPRING 1ST	-5103	8226	8226	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
17641952	BONE SPRING 2ND	-6168	9291	9291	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
17641944	BONE SPRING 3RD	-7024	10147	10147	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
17641943	WOLFCAMP	-7397	10520	10520	SANDSTONE, SHALE	NATURAL GAS, OIL, OTHER : Produced Water	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 10560

Equipment: Once the permanent WH is installed on the casing, the blow out preventer equipment (BOP) will consist of a minimum 5M Hydril and a minimum 10M triple Ram BOP. XTO will use a 4 String Slim Hole Multi-Bowl system which is attached.

Requesting Variance? YES

Variance request: Offline Cementing Variance XOM requests the option to offline cement and remediate (if needed) surface, intermediate & production casing strings where batch drilling is approved and if unplanned remediation is needed. XOM will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence. The TA

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

cap will also be installed when applicable per wellhead manufacturer's procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Break Test Variance A break testing variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead for the intermediate hole sections which is in compliance with API Standard 53. The maximum anticipated surface pressure is less than 4800psi and the deepest intermediate casing point does not penetrate the Wolfcamp Formation. Flex Hose Variance 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. Open Hole Logging Variance Open hole logging will not be done on this well. Spudder Rig Variance XOM requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing. Batch Drilling Variance XOM requests a variance to be able to batch drill this well. In doing so, XOM will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. XOM will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XOM will begin drilling the production hole on each of the wells.

Testing Procedure: All BOP testing will be done by an independent service company. Operator will test as per 43 CFR 3172.

Choke Diagram Attachment:

SOPHIA_20_29_32_FEDERAL_STATE_COM_10MCM_20241118124422.pdf

BOP Diagram Attachment:

SOPHIA_20_29_32_FEDERAL_STATE_COM_5M10M_BOP_20241115112550.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	925	0	925	3123	2198	925	J-55	54.5	BUTT	5.64	9.65	DRY	5.94	DRY	5.94
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3413	0	3298	3123	-175	3413	J-55	40	BUTT	3.6	3.81	DRY	3.18	DRY	3.18
3	INTERMEDIATE	8.75	7.625	NEW	NON API	Y	0	10178	0	9692	3123	-6569	10178	L-80	29.7	OTHER - Tenaris Wedge 511	4.41	2.06	DRY	2.25	DRY	2.25
4	PRODUCTION	6.75	5.5	NEW	NON API	Y	0	23397	0	10560	3123	-7437	23397	P-110	20	OTHER - Tenaris Wedge 441	2.69	1.18	DRY	2.79	DRY	2.79

Casing Attachments

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 3 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Wedge_511__7.625_0.375_L80_IC_11202024_20250620052410.pdf

Wedge_511__7.625_0.375_P110_ICY_11202024_20250620052411.pdf

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Casing Attachments

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Wedge_441__5.500__20.00_0.361_P110_ICY_20251113104748.pdf

Tapered String Spec:

Casing_and_Tapered_Spec_20250620052822.pdf

Casing Design Assumptions and Worksheet(s):

Casing_and_Tapered_Spec_20250620052849.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MID	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	NA	NA
PRODUCTION	Tail		9678	23397	966	1.44	13.2	1391.04	25	Class C	NA
SURFACE	Lead		0	625	412	2.11	12.4	869.32	100	Class C	NA
SURFACE	Tail		625	925	313	1.33	14.8	416.29	100	Class C	NA
INTERMEDIATE	Lead		0	3113	724	2.02	12.9	1462.48	50	Class C	NA
INTERMEDIATE	Tail		3113	3413	97	1.45	14.8	140.65	50	Class C	NA
INTERMEDIATE	Lead		2913	6067	295	1.45	14.8	427.75	35	Class C	NA
INTERMEDIATE	Tail		6067	10178	285	1.45	14.8	413.25	0	Class C	NA

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: The necessary mud products for weight addition and fluid loss control will be on location at all times.

Describe the mud monitoring system utilized: Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. An EDR (Electronic Drilling Recorder) will be used to detect changes in loss or gain of mud volume. 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.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	925	WATER-BASED MUD	8.3	8.7							Fresh Water or Native Water
925	3413	OTHER : BDE/OBM or FW/Brine	9.5	10							Fluid type will be based upon on well conditions. A fully saturated system will be used across the salt interval.
3413	10178	OTHER : BDE/OBM or FW/Brine	9.5	10							Fluid type will be based upon on well conditions.
10178	23397	OTHER : OBM / Cut Brine	9.5	12							OBM or Cut Brine depending on Well Conditions

Operator Name: XTO ENERGY INCORPORATED**Well Name:** SOPHIA 20-29-32 FEDERAL STATE COM**Well Number:** 302H

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Open hole logging will not be done on this well.

List of open and cased hole logs run in the well:

GAMMA RAY LOG, CEMENT BOND LOG, DIRECTIONAL SURVEY, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No Coring is planned for the well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6589**Anticipated Surface Pressure:** 4265**Anticipated Bottom Hole Temperature(F):** 190**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO**Describe:****Contingency Plans geohazards description:****Contingency Plans geohazards****Hydrogen Sulfide drilling operations plan required?** YES**Hydrogen sulfide drilling operations**

XTO_Energy_H2S_Plan_Updated_20241107095027.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

SOPHIA_20_29_32_Federal_State_Com_302H_DD_20251113104821.pdf

Sophia_20_29_32_Federal_State_Com_302H_Formation__Section__Plan_View_20251114071137.pdf

Other proposed operations facets description:**Other proposed operations facets attachment:**

SOPHIA_20_29_32_FEDERAL_STATE_COM_13.375_9.625_7.625_5.5_4_String_20241112104752.pdf

NGMPForm__Ross_Draw_20251111100158.pdf

H2S_Diagram_Combined_Ross_Draw_20251111100207.pdf

Sophia_20_29_32_Federal_State_Com_302H_DP_20251113104845.pdf

Other Variance request(s)?: Y**Other Variance attachment:**

SOPHIA_20_29_32_FEDERAL_STATE_COM_Flex_Hose_Updated_20241112104609.pdf

SOPHIA_20_29_32_FEDERAL_STATE_COM_OLCV_20241112104609.pdf

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

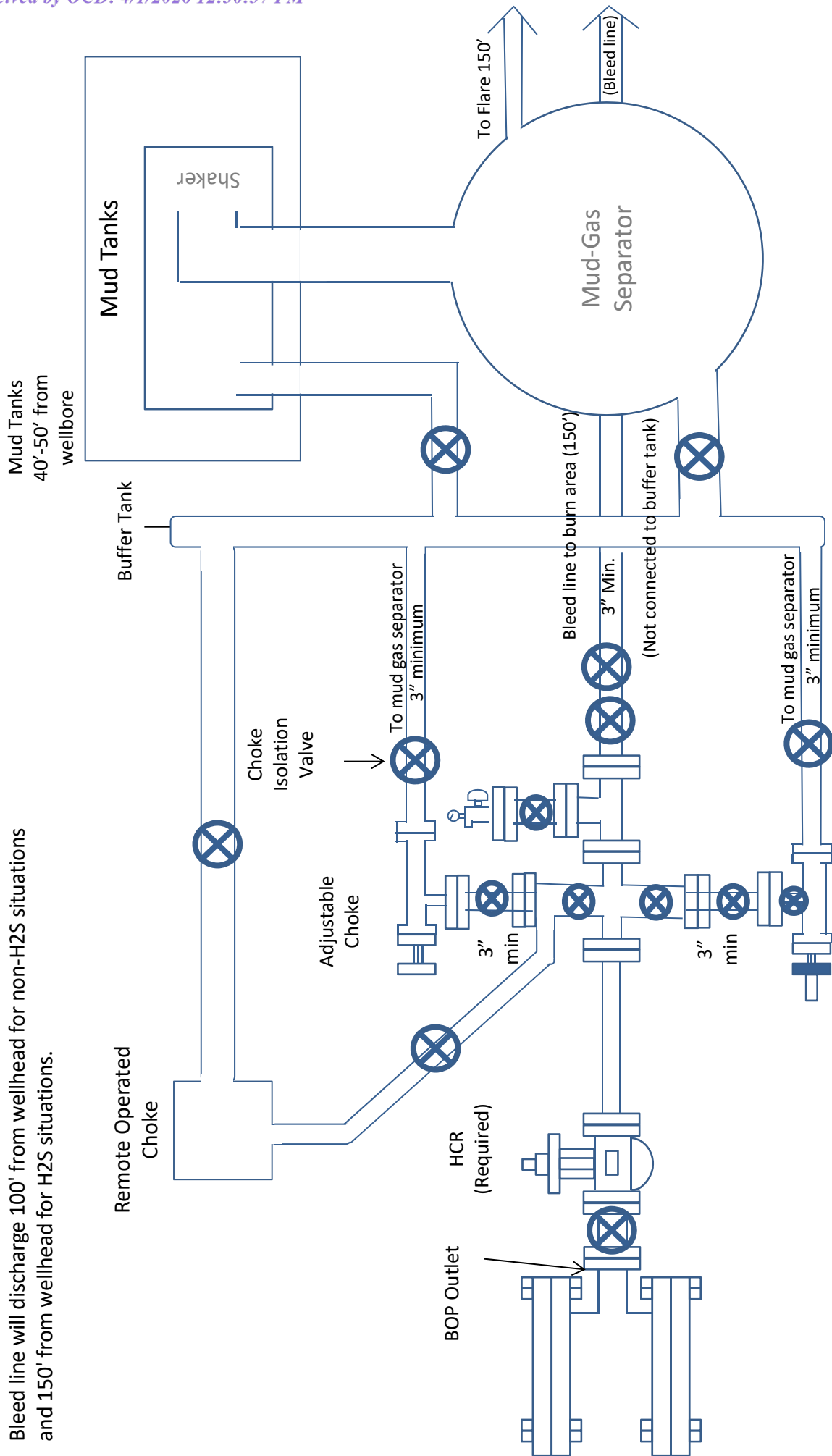
BOP_Break_Test_Variance_20241107104845.pdf

Spudder_Rig_Request_20241107104819.pdf

Offline_Cementing_Variance_Prod_Csg_20251113115521.pdf

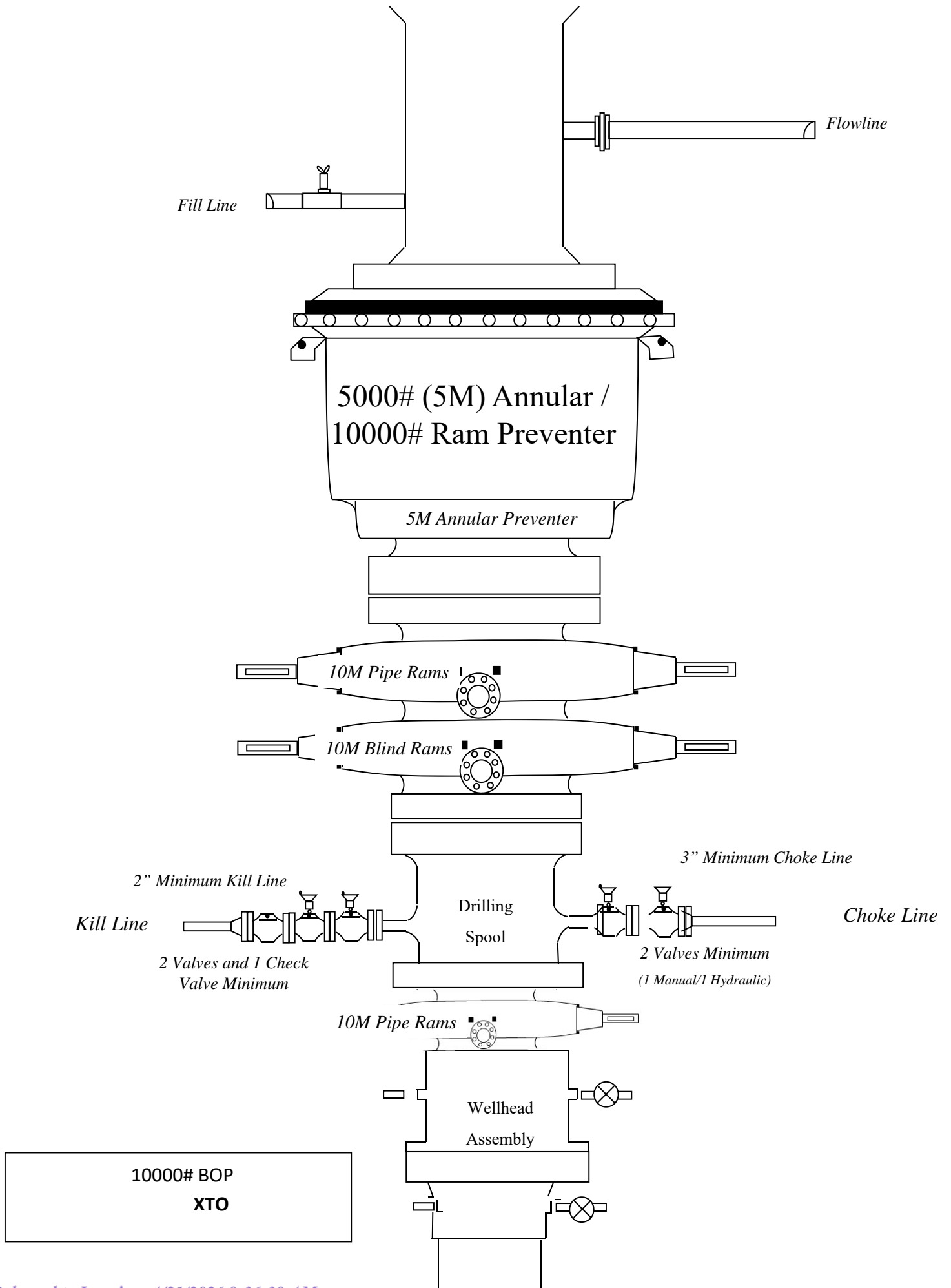
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Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



10M Choke Manifold Diagram XTO

Drilling Operations Choke Manifold 10M Service





TenarisHydril Wedge 511



Coupling	Pipe Body
Grade: L80-IC	Grade: L80-IC
Body: Red	1st Band: Red
1st Band: Brown	2nd Band: Brown
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	7.625 in.	Wall Thickness	0.375 in.	Grade	L80-IC
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	Wall Thickness	0.375 in.	Body Yield Strength	683 x1000 lb
Nominal Weight	29.70 lb/ft	Plain End Weight	29.06 lb/ft	Min. Internal Yield Pressure	6890 psi
Drift	6.750 in.	OD Tolerance	API	SMYS	80,000 psi
Nominal ID	6.875 in.			Collapse Pressure	5900 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	Tension Efficiency	61.10 %	Minimum	5900 ft-lb
Connection ID	6.787 in.	Joint Yield Strength	417 x1000 lb	Optimum	7100 ft-lb
Make-up Loss	3.704 in.	Internal Pressure Capacity	6890 psi	Maximum	10,300 ft-lb
Threads per inch	328	Compression Efficiency	73.80 %		
Connection OD Option	Regular	Compression Strength	504 x1000 lb	Operation Limit Torques	
		Max. Allowable Bending	29.33 °/100 ft	Operating Torque	35,000 ft-lb
		External Pressure Capacity	5900 psi	Yield Torque	52,000 ft-lb

Notes

For the latest performance data, always visit our website: www.tenaris.com
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TenarisHydril Wedge 511



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	7.625 in.	Wall Thickness	0.375 in.	Grade	P110-ICY
Min. Wall Thickness	90.00 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	Wall Thickness	0.375 in.	Body Yield Strength	1068 x1000 lb
Nominal Weight	29.70 lb/ft	Plain End Weight	29.06 lb/ft	Min. Internal Yield Pressure	11,070 psi
Drift	6.750 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	6.875 in.			Collapse Pressure	7360 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	Tension Efficiency	61.10 %	Minimum	5900 ft-lb
Connection ID	6.787 in.	Joint Yield Strength	653 x1000 lb	Optimum	7100 ft-lb
Make-up Loss	3.704 in.	Internal Pressure Capacity	11,070 psi	Maximum	10,300 ft-lb
Threads per inch	328	Compression Efficiency	73.80 %		
Connection OD Option	Regular	Compression Strength	788 x1000 lb	Operation Limit Torques	
		Max. Allowable Bending	45.83 °/100 ft	Operating Torque	55,000 ft-lb
		External Pressure Capacity	7360 psi	Yield Torque	82,000 ft-lb

Notes

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TenarisHydril Wedge 441®



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-ICY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Body Yield Strength	729 x1000 lb
Nominal Weight	20.00 lb/ft	Plain End Weight	19.83 lb/ft	Min. Internal Yield Pressure	14,360 psi
Drift	4.653 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	4.778 in.			Collapse Pressure	12,300 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.852 in.	Tension Efficiency	81.50 %	Minimum	15,000 ft-lb
Coupling Length	8.714 in.	Joint Yield Strength	594 x1000 lb	Optimum	16,000 ft-lb
Connection ID	4.778 in.	Internal Pressure Capacity	14,360 psi	Maximum	19,200 ft-lb
Make-up Loss	3.780 in.	Compression Efficiency	81.50 %		
Threads per inch	3.40	Compression Strength	594 x1000 lb	Operation Limit Torques	
Connection OD Option	Regular	Max. Allowable Bending	84.76 °/100 ft	Operating Torque	36,000 ft-lb
		External Pressure Capacity	12,300 psi	Yield Torque	42,000 ft-lb
				Buck-On	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

This connection is fully interchangeable with:
 Wedge 441® - 5.5 in. - 0.304 (17.00) in. (lb/ft)
 Wedge 461® - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) / 0.415 (23.00) in. (lb/ft)
 Connections with Dopeless® Technology are fully compatible with the same connection in its doped version

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See drilling plan for the required casing assumptions table

See drilling plan for the required casing assumptions table



HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - o Detection of H₂S, and
 - o Measures for protection against the gas,
 - o Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

CARLSBAD OFFICE – EDDY & LEA COUNTIES

3104 E. Greene St., Carlsbad, NM 88220
Carlsbad, NM 575-887-7329

XTO PERSONNEL:

Will Dacus, Drilling Manager 832-948-5021
Brian Dunn, Drilling Supervisor 832-653-0490
Robert Bartels, Construction Execution Planner 406-478-3617
Andy Owens, EH & S Manager 903-245-2602
Frank Fuentes, Production Foreman 575-689-3363

SHERIFF DEPARTMENTS:

Eddy County 575-887-7551
Lea County 575-396-3611

NEW MEXICO STATE POLICE:

575-392-5588

FIRE DEPARTMENTS:

911
Carlsbad 575-885-2111
Eunice 575-394-2111
Hobbs 575-397-9308
Jal 575-395-2221
Lovington 575-396-2359

HOSPITALS:

911
Carlsbad Medical Emergency 575-885-2111
Eunice Medical Emergency 575-394-2112
Hobbs Medical Emergency 575-397-9308
Jal Medical Emergency 575-395-2221
Lovington Medical Emergency 575-396-2359

AGENT NOTIFICATIONS:

For Lea County:

Bureau of Land Management – Hobbs 575-393-3612
New Mexico Oil Conservation Division – Hobbs 575-393-6161

For Eddy County:

Bureau of Land Management - Carlsbad 575-234-5972
New Mexico Oil Conservation Division - Artesia 575-748-1283

Long Lead_Well Planning

Long Lead Sophia Rose Blanche

Sophia & Blanche

SOPHIA 20-29-32 Federal State Com302H

OH

Plan: Plan 1

Standard Planning Report

07 November, 2025

Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project	Long Lead Sophia Rose Blanche		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sophia & Blanche				
Site Position:		Northing:	376,593.92 usft	Latitude:	32° 2' 4.769 N
From:	Map	Easting:	631,779.22 usft	Longitude:	103° 54' 29.064 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	SOPHIA 20-29-32 Federal State Com302H					
Well Position	+N/-S	0.0 usft	Northing:	376,668.91 usft	Latitude:	32° 2' 5.514 N
	+E/-W	0.0 usft	Easting:	631,719.23 usft	Longitude:	103° 54' 29.758 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,123.4 usft
Grid Convergence:	0.23 °					

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/3/2025	6.18	59.54	46,903.05931165

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.58

Plan Survey Tool Program	Date	10/16/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	23,396.8 Plan 1 (OH)	XOM_R2OWSG MWD+IFR1+ OWSG MWD + IFR1 + Multi-SI	

Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

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 (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,200.0	22.00	88.00	2,173.2	7.3	208.5	2.00	2.00	0.00	88.00	
4,500.0	22.00	88.00	4,305.7	37.3	1,069.5	0.00	0.00	0.00	0.00	
4,537.5	22.00	90.00	4,340.4	37.6	1,083.6	2.00	0.00	5.34	90.93	
8,117.5	22.00	90.00	7,659.7	37.6	2,424.7	0.00	0.00	0.00	0.00	
9,217.5	0.00	0.00	8,732.9	37.6	2,633.3	2.00	-2.00	0.00	180.00	
10,328.3	0.00	0.00	9,843.8	37.6	2,633.3	0.00	0.00	0.00	0.00	
11,453.3	90.00	179.85	10,560.0	-678.6	2,635.1	8.00	8.00	0.00	179.85	
11,466.7	90.00	179.58	10,560.0	-691.9	2,635.2	2.00	0.00	-2.00	-90.00	
23,116.8	90.00	179.58	10,560.0	-12,341.7	2,719.9	0.00	0.00	0.00	0.00	LTP 302H
23,396.8	90.00	179.58	10,560.0	-12,621.7	2,722.0	0.00	0.00	0.00	0.00	BHL 302H

Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	2.00	88.00	1,200.0	0.1	1.7	0.0	2.00	2.00	0.00	
1,300.0	4.00	88.00	1,299.8	0.2	7.0	-0.2	2.00	2.00	0.00	
1,400.0	6.00	88.00	1,399.5	0.5	15.7	-0.4	2.00	2.00	0.00	
1,500.0	8.00	88.00	1,498.7	1.0	27.9	-0.8	2.00	2.00	0.00	
1,600.0	10.00	88.00	1,597.5	1.5	43.5	-1.2	2.00	2.00	0.00	
1,700.0	12.00	88.00	1,695.6	2.2	62.6	-1.7	2.00	2.00	0.00	
1,800.0	14.00	88.00	1,793.1	3.0	85.0	-2.3	2.00	2.00	0.00	
1,900.0	16.00	88.00	1,889.6	3.9	110.9	-3.1	2.00	2.00	0.00	
2,000.0	18.00	88.00	1,985.3	4.9	140.1	-3.9	2.00	2.00	0.00	
2,100.0	20.00	88.00	2,079.8	6.0	172.7	-4.8	2.00	2.00	0.00	
2,200.0	22.00	88.00	2,173.2	7.3	208.5	-5.8	2.00	2.00	0.00	
2,300.0	22.00	88.00	2,265.9	8.6	245.9	-6.8	0.00	0.00	0.00	
2,400.0	22.00	88.00	2,358.6	9.9	283.4	-7.8	0.00	0.00	0.00	
2,500.0	22.00	88.00	2,451.3	11.2	320.8	-8.9	0.00	0.00	0.00	
2,600.0	22.00	88.00	2,544.0	12.5	358.2	-9.9	0.00	0.00	0.00	
2,700.0	22.00	88.00	2,636.8	13.8	395.7	-10.9	0.00	0.00	0.00	
2,800.0	22.00	88.00	2,729.5	15.1	433.1	-11.9	0.00	0.00	0.00	
2,900.0	22.00	88.00	2,822.2	16.4	470.5	-13.0	0.00	0.00	0.00	
3,000.0	22.00	88.00	2,914.9	17.7	508.0	-14.0	0.00	0.00	0.00	
3,100.0	22.00	88.00	3,007.6	19.0	545.4	-15.0	0.00	0.00	0.00	
3,200.0	22.00	88.00	3,100.4	20.4	582.9	-16.1	0.00	0.00	0.00	
3,300.0	22.00	88.00	3,193.1	21.7	620.3	-17.1	0.00	0.00	0.00	
3,400.0	22.00	88.00	3,285.8	23.0	657.7	-18.1	0.00	0.00	0.00	
3,500.0	22.00	88.00	3,378.5	24.3	695.2	-19.2	0.00	0.00	0.00	
3,600.0	22.00	88.00	3,471.2	25.6	732.6	-20.2	0.00	0.00	0.00	
3,700.0	22.00	88.00	3,563.9	26.9	770.0	-21.2	0.00	0.00	0.00	
3,800.0	22.00	88.00	3,656.7	28.2	807.5	-22.3	0.00	0.00	0.00	
3,900.0	22.00	88.00	3,749.4	29.5	844.9	-23.3	0.00	0.00	0.00	
4,000.0	22.00	88.00	3,842.1	30.8	882.4	-24.3	0.00	0.00	0.00	
4,100.0	22.00	88.00	3,934.8	32.1	919.8	-25.4	0.00	0.00	0.00	
4,200.0	22.00	88.00	4,027.5	33.4	957.2	-26.4	0.00	0.00	0.00	
4,300.0	22.00	88.00	4,120.3	34.7	994.7	-27.4	0.00	0.00	0.00	
4,400.0	22.00	88.00	4,213.0	36.0	1,032.1	-28.5	0.00	0.00	0.00	
4,500.0	22.00	88.00	4,305.7	37.3	1,069.5	-29.5	0.00	0.00	0.00	
4,537.5	22.00	90.00	4,340.4	37.6	1,083.6	-29.7	2.00	0.00	5.34	
4,600.0	22.00	90.00	4,398.4	37.6	1,107.0	-29.5	0.00	0.00	0.00	
4,700.0	22.00	90.00	4,491.1	37.6	1,144.5	-29.2	0.00	0.00	0.00	
4,800.0	22.00	90.00	4,583.8	37.6	1,181.9	-28.9	0.00	0.00	0.00	
4,900.0	22.00	90.00	4,676.6	37.6	1,219.4	-28.7	0.00	0.00	0.00	
5,000.0	22.00	90.00	4,769.3	37.6	1,256.8	-28.4	0.00	0.00	0.00	
5,100.0	22.00	90.00	4,862.0	37.6	1,294.3	-28.1	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,200.0	22.00	90.00	4,954.7	37.6	1,331.8	-27.8	0.00	0.00	0.00	
5,300.0	22.00	90.00	5,047.4	37.6	1,369.2	-27.6	0.00	0.00	0.00	
5,400.0	22.00	90.00	5,140.2	37.6	1,406.7	-27.3	0.00	0.00	0.00	
5,500.0	22.00	90.00	5,232.9	37.6	1,444.1	-27.0	0.00	0.00	0.00	
5,600.0	22.00	90.00	5,325.6	37.6	1,481.6	-26.7	0.00	0.00	0.00	
5,700.0	22.00	90.00	5,418.3	37.6	1,519.1	-26.5	0.00	0.00	0.00	
5,800.0	22.00	90.00	5,511.0	37.6	1,556.5	-26.2	0.00	0.00	0.00	
5,900.0	22.00	90.00	5,603.7	37.6	1,594.0	-25.9	0.00	0.00	0.00	
6,000.0	22.00	90.00	5,696.5	37.6	1,631.5	-25.6	0.00	0.00	0.00	
6,100.0	22.00	90.00	5,789.2	37.6	1,668.9	-25.4	0.00	0.00	0.00	
6,200.0	22.00	90.00	5,881.9	37.6	1,706.4	-25.1	0.00	0.00	0.00	
6,300.0	22.00	90.00	5,974.6	37.6	1,743.8	-24.8	0.00	0.00	0.00	
6,400.0	22.00	90.00	6,067.3	37.6	1,781.3	-24.5	0.00	0.00	0.00	
6,500.0	22.00	90.00	6,160.1	37.6	1,818.8	-24.3	0.00	0.00	0.00	
6,600.0	22.00	90.00	6,252.8	37.6	1,856.2	-24.0	0.00	0.00	0.00	
6,700.0	22.00	90.00	6,345.5	37.6	1,893.7	-23.7	0.00	0.00	0.00	
6,800.0	22.00	90.00	6,438.2	37.6	1,931.1	-23.4	0.00	0.00	0.00	
6,900.0	22.00	90.00	6,530.9	37.6	1,968.6	-23.2	0.00	0.00	0.00	
7,000.0	22.00	90.00	6,623.7	37.6	2,006.1	-22.9	0.00	0.00	0.00	
7,100.0	22.00	90.00	6,716.4	37.6	2,043.5	-22.6	0.00	0.00	0.00	
7,200.0	22.00	90.00	6,809.1	37.6	2,081.0	-22.3	0.00	0.00	0.00	
7,300.0	22.00	90.00	6,901.8	37.6	2,118.4	-22.1	0.00	0.00	0.00	
7,400.0	22.00	90.00	6,994.5	37.6	2,155.9	-21.8	0.00	0.00	0.00	
7,500.0	22.00	90.00	7,087.2	37.6	2,193.4	-21.5	0.00	0.00	0.00	
7,600.0	22.00	90.00	7,180.0	37.6	2,230.8	-21.2	0.00	0.00	0.00	
7,700.0	22.00	90.00	7,272.7	37.6	2,268.3	-21.0	0.00	0.00	0.00	
7,800.0	22.00	90.00	7,365.4	37.6	2,305.7	-20.7	0.00	0.00	0.00	
7,900.0	22.00	90.00	7,458.1	37.6	2,343.2	-20.4	0.00	0.00	0.00	
8,000.0	22.00	90.00	7,550.8	37.6	2,380.7	-20.1	0.00	0.00	0.00	
8,100.0	22.00	90.00	7,643.6	37.6	2,418.1	-19.9	0.00	0.00	0.00	
8,117.5	22.00	90.00	7,659.7	37.6	2,424.7	-19.8	0.00	0.00	0.00	
8,200.0	20.35	90.00	7,736.7	37.6	2,454.5	-19.6	2.00	-2.00	0.00	
8,300.0	18.35	90.00	7,831.1	37.6	2,487.6	-19.4	2.00	-2.00	0.00	
8,400.0	16.35	90.00	7,926.5	37.6	2,517.4	-19.1	2.00	-2.00	0.00	
8,500.0	14.35	90.00	8,022.9	37.6	2,543.9	-18.9	2.00	-2.00	0.00	
8,600.0	12.35	90.00	8,120.2	37.6	2,567.0	-18.8	2.00	-2.00	0.00	
8,700.0	10.35	90.00	8,218.3	37.6	2,586.7	-18.6	2.00	-2.00	0.00	
8,800.0	8.35	90.00	8,316.9	37.6	2,602.9	-18.5	2.00	-2.00	0.00	
8,900.0	6.35	90.00	8,416.1	37.6	2,615.7	-18.4	2.00	-2.00	0.00	
9,000.0	4.35	90.00	8,515.7	37.6	2,625.0	-18.4	2.00	-2.00	0.00	
9,100.0	2.35	90.00	8,615.5	37.6	2,630.9	-18.3	2.00	-2.00	0.00	
9,200.0	0.35	90.00	8,715.5	37.6	2,633.2	-18.3	2.00	-2.00	0.00	
9,217.5	0.00	0.00	8,732.9	37.6	2,633.3	-18.3	2.00	-2.00	0.00	
9,300.0	0.00	0.00	8,815.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
9,400.0	0.00	0.00	8,915.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,015.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,115.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,215.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,315.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,415.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,515.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
10,100.0	0.00	0.00	9,615.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
10,200.0	0.00	0.00	9,715.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,300.0	0.00	0.00	9,815.5	37.6	2,633.3	-18.3	0.00	0.00	0.00	
10,328.3	0.00	0.00	9,843.8	37.6	2,633.3	-18.3	0.00	0.00	0.00	
10,350.0	1.73	179.85	9,865.4	37.3	2,633.3	-18.0	8.00	8.00	0.00	
10,400.0	5.73	179.85	9,915.3	34.0	2,633.3	-14.7	8.00	8.00	0.00	
10,450.0	9.73	179.85	9,964.9	27.3	2,633.3	-8.0	8.00	8.00	0.00	
10,500.0	13.73	179.85	10,013.8	17.1	2,633.3	2.2	8.00	8.00	0.00	
10,550.0	17.73	179.85	10,061.9	3.6	2,633.4	15.7	8.00	8.00	0.00	
10,600.0	21.73	179.85	10,109.0	-13.3	2,633.4	32.6	8.00	8.00	0.00	
10,650.0	25.73	179.85	10,154.7	-33.4	2,633.5	52.7	8.00	8.00	0.00	
10,700.0	29.73	179.85	10,199.0	-56.7	2,633.5	76.0	8.00	8.00	0.00	
10,750.0	33.73	179.85	10,241.5	-83.0	2,633.6	102.3	8.00	8.00	0.00	
10,800.0	37.73	179.85	10,282.1	-112.2	2,633.7	131.5	8.00	8.00	0.00	
10,850.0	41.73	179.85	10,320.5	-144.1	2,633.7	163.4	8.00	8.00	0.00	
10,900.0	45.73	179.85	10,356.7	-178.7	2,633.8	198.0	8.00	8.00	0.00	
10,950.0	49.73	179.85	10,390.3	-215.7	2,633.9	235.0	8.00	8.00	0.00	
11,000.0	53.73	179.85	10,421.2	-254.9	2,634.0	274.2	8.00	8.00	0.00	
11,050.0	57.73	179.85	10,449.4	-296.2	2,634.1	315.5	8.00	8.00	0.00	
FTP 302H										
11,100.0	61.73	179.85	10,474.6	-339.4	2,634.3	358.7	8.00	8.00	0.00	
11,150.0	65.73	179.85	10,496.7	-384.2	2,634.4	403.5	8.00	8.00	0.00	
11,200.0	69.73	179.85	10,515.7	-430.5	2,634.5	449.8	8.00	8.00	0.00	
11,250.0	73.73	179.85	10,531.3	-478.0	2,634.6	497.3	8.00	8.00	0.00	
11,300.0	77.73	179.85	10,543.6	-526.4	2,634.7	545.7	8.00	8.00	0.00	
11,350.0	81.73	179.85	10,552.6	-575.6	2,634.9	594.9	8.00	8.00	0.00	
11,400.0	85.73	179.85	10,558.0	-625.3	2,635.0	644.6	8.00	8.00	0.00	
11,453.3	90.00	179.85	10,560.0	-678.6	2,635.1	697.9	8.00	8.00	0.00	
11,466.7	90.00	179.58	10,560.0	-691.9	2,635.2	711.2	2.00	0.00	-2.00	
11,500.0	90.00	179.58	10,560.0	-725.3	2,635.5	744.6	0.00	0.00	0.00	
11,600.0	90.00	179.58	10,560.0	-825.2	2,636.2	844.6	0.00	0.00	0.00	
11,700.0	90.00	179.58	10,560.0	-925.2	2,636.9	944.6	0.00	0.00	0.00	
11,800.0	90.00	179.58	10,560.0	-1,025.2	2,637.6	1,044.6	0.00	0.00	0.00	
11,900.0	90.00	179.58	10,560.0	-1,125.2	2,638.4	1,144.6	0.00	0.00	0.00	
12,000.0	90.00	179.58	10,560.0	-1,225.2	2,639.1	1,244.6	0.00	0.00	0.00	
12,100.0	90.00	179.58	10,560.0	-1,325.2	2,639.8	1,344.6	0.00	0.00	0.00	
12,200.0	90.00	179.58	10,560.0	-1,425.2	2,640.5	1,444.6	0.00	0.00	0.00	
12,300.0	90.00	179.58	10,560.0	-1,525.2	2,641.3	1,544.6	0.00	0.00	0.00	
12,400.0	90.00	179.58	10,560.0	-1,625.2	2,642.0	1,644.6	0.00	0.00	0.00	
12,500.0	90.00	179.58	10,560.0	-1,725.2	2,642.7	1,744.6	0.00	0.00	0.00	
12,600.0	90.00	179.58	10,560.0	-1,825.2	2,643.5	1,844.6	0.00	0.00	0.00	
12,700.0	90.00	179.58	10,560.0	-1,925.2	2,644.2	1,944.6	0.00	0.00	0.00	
12,800.0	90.00	179.58	10,560.0	-2,025.2	2,644.9	2,044.6	0.00	0.00	0.00	
12,900.0	90.00	179.58	10,560.0	-2,125.2	2,645.6	2,144.6	0.00	0.00	0.00	
13,000.0	90.00	179.58	10,560.0	-2,225.2	2,646.4	2,244.6	0.00	0.00	0.00	
13,100.0	90.00	179.58	10,560.0	-2,325.2	2,647.1	2,344.6	0.00	0.00	0.00	
13,200.0	90.00	179.58	10,560.0	-2,425.2	2,647.8	2,444.6	0.00	0.00	0.00	
13,300.0	90.00	179.58	10,560.0	-2,525.2	2,648.5	2,544.6	0.00	0.00	0.00	
13,400.0	90.00	179.58	10,560.0	-2,625.2	2,649.3	2,644.6	0.00	0.00	0.00	
13,500.0	90.00	179.58	10,560.0	-2,725.2	2,650.0	2,744.6	0.00	0.00	0.00	
13,600.0	90.00	179.58	10,560.0	-2,825.2	2,650.7	2,844.6	0.00	0.00	0.00	
13,700.0	90.00	179.58	10,560.0	-2,925.2	2,651.5	2,944.6	0.00	0.00	0.00	
13,800.0	90.00	179.58	10,560.0	-3,025.2	2,652.2	3,044.6	0.00	0.00	0.00	
13,900.0	90.00	179.58	10,560.0	-3,125.2	2,652.9	3,144.6	0.00	0.00	0.00	
14,000.0	90.00	179.58	10,560.0	-3,225.2	2,653.6	3,244.6	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,100.0	90.00	179.58	10,560.0	-3,325.2	2,654.4	3,344.6	0.00	0.00	0.00	
14,200.0	90.00	179.58	10,560.0	-3,425.2	2,655.1	3,444.6	0.00	0.00	0.00	
14,300.0	90.00	179.58	10,560.0	-3,525.2	2,655.8	3,544.6	0.00	0.00	0.00	
14,400.0	90.00	179.58	10,560.0	-3,625.2	2,656.5	3,644.6	0.00	0.00	0.00	
14,500.0	90.00	179.58	10,560.0	-3,725.2	2,657.3	3,744.6	0.00	0.00	0.00	
14,600.0	90.00	179.58	10,560.0	-3,825.2	2,658.0	3,844.6	0.00	0.00	0.00	
14,700.0	90.00	179.58	10,560.0	-3,925.2	2,658.7	3,944.6	0.00	0.00	0.00	
14,800.0	90.00	179.58	10,560.0	-4,025.2	2,659.5	4,044.6	0.00	0.00	0.00	
14,900.0	90.00	179.58	10,560.0	-4,125.2	2,660.2	4,144.6	0.00	0.00	0.00	
15,000.0	90.00	179.58	10,560.0	-4,225.2	2,660.9	4,244.6	0.00	0.00	0.00	
15,100.0	90.00	179.58	10,560.0	-4,325.2	2,661.6	4,344.6	0.00	0.00	0.00	
15,200.0	90.00	179.58	10,560.0	-4,425.2	2,662.4	4,444.6	0.00	0.00	0.00	
15,300.0	90.00	179.58	10,560.0	-4,525.2	2,663.1	4,544.6	0.00	0.00	0.00	
15,400.0	90.00	179.58	10,560.0	-4,625.1	2,663.8	4,644.6	0.00	0.00	0.00	
15,500.0	90.00	179.58	10,560.0	-4,725.1	2,664.5	4,744.6	0.00	0.00	0.00	
15,600.0	90.00	179.58	10,560.0	-4,825.1	2,665.3	4,844.6	0.00	0.00	0.00	
15,700.0	90.00	179.58	10,560.0	-4,925.1	2,666.0	4,944.6	0.00	0.00	0.00	
15,800.0	90.00	179.58	10,560.0	-5,025.1	2,666.7	5,044.6	0.00	0.00	0.00	
15,900.0	90.00	179.58	10,560.0	-5,125.1	2,667.5	5,144.6	0.00	0.00	0.00	
16,000.0	90.00	179.58	10,560.0	-5,225.1	2,668.2	5,244.6	0.00	0.00	0.00	
16,100.0	90.00	179.58	10,560.0	-5,325.1	2,668.9	5,344.6	0.00	0.00	0.00	
16,200.0	90.00	179.58	10,560.0	-5,425.1	2,669.6	5,444.6	0.00	0.00	0.00	
16,300.0	90.00	179.58	10,560.0	-5,525.1	2,670.4	5,544.6	0.00	0.00	0.00	
16,400.0	90.00	179.58	10,560.0	-5,625.1	2,671.1	5,644.6	0.00	0.00	0.00	
16,500.0	90.00	179.58	10,560.0	-5,725.1	2,671.8	5,744.6	0.00	0.00	0.00	
16,600.0	90.00	179.58	10,560.0	-5,825.1	2,672.5	5,844.6	0.00	0.00	0.00	
16,700.0	90.00	179.58	10,560.0	-5,925.1	2,673.3	5,944.6	0.00	0.00	0.00	
16,800.0	90.00	179.58	10,560.0	-6,025.1	2,674.0	6,044.6	0.00	0.00	0.00	
16,900.0	90.00	179.58	10,560.0	-6,125.1	2,674.7	6,144.6	0.00	0.00	0.00	
17,000.0	90.00	179.58	10,560.0	-6,225.1	2,675.5	6,244.6	0.00	0.00	0.00	
17,100.0	90.00	179.58	10,560.0	-6,325.1	2,676.2	6,344.6	0.00	0.00	0.00	
17,200.0	90.00	179.58	10,560.0	-6,425.1	2,676.9	6,444.6	0.00	0.00	0.00	
17,300.0	90.00	179.58	10,560.0	-6,525.1	2,677.6	6,544.6	0.00	0.00	0.00	
17,400.0	90.00	179.58	10,560.0	-6,625.1	2,678.4	6,644.6	0.00	0.00	0.00	
17,500.0	90.00	179.58	10,560.0	-6,725.1	2,679.1	6,744.6	0.00	0.00	0.00	
17,600.0	90.00	179.58	10,560.0	-6,825.1	2,679.8	6,844.6	0.00	0.00	0.00	
17,700.0	90.00	179.58	10,560.0	-6,925.1	2,680.5	6,944.6	0.00	0.00	0.00	
17,800.0	90.00	179.58	10,560.0	-7,025.1	2,681.3	7,044.6	0.00	0.00	0.00	
17,900.0	90.00	179.58	10,560.0	-7,125.1	2,682.0	7,144.6	0.00	0.00	0.00	
18,000.0	90.00	179.58	10,560.0	-7,225.1	2,682.7	7,244.6	0.00	0.00	0.00	
18,100.0	90.00	179.58	10,560.0	-7,325.1	2,683.5	7,344.6	0.00	0.00	0.00	
18,200.0	90.00	179.58	10,560.0	-7,425.1	2,684.2	7,444.6	0.00	0.00	0.00	
18,300.0	90.00	179.58	10,560.0	-7,525.1	2,684.9	7,544.6	0.00	0.00	0.00	
18,400.0	90.00	179.58	10,560.0	-7,625.1	2,685.6	7,644.6	0.00	0.00	0.00	
18,500.0	90.00	179.58	10,560.0	-7,725.1	2,686.4	7,744.6	0.00	0.00	0.00	
18,600.0	90.00	179.58	10,560.0	-7,825.1	2,687.1	7,844.6	0.00	0.00	0.00	
18,700.0	90.00	179.58	10,560.0	-7,925.1	2,687.8	7,944.6	0.00	0.00	0.00	
18,800.0	90.00	179.58	10,560.0	-8,025.1	2,688.5	8,044.6	0.00	0.00	0.00	
18,900.0	90.00	179.58	10,560.0	-8,125.1	2,689.3	8,144.6	0.00	0.00	0.00	
19,000.0	90.00	179.58	10,560.0	-8,225.1	2,690.0	8,244.6	0.00	0.00	0.00	
19,100.0	90.00	179.58	10,560.0	-8,325.0	2,690.7	8,344.6	0.00	0.00	0.00	
19,200.0	90.00	179.58	10,560.0	-8,425.0	2,691.5	8,444.6	0.00	0.00	0.00	
19,300.0	90.00	179.58	10,560.0	-8,525.0	2,692.2	8,544.6	0.00	0.00	0.00	

Planning Report

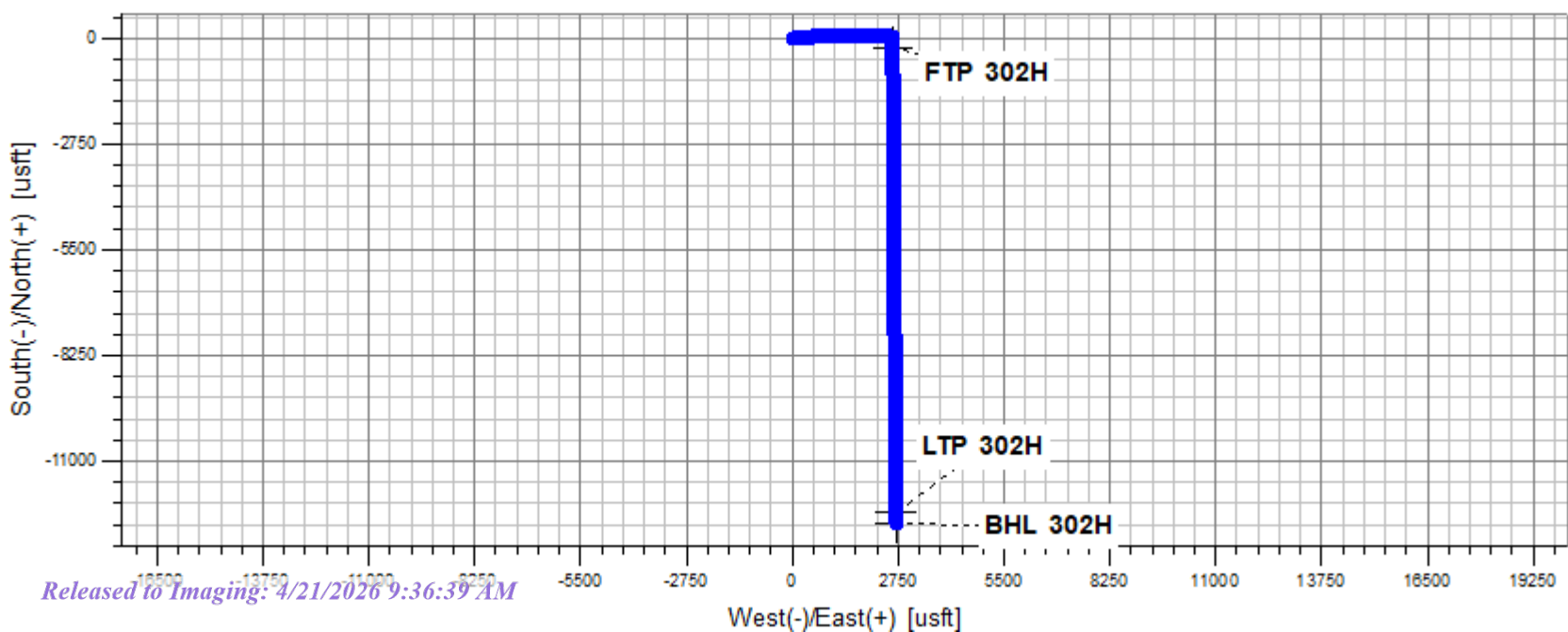
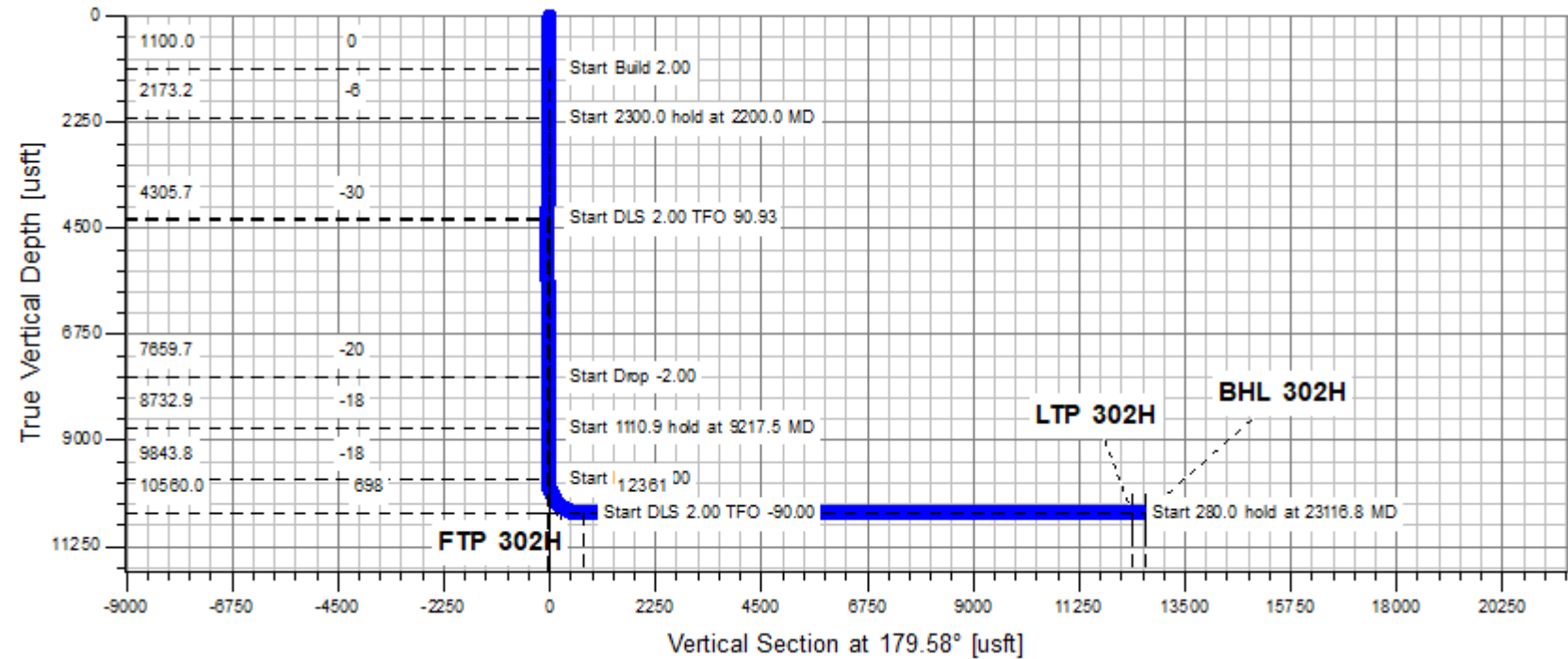
Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
19,400.0	90.00	179.58	10,560.0	-8,625.0	2,692.9	8,644.6	0.00	0.00	0.00	
19,500.0	90.00	179.58	10,560.0	-8,725.0	2,693.6	8,744.6	0.00	0.00	0.00	
19,600.0	90.00	179.58	10,560.0	-8,825.0	2,694.4	8,844.6	0.00	0.00	0.00	
19,700.0	90.00	179.58	10,560.0	-8,925.0	2,695.1	8,944.6	0.00	0.00	0.00	
19,800.0	90.00	179.58	10,560.0	-9,025.0	2,695.8	9,044.6	0.00	0.00	0.00	
19,900.0	90.00	179.58	10,560.0	-9,125.0	2,696.5	9,144.6	0.00	0.00	0.00	
20,000.0	90.00	179.58	10,560.0	-9,225.0	2,697.3	9,244.6	0.00	0.00	0.00	
20,100.0	90.00	179.58	10,560.0	-9,325.0	2,698.0	9,344.6	0.00	0.00	0.00	
20,200.0	90.00	179.58	10,560.0	-9,425.0	2,698.7	9,444.6	0.00	0.00	0.00	
20,300.0	90.00	179.58	10,560.0	-9,525.0	2,699.5	9,544.6	0.00	0.00	0.00	
20,400.0	90.00	179.58	10,560.0	-9,625.0	2,700.2	9,644.6	0.00	0.00	0.00	
20,500.0	90.00	179.58	10,560.0	-9,725.0	2,700.9	9,744.6	0.00	0.00	0.00	
20,600.0	90.00	179.58	10,560.0	-9,825.0	2,701.6	9,844.6	0.00	0.00	0.00	
20,700.0	90.00	179.58	10,560.0	-9,925.0	2,702.4	9,944.6	0.00	0.00	0.00	
20,800.0	90.00	179.58	10,560.0	-10,025.0	2,703.1	10,044.6	0.00	0.00	0.00	
20,900.0	90.00	179.58	10,560.0	-10,125.0	2,703.8	10,144.6	0.00	0.00	0.00	
21,000.0	90.00	179.58	10,560.0	-10,225.0	2,704.5	10,244.6	0.00	0.00	0.00	
21,100.0	90.00	179.58	10,560.0	-10,325.0	2,705.3	10,344.6	0.00	0.00	0.00	
21,200.0	90.00	179.58	10,560.0	-10,425.0	2,706.0	10,444.6	0.00	0.00	0.00	
21,300.0	90.00	179.58	10,560.0	-10,525.0	2,706.7	10,544.6	0.00	0.00	0.00	
21,400.0	90.00	179.58	10,560.0	-10,625.0	2,707.5	10,644.6	0.00	0.00	0.00	
21,500.0	90.00	179.58	10,560.0	-10,725.0	2,708.2	10,744.6	0.00	0.00	0.00	
21,600.0	90.00	179.58	10,560.0	-10,825.0	2,708.9	10,844.6	0.00	0.00	0.00	
21,700.0	90.00	179.58	10,560.0	-10,925.0	2,709.6	10,944.6	0.00	0.00	0.00	
21,800.0	90.00	179.58	10,560.0	-11,025.0	2,710.4	11,044.6	0.00	0.00	0.00	
21,900.0	90.00	179.58	10,560.0	-11,125.0	2,711.1	11,144.6	0.00	0.00	0.00	
22,000.0	90.00	179.58	10,560.0	-11,225.0	2,711.8	11,244.6	0.00	0.00	0.00	
22,100.0	90.00	179.58	10,560.0	-11,325.0	2,712.5	11,344.6	0.00	0.00	0.00	
22,200.0	90.00	179.58	10,560.0	-11,425.0	2,713.3	11,444.6	0.00	0.00	0.00	
22,300.0	90.00	179.58	10,560.0	-11,525.0	2,714.0	11,544.6	0.00	0.00	0.00	
22,400.0	90.00	179.58	10,560.0	-11,625.0	2,714.7	11,644.6	0.00	0.00	0.00	
22,500.0	90.00	179.58	10,560.0	-11,725.0	2,715.5	11,744.6	0.00	0.00	0.00	
22,600.0	90.00	179.58	10,560.0	-11,825.0	2,716.2	11,844.6	0.00	0.00	0.00	
22,700.0	90.00	179.58	10,560.0	-11,925.0	2,716.9	11,944.6	0.00	0.00	0.00	
22,800.0	90.00	179.58	10,560.0	-12,025.0	2,717.6	12,044.6	0.00	0.00	0.00	
22,900.0	90.00	179.58	10,560.0	-12,124.9	2,718.4	12,144.6	0.00	0.00	0.00	
23,000.0	90.00	179.58	10,560.0	-12,224.9	2,719.1	12,244.6	0.00	0.00	0.00	
23,100.0	90.00	179.58	10,560.0	-12,324.9	2,719.8	12,344.6	0.00	0.00	0.00	
23,116.8	90.00	179.58	10,560.0	-12,341.7	2,719.9	12,361.3	0.00	0.00	0.00	
LTP 302H										
23,200.0	90.00	179.58	10,560.0	-12,424.9	2,720.5	12,444.6	0.00	0.00	0.00	
23,300.0	90.00	179.58	10,560.0	-12,524.9	2,721.3	12,544.6	0.00	0.00	0.00	
23,396.8	90.00	179.58	10,560.0	-12,621.7	2,722.0	12,641.3	0.00	0.00	0.00	
BHL 302H										

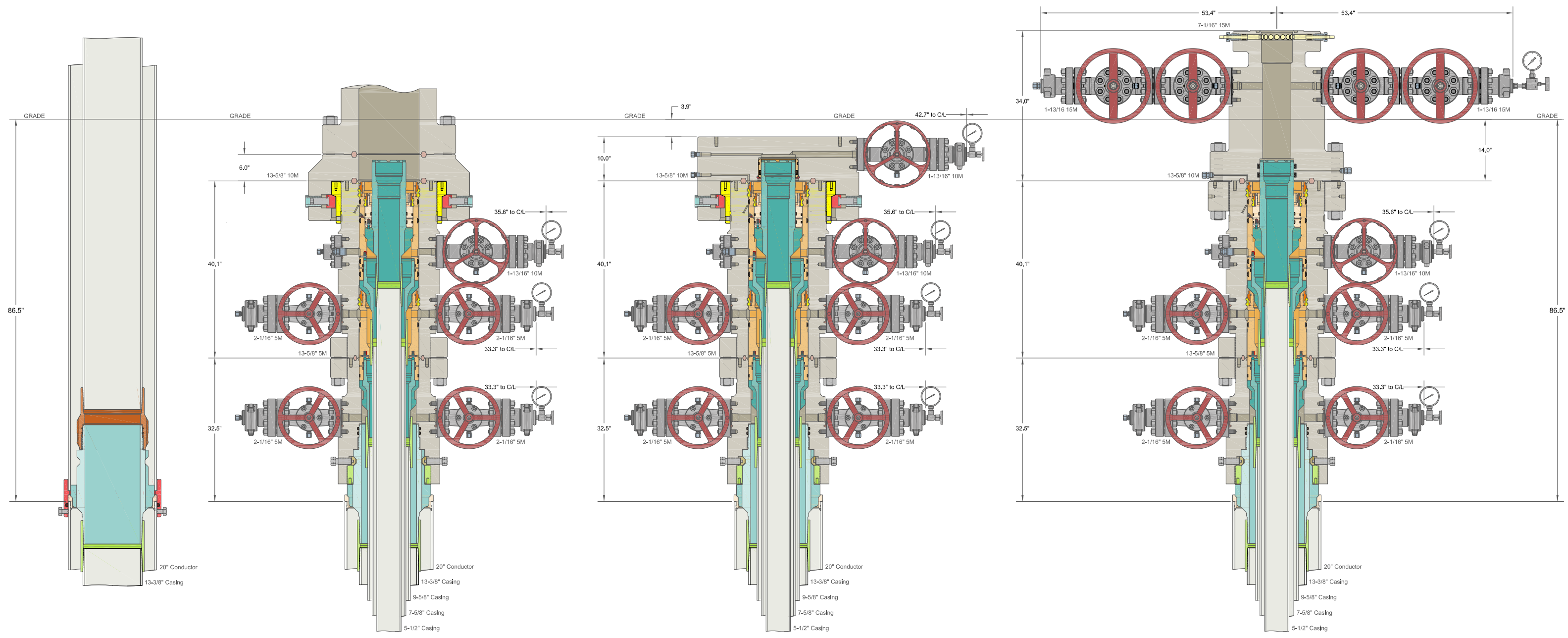
Planning Report

Database:	EDM 5000.18 Single User Db	Local Co-ordinate Reference:	Well SOPHIA 20-29-32 Federal State Com302H
Company:	Long Lead_Well Planning	TVD Reference:	RKB @ 3155.4usft
Project:	Long Lead Sophia Rose Blanche	MD Reference:	RKB @ 3155.4usft
Site:	Sophia & Blanche	North Reference:	Grid
Well:	SOPHIA 20-29-32 Federal State Com302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
BHL 302H - plan misses target center by 0.9usft at 23396.8usft MD (10560.0 TVD, -12621.7 N, 2722.0 E) - Point	0.00	0.00	10,560.0	-12,621.7	2,721.1	364,047.18	634,440.35	32° 0' 0.497 N	103° 53' 58.735 W
LTP 302H - plan hits target center - Point	0.00	0.00	10,560.0	-12,341.7	2,719.9	364,327.17	634,439.17	32° 0' 3.268 N	103° 53' 58.735 W
FTP 302H - plan misses target center by 130.2usft at 11050.0usft MD (10449.4 TVD, -296.2 N, 2634.1 E) - Point	0.00	0.00	10,560.0	-227.7	2,630.5	376,441.16	634,349.71	32° 2' 3.156 N	103° 53' 59.210 W



Formation	TVDSS (feet)	TVD (feet)
Rustler	2,494'	662'
Salado	2,220'	936'
Top of Salt	2,204'	950'
Castile "Unconformity" (Harsh)	1,804'	1,350'
Base of Salt	-158'	3,313'
Delaware	-331'	3,487'
Cherry Canyon	-1,259'	4,415'
Brushy Canyon	-2,911'	6,067'
Basal Brushy Canyon	-3,863'	7,019'
Bone Spring Lm.	-4,139'	7,295'
Avalon	-4,306'	7,462'
Lower Avalon	-4,692'	7,847'
1st Bone Spring Lime	-4,849'	8,004'
1st Bone Spring Sand	-5,071'	8,226'
2nd Bone Spring Shale	-5,373'	8,528'
2nd Bone Spring Lime	-5,535'	8,690'
2nd Bone Spring Sand	-5,734'	8,890'
2nd Bone Spring A Sand	-5,971'	9,127'
2nd Bone Spring B Sand	-6,135'	9,291'
3rd Bone Spring Lime	-6,223'	9,378'
Harkey	-6,548'	9,704'
Mid 3rd Bone Shale Lime	-6,819'	9,975'
3rd Bone Spring Sand	-6,992'	10,147'
Wolfcamp	-7,115'	10,270'
Wolfcamp X	-7,195'	10,350'
Wolfcamp A	-7,365'	10,520'
Wolfcamp A Landing	-7,406'	10,560'
Wolfcamp B	-7,900'	11,055'



Received by OCD: 4/1/2026 12:30:37 PM

INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

Released to Imaging: 4/21/2026 9:36:39 AM

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC		XTO ENERGY INC DELAWARE BASIN	
(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And Drilling & Skid Configurations		DRAWN	VJK
		APPRV	31MAR22
		DRAWING NO.	SDT-3301

State of New Mexico
 Energy, Minerals and Natural Resources Department

Submit Electronically
 Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

I. Operator: XTO ENERGY, INC. **OGRID:** 005380 **Date:** 08/28/2024

II. Type: Original Amendment due to 19.15.27.9.D(6)(a) NMAC 19.15.27.9.D(6)(b) NMAC Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	3 yr Anticipated decline Oil BBL/D	Anticipated Gas MCF/D	3 yr anticipated decline Gas MCF/D	Anticipated Produced Water BBL/D	3 yr anticipated decline Water BBL/D
Dorothy 30 31 Federal Com #100H	TBD	30 26S 30E	307 FNL, 294 FWL	1,100	100	4,500	700	4,250	450
Dorothy 30 31 Federal Com #101H	TBD	30 26S 30E	367 FNL, 294 FWL	1,100	100	4,500	700	4,250	450
Dorothy 30 31 Federal Com #103H	TBD	30 26S 30E	277 FNL, 294 FWL	1,100	150	2,000	500	2,250	250
Dorothy 30 31 Federal Com #104H	TBD	30 26S 30E	427 FNL, 294 FWL	1,100	150	2,000	500	2,250	250
Dorothy 30 31 Federal Com #105H	TBD	30 26S 30E	337 FNL, 294 FWL	1,100	100	4,500	700	4,250	450
Dorothy 30 31 Federal Com #106H	TBD	30 26S 30E	397 FNL, 294 FWL	1,100	100	4,500	700	4,250	450
Blanche 20 29 32 Federal State Com #200H	TBD	19 26S 30E	420 FNL, 947 FEL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #201H	TBD	19 26S 30E	450 FNL, 947 FEL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #203H	TBD	19 26S 30E	511 FNL, 823 FEL	1,800	200	7,500	1,200	7,000	800

Rose 19 30 31 Federal State Com #204H	TBD	19 26S 30E	479 FNL, 1072 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #205H	TBD	19 26S 30E	361 FNL, 822 FEL	1,900	200	3,250	900	3,750	400
Rose 19 30 31 Federal State Com #206H	TBD	19 26S 30E	449 FNL, 1072 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #207H	TBD	19 26S 30E	421 FNL, 822 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #208H	TBD	19 26S 30E	391 FNL, 822 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #209H	TBD	19 26S 30E	359 FNL, 1072 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #210H	TBD	19 26S 30E	390 FNL, 947 FEL	1,900	200	3,250	900	3,750	400
Sophia 20 29 32 Federal State Com #216H	TBD	19 26S 30E	451 FNL, 822 FEL	1,800	200	7,500	1,200	7,000	800
Sophia 20 29 32 Federal State Com #217H	TBD	19 26S 30E	481 FNL, 822 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #211H	TBD	19 26S 30E	389 FNL, 1072 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #212H	TBD	19 26S 30E	360 FNL, 947 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #213H	TBD	19 26S 30E	419 FNL, 1072 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #214H	TBD	19 26S 30E	480 FNL, 947 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #215H	TBD	19 26S 30E	509 FNL, 1073 FEL	1,800	200	7,500	1,200	7,000	800
Rose 19 30 31 Federal State Com #218H	TBD	19 26S 30E	510 FNL, 948 FEL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #312H	TBD	20 26S 30E	82 FNL, 840 FWL	1,900	200	3,250	900	3,750	400
Blanche 20 29 32 Federal State Com #313H	TBD	20 26S 30E	82 FNL, 870 FWL	1,900	200	3,250	900	3,750	400
Blanche 20 29 32 Federal State Com #314H	TBD	20 26S 30E	83 FNL, 900 FWL	1,800	200	7,500	1,200	7,000	800

Blanche 20 29 32 Federal State Com #315H	TBD	20 26S 30E	83 FNL, 930 FWL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #316H	TBD	20 26S 30E	83 FNL, 960 FWL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #317H	TBD	20 26S 30E	157 FNL, 840 FWL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #318H	TBD	20 26S 30E	157 FNL, 870 FWL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #319H	TBD	20 26S 30E	158 FNL, 900 FWL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #320H	TBD	20 26S 30E	158 FNL, 930 FWL	1,800	200	7,500	1,200	7,000	800
Blanche 20 29 32 Federal State Com #321H	TBD	20 26S 30E	158 FNL, 960 FWL	1,800	200	7,500	1,200	7,000	800
Sophia 20 29 32 Federal State Com #300H	TBD	20 26S 30E	83 FNL, 990 FWL	1,800	200	7,500	1,200	7,000	800
Sophia 20 29 32 Federal State Com #302H	TBD	20 26S 30E	84 FNL, 1020 FWL	1,900	200	3,250	900	3,750	400
Sophia 20 29 32 Federal State Com #303H	TBD	20 26S 30E	84 FNL, 1050 FWL	1,900	200	3,250	900	3,750	400
Sophia 20 29 32 Federal State Com #304H	TBD	20 26S 30E	84 FNL, 1080 FWL	1,800	200	7,500	1,200	7,000	800
Sophia 20 29 32 Federal State Com #305H	TBD	20 26S 30E	158 FNL, 990 FWL	1,800	200	7,500	1,200	7,000	800
Sophia 20 29 32 Federal State Com #306H	TBD	20 26S 30E	159 FNL, 1020 FWL	1,800	200	7,500	1,200	7,000	800
Sophia 20 29 32 Federal State Com #307H	TBD	20 26S 30E	159 FNL, 1050 FWL	1,800	200	7,500	1,200	7,000	800

Sophia 20 29 32 Federal State Com #308H	TBD	20 26S 30E	159 FNL, 1080 FWL	1,800	200	7,500	1,200	7,000	800
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IV. Central Delivery Point Name: Ross Draw CDP Oil, Ross Draw CDP Gas [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Dorothy 30 31 Federal Com #100H	TBD	TBD	TBD	TBD	TBD	TBD
Dorothy 30 31 Federal Com #101H	TBD	TBD	TBD	TBD	TBD	TBD
Dorothy 30 31 Federal Com #103H	TBD	TBD	TBD	TBD	TBD	TBD
Dorothy 30 31 Federal Com #104H	TBD	TBD	TBD	TBD	TBD	TBD
Dorothy 30 31 Federal Com #105H	TBD	TBD	TBD	TBD	TBD	TBD
Dorothy 30 31 Federal Com #106H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #200H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #201H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #203H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #204H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #205H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #206H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #207H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #208H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #209H	TBD	TBD	TBD	TBD	TBD	TBD

Rose 19 30 31 Federal State Com #210H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #216H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #217H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #211H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #212H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #213H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #214H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #215H	TBD	TBD	TBD	TBD	TBD	TBD
Rose 19 30 31 Federal State Com #218H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #312H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #313H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #314H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #315H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #316H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #317H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #318H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #319H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #320H	TBD	TBD	TBD	TBD	TBD	TBD
Blanche 20 29 32 Federal State Com #321H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #300H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #302H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #303H	TBD	TBD	TBD	TBD	TBD	TBD

Sophia 20 29 32 Federal State Com #304H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #305H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #306H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #307H	TBD	TBD	TBD	TBD	TBD	TBD
Sophia 20 29 32 Federal State Com #308H	TBD	TBD	TBD	TBD	TBD	TBD

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system will will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator does does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator’s plan to manage production in response to the increased line pressure.

XIV. Confidentiality: Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: *Vishal Rajan*

Printed Name: Vishal Rajan

Title: Regulatory Analyst

E-mail Address: vishal.rajan@exxonmobil.com

Date: 11/08/2024

Phone: 3462259159

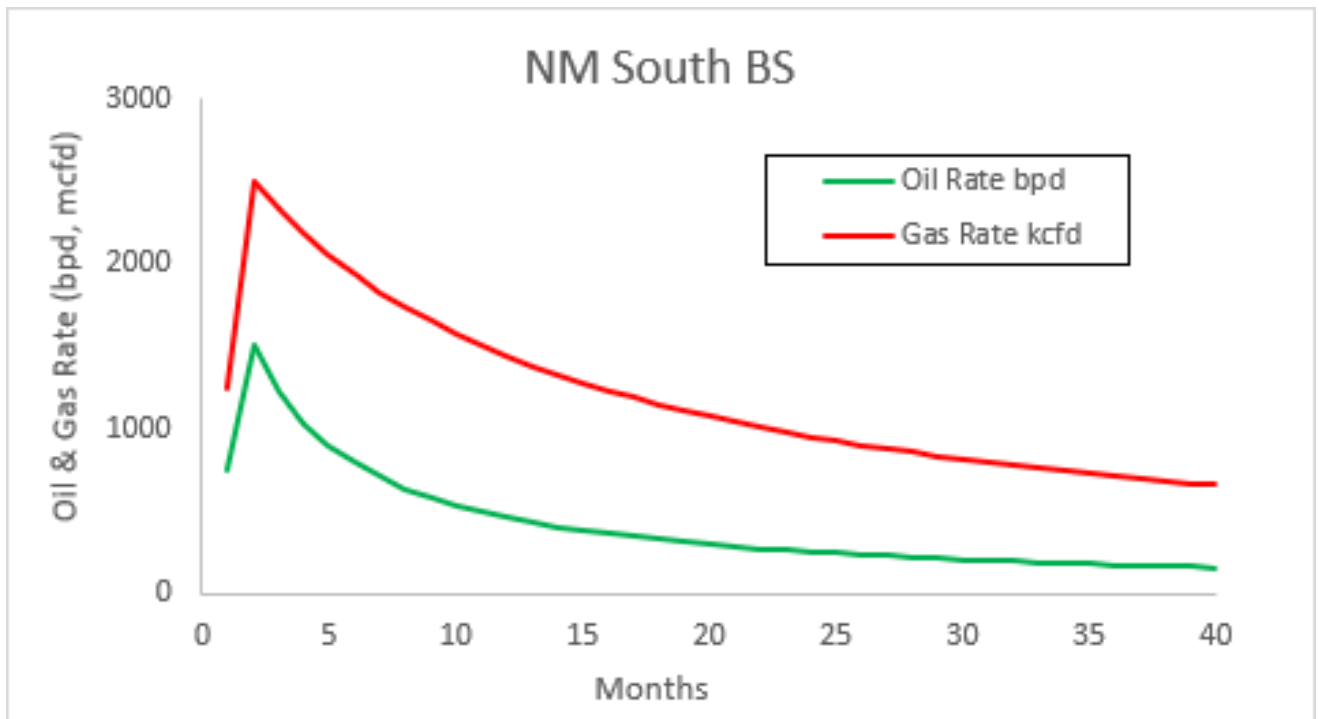
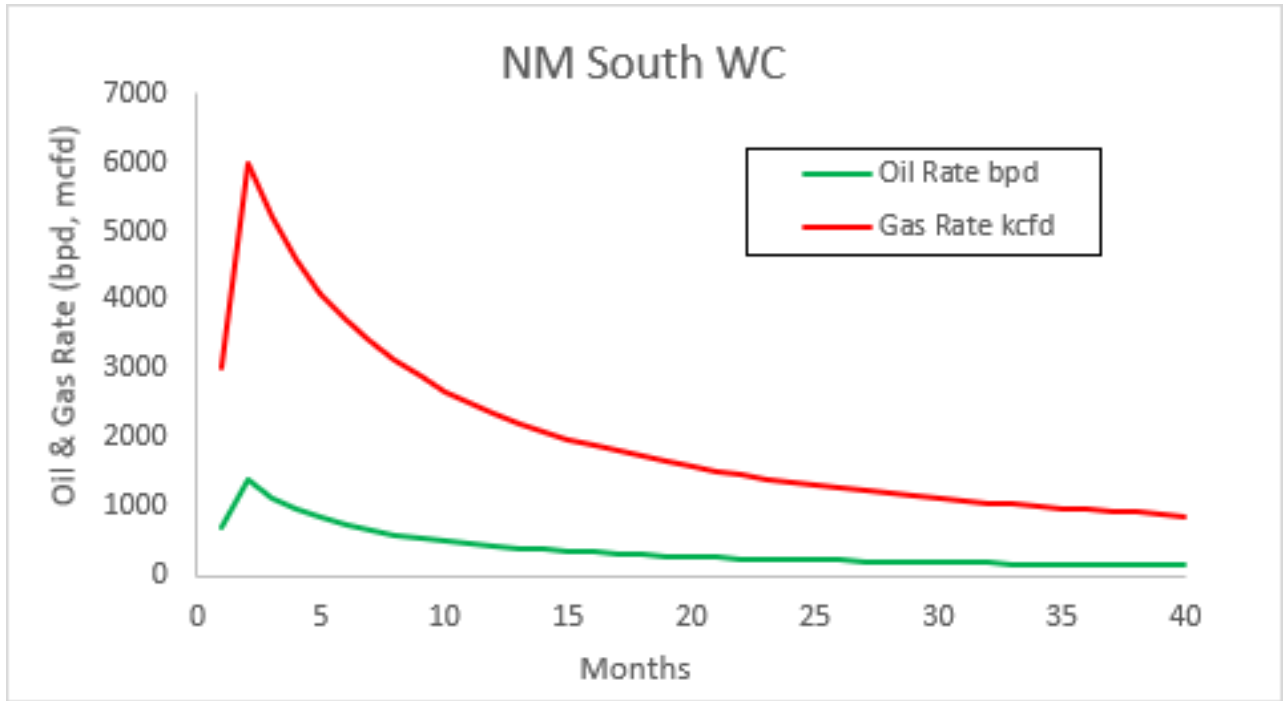
**OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)**

Approved By:

Title:

Approval Date:

Conditions of Approval:



VI. Separation Equipment:

XTO Permian Operating LLC. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. XTO utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.

VII. Operational Practices

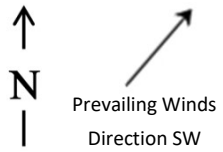
XTO Permian Operating LLC will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO Permian Operating LLC will turn operations to onsite separation vessels and flow to the gathering pipeline.
- During production operations, XTO Permian Operating LLC will take every practical effort to minimize waste of natural gas through venting and flaring by:
 - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
 - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
 - Flaring in lieu of venting, where technically feasible
 - Utilizing auto-igniters or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
 - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
 - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
 - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications

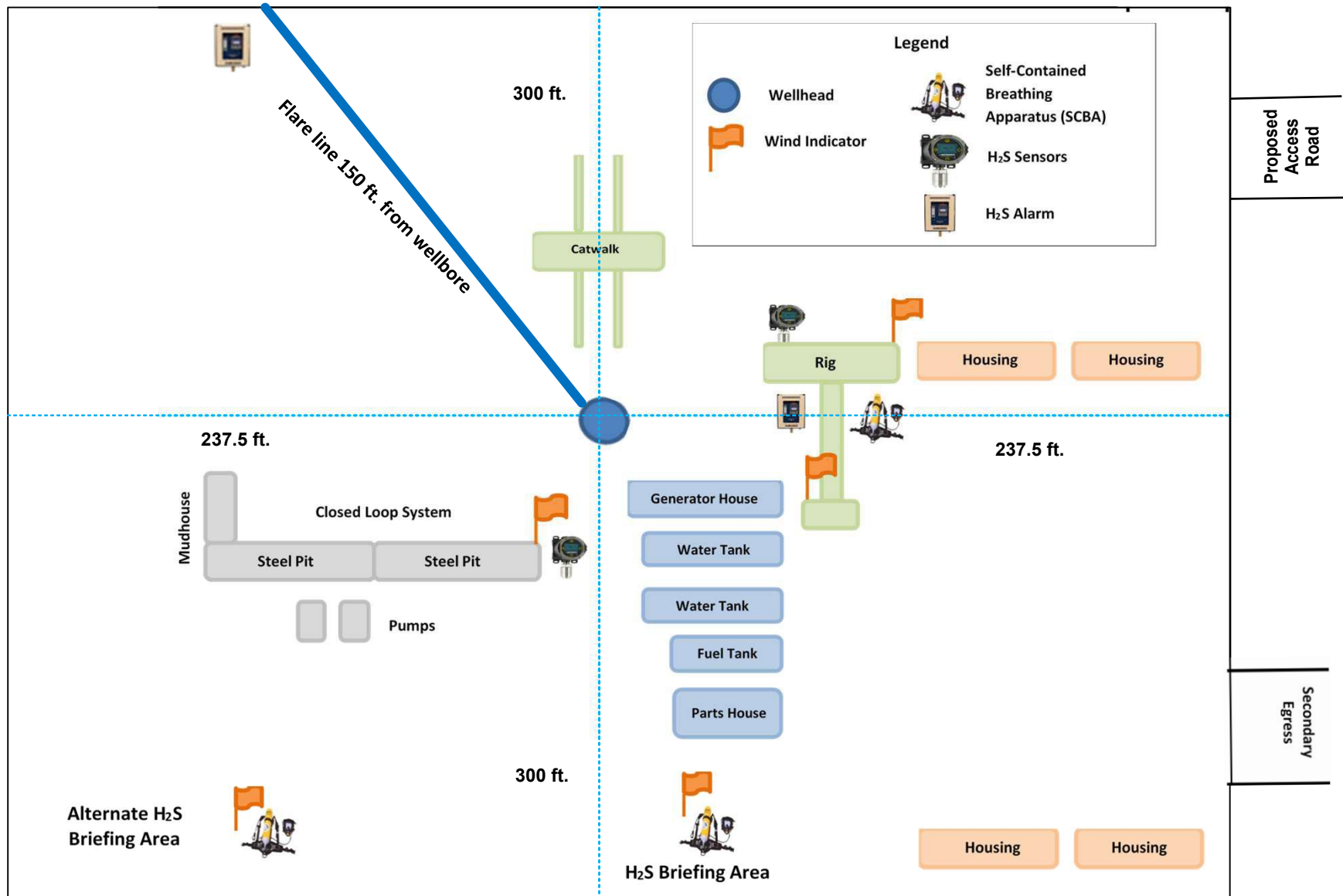
- Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible.

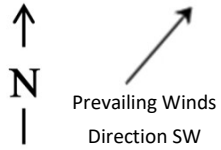
VIII. Best Management Practices during Maintenance

XTO Permian Operating LLC. will utilize best management practices to minimize venting during active and planned maintenance activities. XTO is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high-pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. XTO will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.

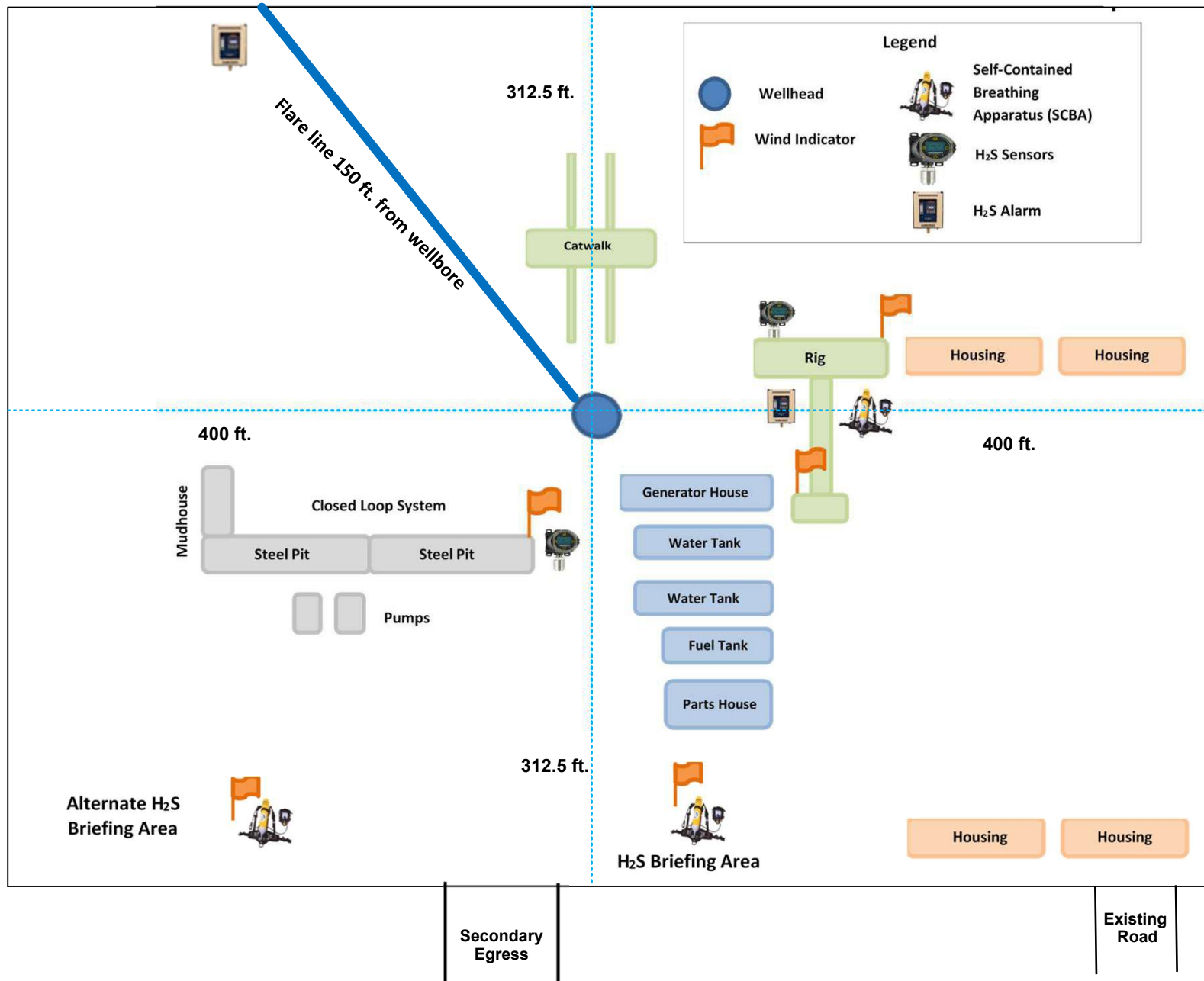


H2S Briefing Areas and Alarm Locations (Pad A)



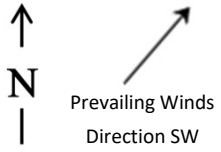


H2S Briefing Areas and Alarm Locations (Pad B)



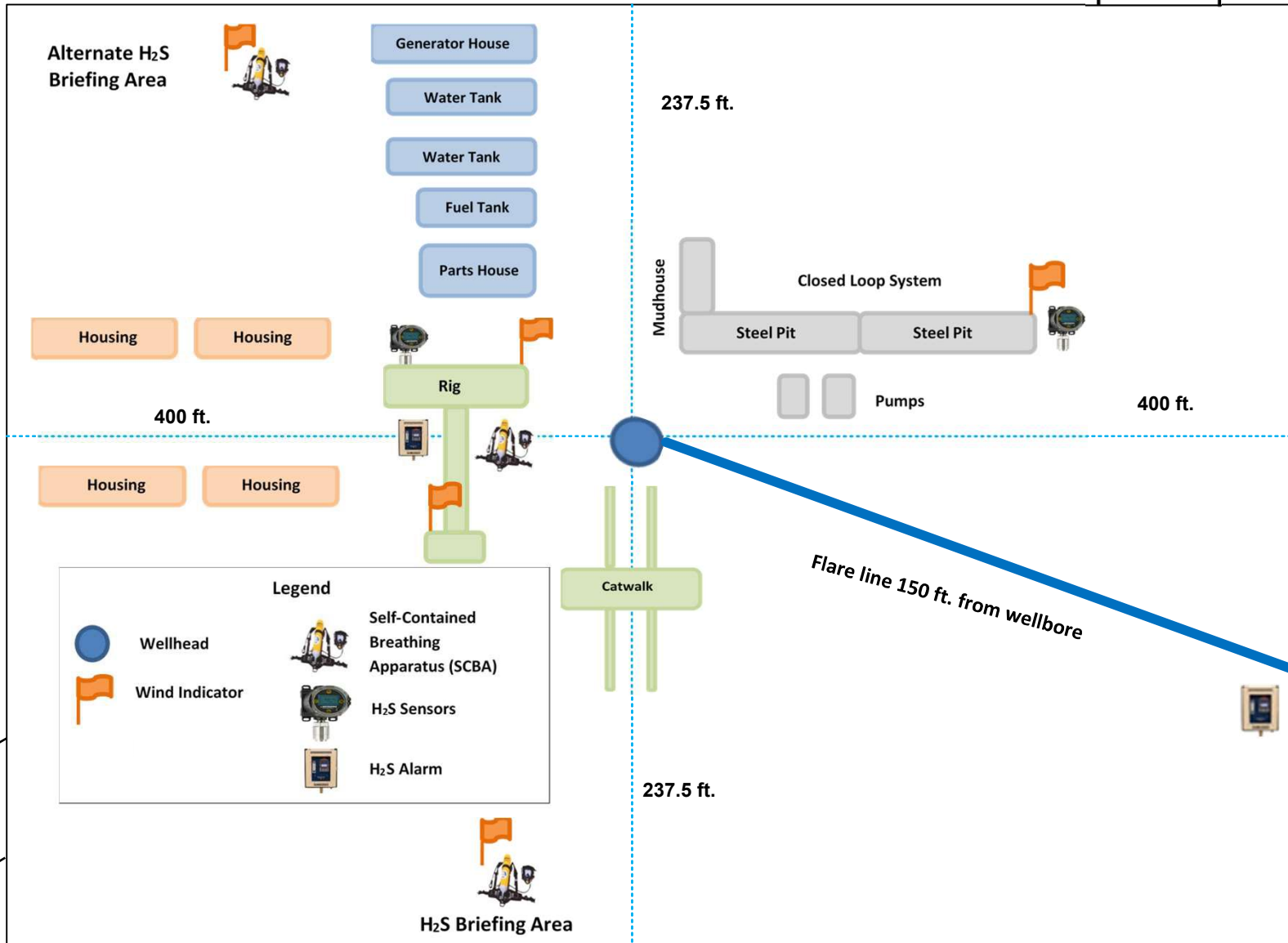
Legend

- Wellhead
- Wind Indicator
- Self-Contained Breathing Apparatus (SCBA)
- H₂S Sensors
- H₂S Alarm



H2S Briefing Areas and Alarm Locations (Pad CD)

Secondary
Egress



Legend

- Wellhead
- Wind Indicator
- Self-Contained Breathing Apparatus (SCBA)
- H2S Sensors
- H2S Alarm

Section 2 Summary:

*** Deepest Expected Groundwater Depth: 40' (per NM State Engineers Office).

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13-3/8" inch casing at 925' and circulating cement back to surface.

3. Primary Casing Design

Primary Design:

Hole Size (in.)	MD	Casing TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5"	0' - 925'	925'	13-3/8"	54.5	J55	BTC	New	9.65	5.64	5.94
12.25"	0' - 3413'	3298'	9-5/8"	40	J55	BTC	New	3.81	3.60	3.18
8.75"	0' - 3513'	3391'	7-5/8"	29.7	P110-ICY	Tenaris Wedge 511	New	6.17	10.02	3.15
8.75"	3513' - 10178'	9692'	7-5/8"	29.7	L80-IC	Tenaris Wedge 511	New	2.06	4.41	2.25
6.75"	0' - 10078'	9593'	5-1/2"	20	P110-ICY	Tenaris Wedge 441	New	1.18	2.96	2.79
6.75"	10078' - 23397'	10560'	5-1/2"	20	P110-ICY	Tenaris Wedge 441	New	1.18	2.69	2.79

Section 3 Summary:

XTO will keep casing fluid filled to meet BLM's collapse requirement.
The planned kick off point is located at: 10328' MD / 9844' TVD.

Wellhead:

A multi-bowl wellhead system will be utilized. The well design chosen is: 4-String Slim Potash (Non-Capitan Reef) (Figure D)

Wellhead will be installed by manufacturer's representatives.

Manufacturer will monitor welding process to ensure appropriate temperature of seal.

4. Cement Program

Primary Cementing								
Hole Section	Slurry Type	No. Sacks	Density (ppg)	Yield (ft ³ /sack)	TOC (ft)	Casing Setting Depth (MD)	Excess (%)	Slurry Description
Surface 1	Lead	412	12.4	2.11	0	925	100%	Surface 1 Class C Lead Cement
Surface 1	Tail	313	14.8	1.33	625	925	100%	Surface 1 Class C Tail Cement
Intermediate 1	Lead	724	12.9	2.02	0	3,413	50%	Intermediate 1 Class C Lead Cement
Intermediate 1	Tail	97	14.8	1.45	3113	3,413	50%	Intermediate 1 Class C Tail Cement
Intermediate 2	Lead							
Intermediate 2	Tail	285	14.8	1.45	6067	10,178	0%	Intermediate 2 Class C Tail Cement
Production 1	Lead							
Production 1	Tail	966	13.2	1.44	9678	23,397	25%	Production 1 Class C Tail Cement
Bradenhead Cementing								
Casing	Slurry Type	No. Sacks	Density (ppg)	Yield (ft ³ /sack)	Cemented Interval	Excess (%)	Slurry Description	
Intermediate 2	Bradenhead Squeeze	295	14.8	1.45	2913 - 6067'	35%	Intermediate Class C Bradenhead Squeeze Cement	

Section 4 Summary:

*Bradenhead Squeeze 2nd Stage Offline

5. Pressure Control Equipment

Section 5 Summary:

Once the permanent WH is installed on the casing, the blow out preventer equipment (BOP) will consist of a minimum 5M Hydril and a minimum 10M triple Ram BOP.

All BOP testing will be done by an independent service company. Operator will Test as per 43CFR-3172.

No break testing will be done if intermediate casing point penetrates the Wolfcamp

Requested Variances

4A) Offline Cementing Variance

XOM requests the option to perform offline cement and bradenhead jobs (if needed) SURFACE, INTERMEDIATE, and PRODUCTION casing strings where batch drilling is approved. XOM will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence. The TA cap will also be installed when applicable per wellhead manufacturer's procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

5A) Break Test Variance

A break testing variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead for the intermediate hole sections which is in compliance with API Standard 53. The maximum anticipated surface pressure is less than 4800psi and the deepest intermediate casing point does not penetrate the Wolfcamp Formation.

5B) Flex Hose Variance

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.

8A) Open Hole Logging Variance

Open hole logging will not be done on this well.

10A) Spudder Rig Variance

XOM requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing.

10B) Batch Drilling Variance

XOM requests a variance to be able to batch drill this well. In doing so, XOM will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. XOM will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XOM will begin drilling the production hole on each of the wells.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss	Comments
			(ppg)	(sec/qt)	(cc)	
0' - 925'	17.5"	FW/Native	8.3 - 8.7	35-40	NC	Fresh Water or Native Water
925' - 3413'	12.25"	BDE/OBM or FW/Brine	9.5 - 10	30-32	NC	Fluid type will be based upon on well conditions. A fully saturated system will be used across the salt interval.
3413' - 10178'	8.75"	BDE/OBM or FW/Brine	9.5 - 10	30-32	NC	Fluid type will be based upon on well conditions.
10178' - 23397'	6.75"	OBM / Cut Brine	9.5 - 12	50-60	NC - 20	OBM or Cut Brine depending on Well Conditions

Section 6 Summary:

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. An EDR (Electronic Drilling Recorder) will be used to detect changes in loss or gain of mud volume. 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.

7. Auxiliary Well Control and Monitoring Equipment

Section 7 Summary:

A Kelly cock will be in the drill string at all times.

A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.

H2S monitors will be on location when drilling below the 13-3/8" casing.

8. Logging, Coring and Testing Program

Section 8 Summary:

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

Section 9 Summary:

The estimated bottom hole temperature of 170F to 190F. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation is possible throughout the well.

10. Anticipated Starting Date and Duration of Operations

Section 10 Summary:

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.



BLACK GOLD®

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EMAIL: gesna.quality@gates.com
WEB: www.gates.com/oilandgas

*NEW CHOKE HOSE
INSTALLED 02-10-2024*

CERTIFICATE OF CONFORMANCE

This is to verify that the items detailed below meet the requirements of the Customer's Purchase Order referenced herein, and are in Conformance with applicable specifications, and that Records of Required Tests are on file and subject to examination. The following items were inspected and hydrostatically tested at **Gates Engineering & Services North America** facilities in Houston, TX, USA.

CUSTOMER:	NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#:	15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N:	IMR RETEST SN 74621 ASSET #66-1531
PART DESCRIPTION:	RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES
SALES ORDER #:	529480
QUANTITY:	1
SERIAL #:	74621 H3-012524-1

SIGNATURE: *F. OSMOS*

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024



H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company: Nabors Industries Inc.
 Production description: 74621/66-1531
 Sales order #: 529480
 Customer reference: FG1213

TEST OBJECT

Serial number: H3-012524-1
 Lot number:
 Description: 74621/66-1531
 Hose ID: 3" 16C CK
 Part number:

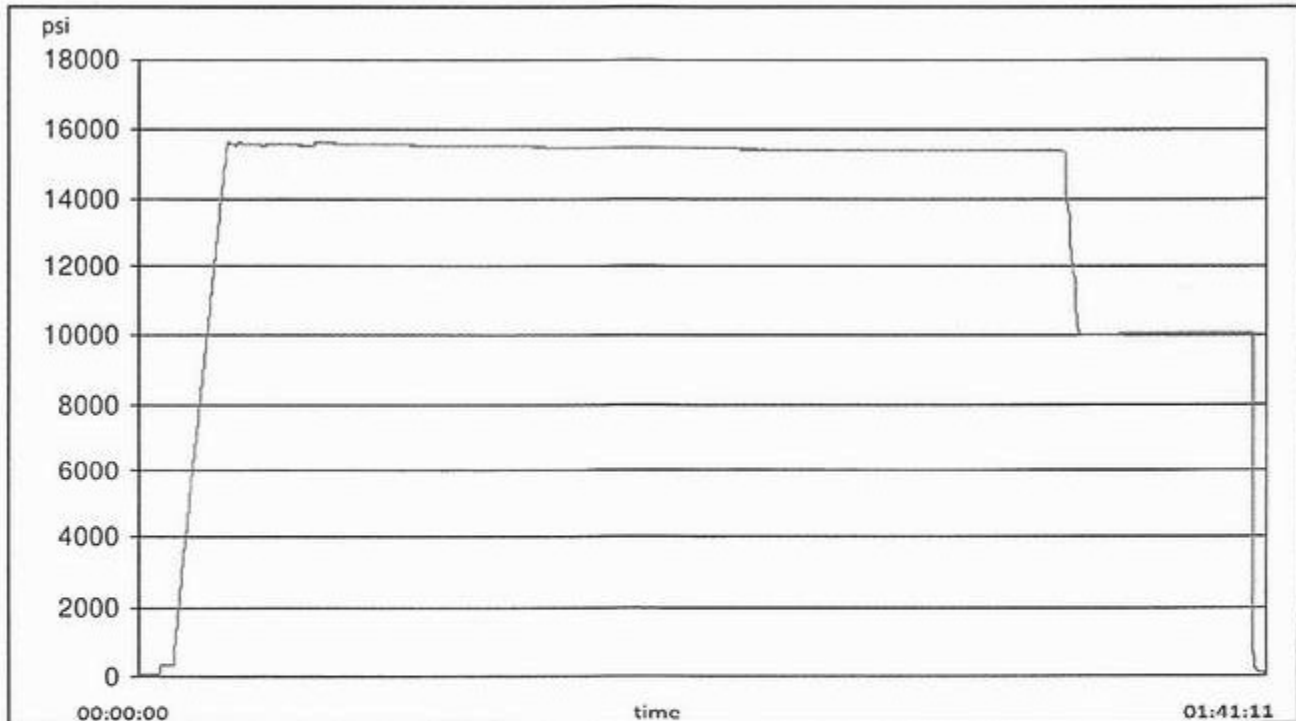
TEST INFORMATION

Test procedure: GTS-04-053
 Test pressure: 15000.00 psi
 Test pressure hold: 3600.00 sec
 Work pressure: 10000.00 psi
 Work pressure hold: 900.00 sec
 Length difference: 0.00 %
 Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K
 Part number:
 Description:
 Fitting 2: 3.0 x 4-1/16 10K
 Part number:
 Description:

Visual check:
 Pressure test result: PASS
 Length measurement result: Length: 45 feet

Test operator: Travis





H3-15/16

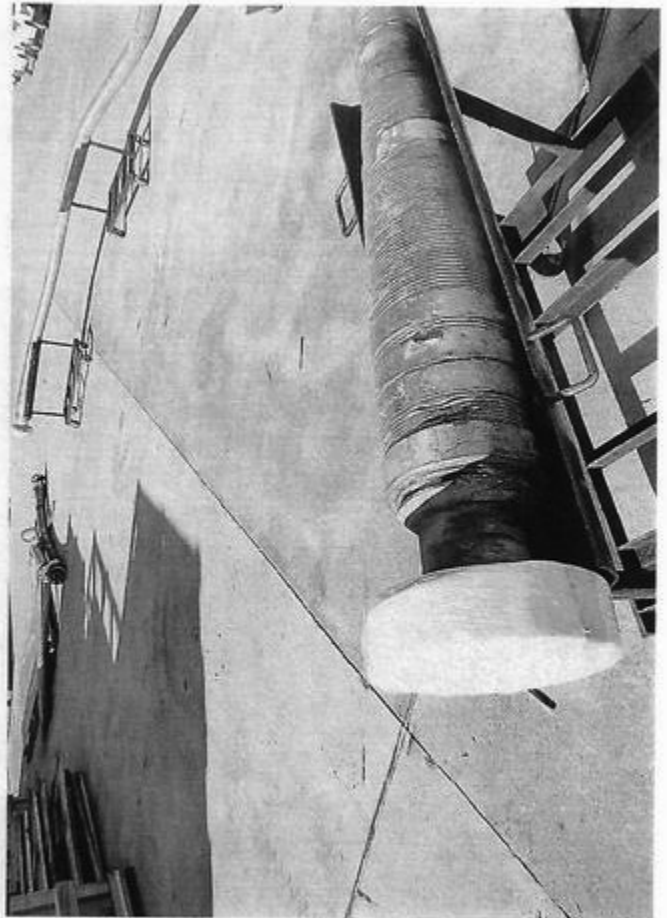
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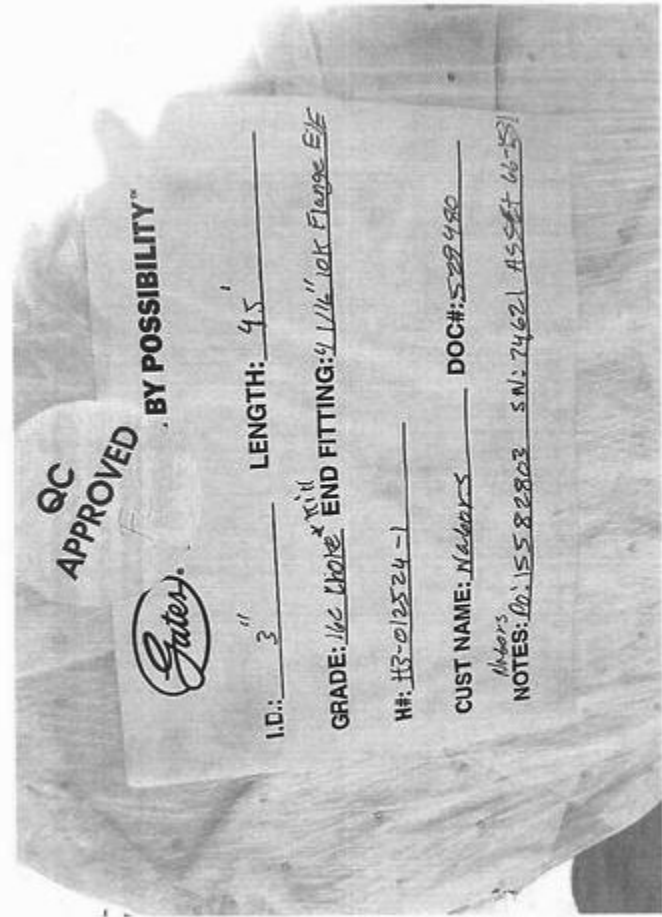
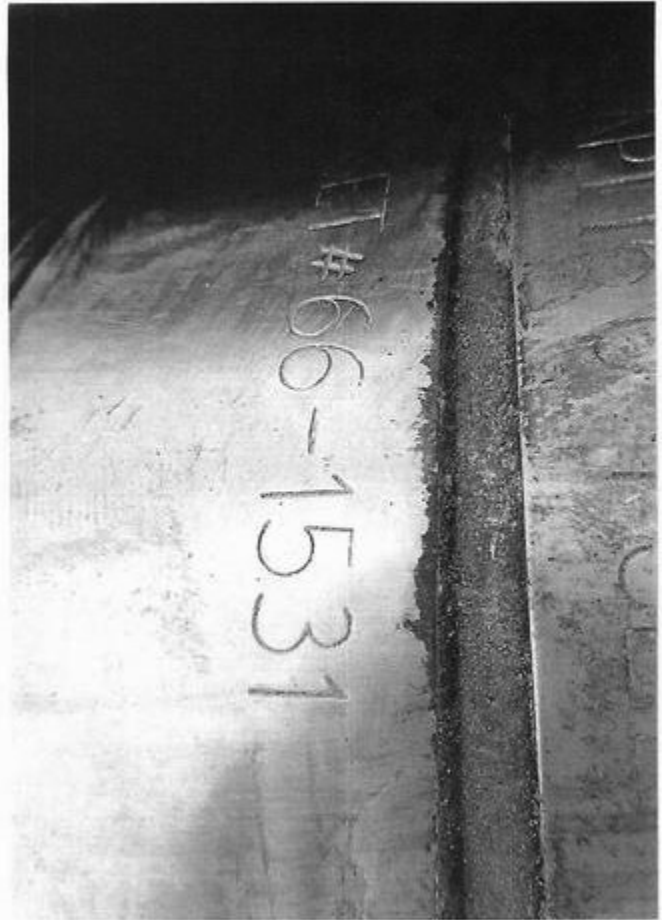
TEST REPORT

GAUGE TRACEABILITY

Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

Comment





XTO Permian Operating, LLC Offline Cementing Variance Request

XTO requests the option to cement the surface and intermediate casing strings offline as a prudent batch drilling efficiency of acreage development.

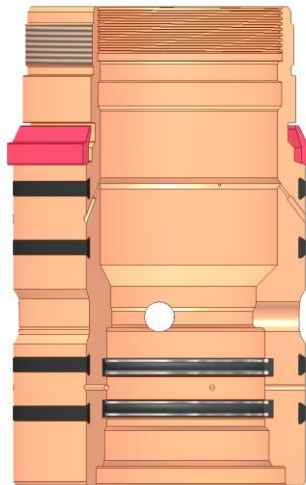
1. Cement Program

No changes to the cement program will take place for offline cementing.

2. Offline Cementing Procedure

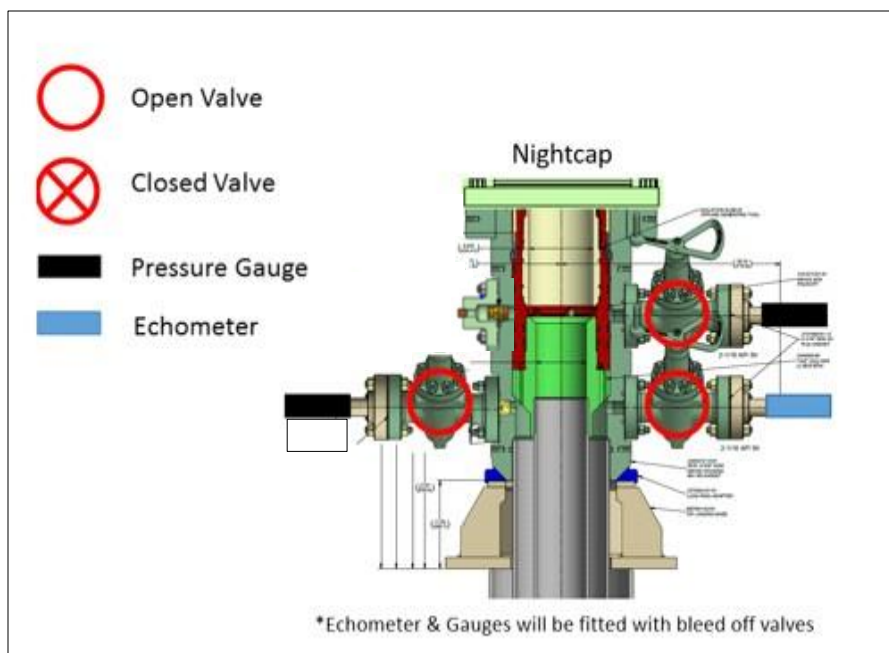
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
 - a. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50-psi compressive strength if kill weight fluid cannot be verified.



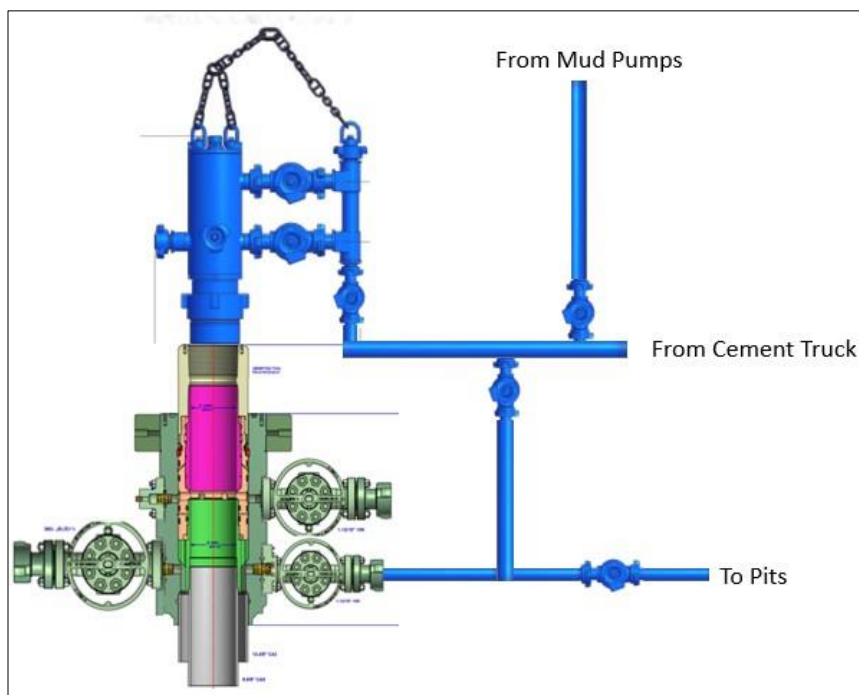
Annular packoff with both external and internal seals

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nipping up for further remediation.
 - a. Well Control Plan
 - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
 - ii. Rig pumps or a 3rd party pump will be tied into the upper casing valve to pump down the casing ID
 - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
 - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
 - v. Well will be confirmed static
 - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
8. Install offline cement tool
9. Rig up cement equipment

XTO Permian Operating, LLC Offline Cementing Variance Request

Wellhead diagram during offline cementing operations

10. Circulate bottoms up with cement truck
 - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
 - b. Max anticipated time before circulating with cement truck is 6 hrs
11. Perform cement job taking returns from the annulus wellhead valve
12. Confirm well is static and floats are holding after cement job
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

XTO Energy requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

Background

Onshore Oil and Gas Order CFR Title 43 Part 3170, Drilling Operations, Sections III.A.2.i.iv.B states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. CFR Title 43 Part 3170 states, "Some situation may exist either on a well-by-well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this order. This situation can be resolved by requesting a variance...". XTO Energy feels the break testing the BOPE is such a situation. Therefore, as per CFR Title 43 Part 3170, XTO Energy submits this request for the variance.

Supporting Documentation

CFR Title 43 Part 3170 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time there have been significant changes in drilling technology. BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since CFR Title 43 Part 3170 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.

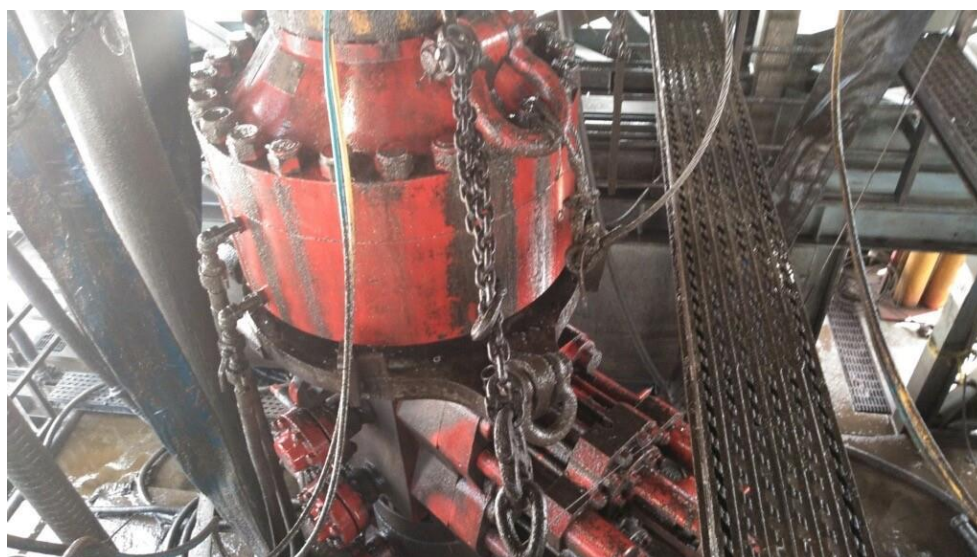


Figure 1: Winch System attached to BOP Stack

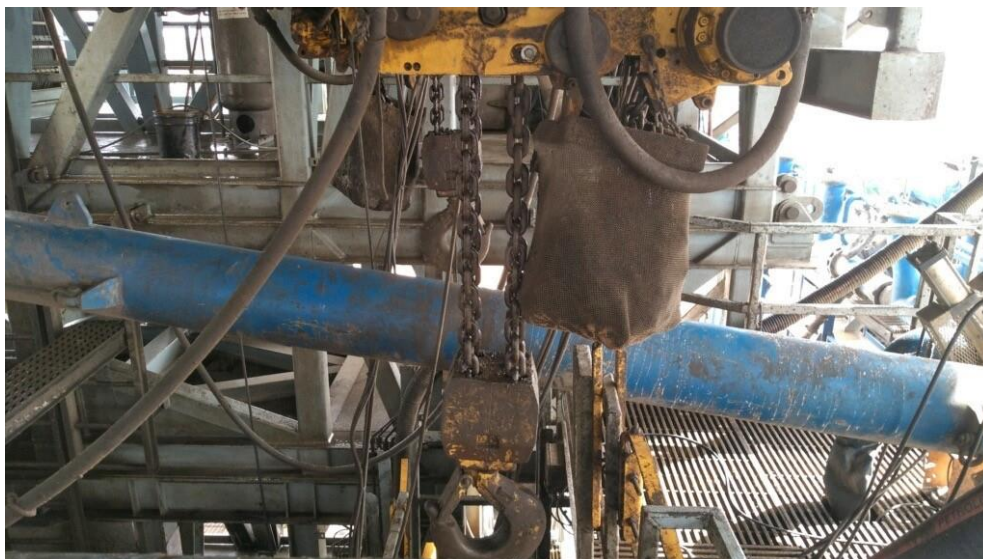


Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. CFR Title 43 Part 3170 recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states “A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component.” See Table C.4 below for reference.

62 API STANDARD 53			
Table C.4—Initial Pressure Testing, Surface BOP Stacks			
Component to be Pressure Tested	Pressure Test—Low Pressure ^{3c} psig (MPa)	Pressure Test—High Pressure ^{3c}	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer ^b	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers ^{3d}	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	
³ Pressure test evaluation periods shall be a minimum of five minutes. No visible leaks. The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure. ^b Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program. ^c For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. ^d For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually. ^e Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.			

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

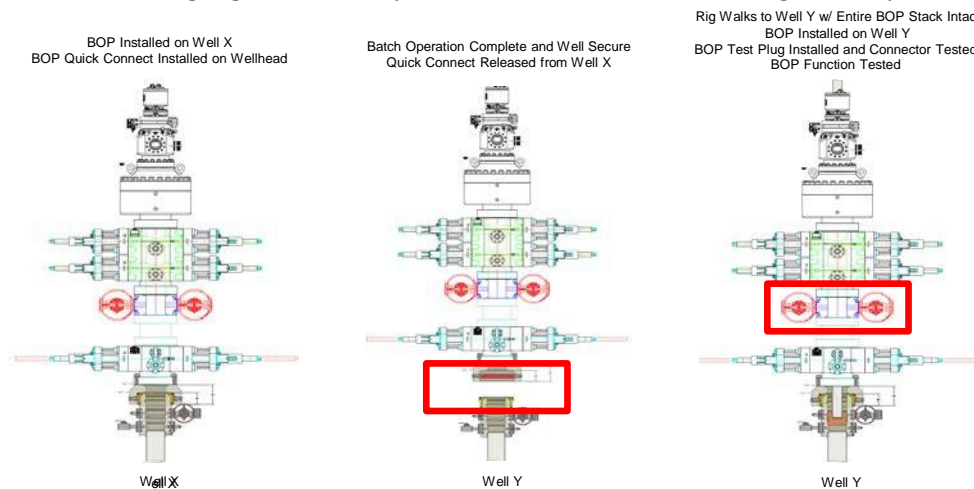
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

Procedures

1. XTO Energy will use this document for our break testing plan for New Mexico Delaware basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
 - a. A full BOP test will be conducted on the first well on the pad.
 - b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
 - i. Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
 - ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
 - c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
 - d. A full BOP test will be required prior to drilling any production hole.
3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
 - a. Between the HCV valve and choke line connection
 - b. Between the BOP quick connect and the wellhead
4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
6. The connections mentioned in 3a and 3b will then be reconnected.
7. Install test plug into the wellhead using test joint or drill pipe.
8. A shell test is performed against the upper pipe rams testing the two breaks.
9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



Summary

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

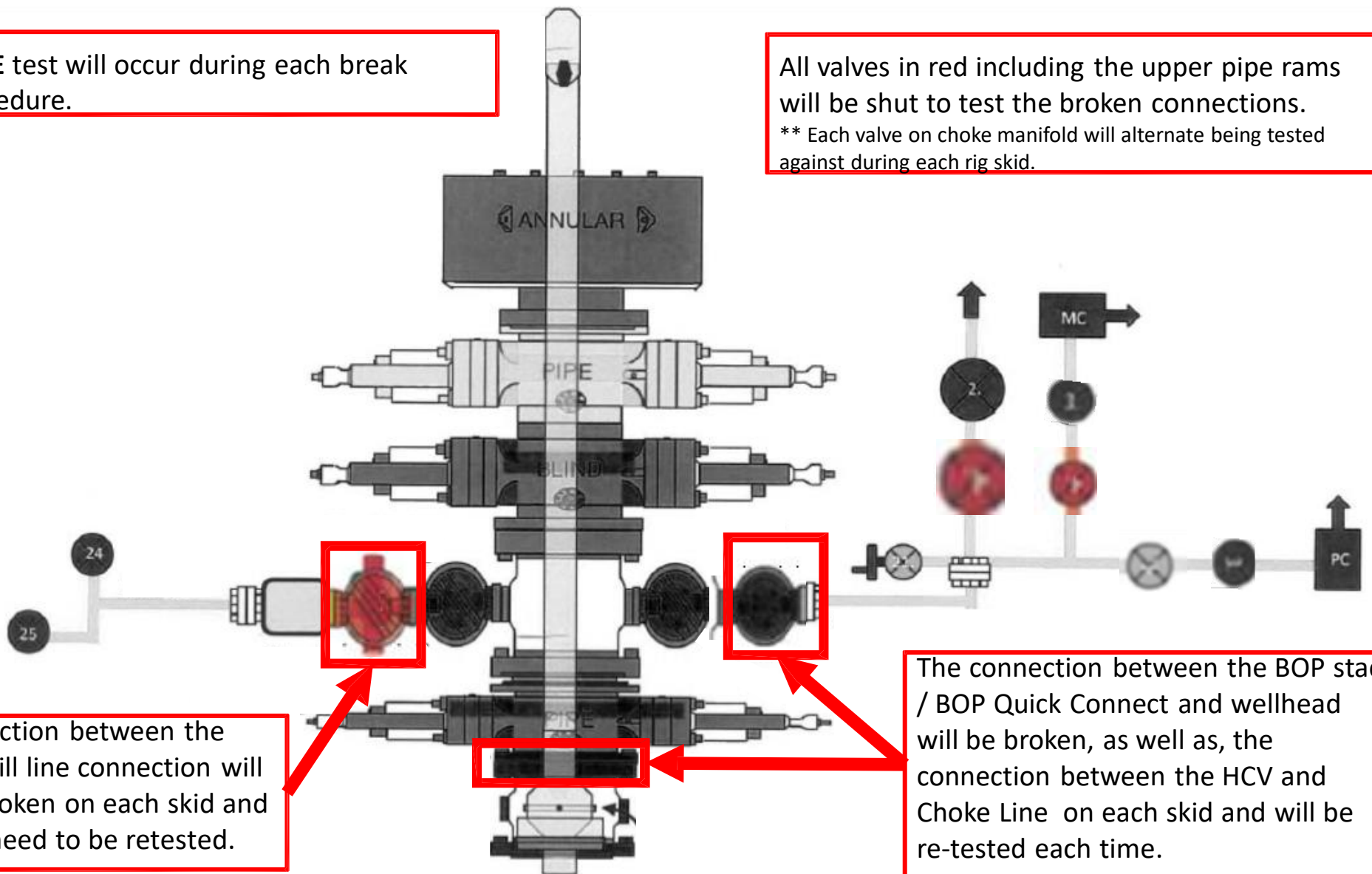
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met:

1. After a full BOP test is conducted on the first well on the pad.
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
4. Full BOP test will be required prior to drilling the production hole.

Only **ONE** test will occur during each break test procedure.

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each skid.



The connection between the HCV and kill line connection will **NOT** be broken on each skid and does not need to be retested.

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.

XTO respectfully requests approval to utilize a spudder rig to pre-set surface casing.

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped up and tested on the wellhead before drilling operations resume on each well.
 - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
 - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.



Offline Production Cementing

Delaware Basin | 18 March 2025

Energy lives here™

Variance Request for Offline Production Cementing

Proposal: allow wells that meet set criteria to perform production casing cement jobs offline, consistent with ExxonMobil's extensive experience safely and effectively cementing production casing strings offline in Texas

Supporting Materials:

- Criteria for offline production cementing
- Proposed procedure
- Process and equipment
- Barrier comparison

Criteria for Offline Cementing

The following conditions must be met to proceed with offline production cementing on Wolfcamp target formations or shallower:

- a) *Casing hanger successfully landed in the wellhead*
- b) *Ability to circulate overbalanced mud weight*
- c) *Initiate offline cementing operations within 24hr of landing casing*
- d) *All well control barriers test successfully and BLM notified of intent to perform offline production cementing prior to N/D BOP*
- e) *No offset frac operations within 1 mile and within the same target horizon*
- f) *Well Control certified ExxonMobil Operations Supervisor to be present during offline cementing operation to monitor returns*
- g) *Drill ahead operations will not begin on next well until offline production cement operations have concluded*

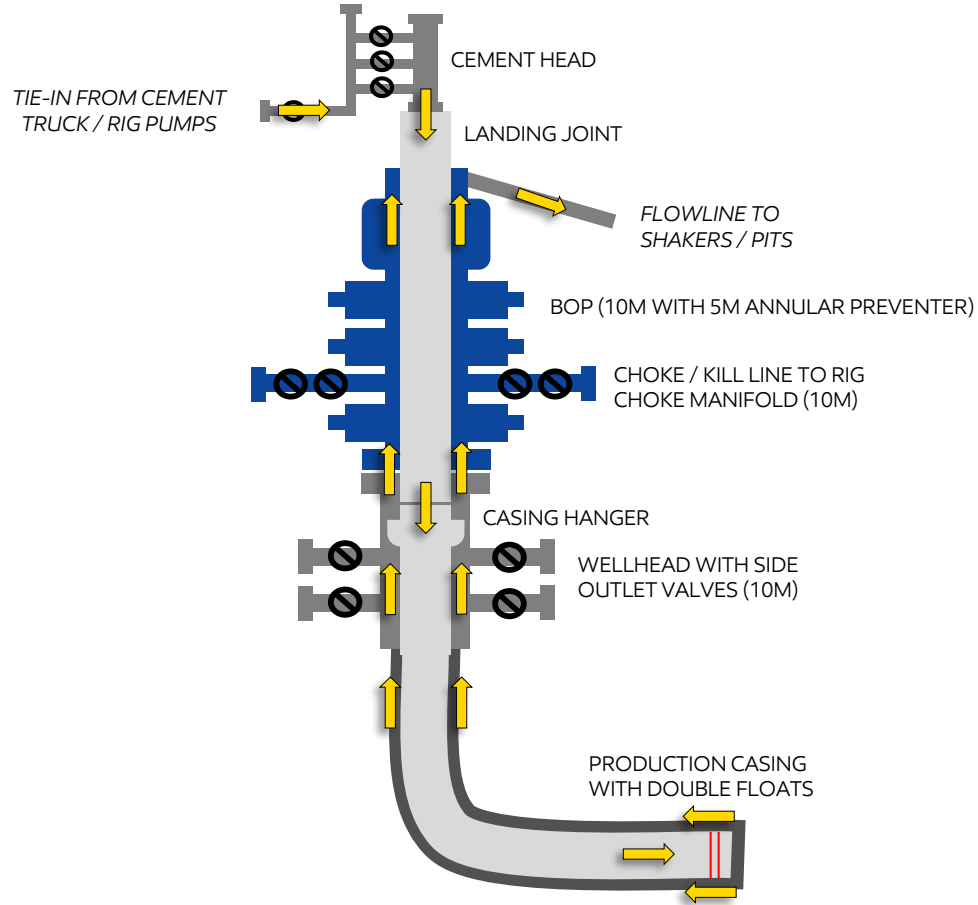


Offline Cementing Procedure

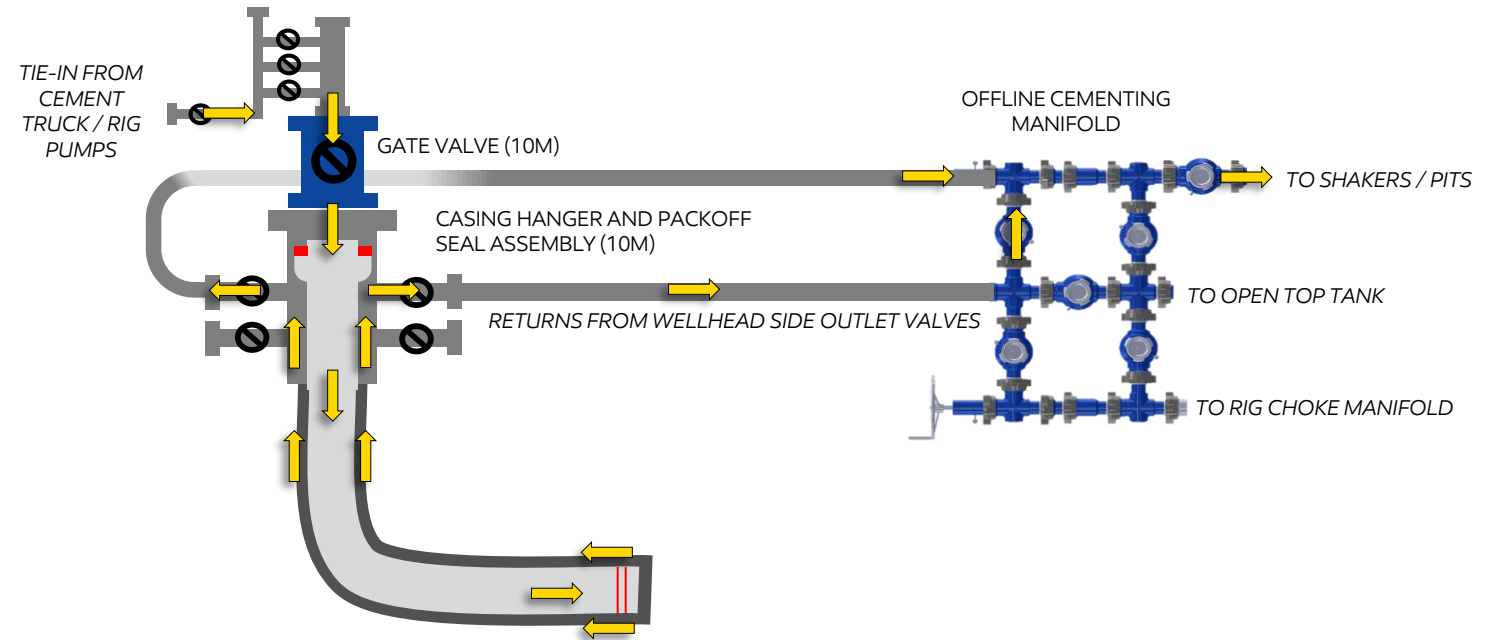
1. **Land production casing hanger** *If casing hanger cannot be landed, cementing will be performed online*
2. Flow check and **confirm the well is static on the casing and annulus.** *If flow is observed, cementing will be performed online*
3. **Lay down landing joint**
4. **Install and test pack-off assembly**
 - a) Pressure test the seal assembly per wellhead provider's procedure to confirm integrity to 250 / 10,000psi
5. **Install back-pressure valve** (BPV, rated to 10,000psi) in hanger per wellhead provider's procedure
6. **Confirm the well is static**
 - a) Flow indicates failure of hydrostatic barrier or mechanical barriers and underbalanced well conditions. *If flow is observed, cementing will be performed online*
 - b) Notify BLM of intent to proceed with nipple down and offline cementing
7. With the well secured and BLM notified; **nipple down BOP and skid rig** to next well on pad
 - a) *Note, verify offline cementing criteria is met before N/D BOP. If unable to meet criteria, cement job will be performed online*
8. **Install and test gate valve**
 - a) Test connection between wellhead adapter seals against hanger neck and ring gasket to 250 / 10,000 psi for 5 minutes
9. **Remove BPV from casing**
10. **Rig up cement head and cementing lines**
11. **Perform production cement job** as per procedure
 - a) Confirm flowpath and valve alignment; default routing to take returns from casing upper side outlet valves → offline cementing manifold → shakers / pits
 - b) *If elevated gas or flow trend observed, reroute returns through choke manifold for ability to hold backpressure to maintain well control and route mud returns to MGS*
12. **Confirm well is static** and double floats are holding after cement job
 - a) *If double floats do not hold, the well can be secured by closing gate valve or cement head or by holding and monitoring pressure at the cement truck while WOC*
13. **Rigdown surface equipment**
 - a) Bleed any remaining line pressure and remove cement head
 - b) Install BPV per wellhead providers recommended procedure
 - c) Close upper casing side outlet valves, break and R/D offline cement lines
 - d) Remove 10M gate valve and wellhead adapter
14. **Secure well**
 - a) Install temporary abandonment cap

Process and Equipment

ONLINE CEMENTING











OFFLINE CEMENTING



KEY DIFFERENCES

1. Rig BOP replaced by gate valve and WH adaptor assembly (10M rated)
2. Addition of offline cementing manifold and high pressure iron to direct fluid returns to rig active system and/or choke manifold
3. Packoff annulus barrier in place and tested prior to cementing operations (10M rated)
4. Cement truck performs cement job displacement (vs rig pumps)

Barrier Comparison

	ONLINE		OFFLINE (PROPOSED)	
	Casing	Annulus	Casing	Annulus
N/D BOP & Skid Rig			1. Hydrostatic 2. Double float valves 3. BPV 	1. Hydrostatic 2. Packoff 
Install Cement Head	1. Hydrostatic 2. Double float valves	1. Hydrostatic 2. BOP (annular, VBR)	1. Hydrostatic 2. Double float valves 3. Gate valve 	1. Hydrostatic 2. Packoff 3. Wellhead Adaptor 
Perform Cement Job	1. Double float valves 2. Cement Head	1. Hydrostatic 2. BOP (annular, VBR)	1. Double float valves 2. Cement Head 3. Gate valve 	1. Hydrostatic 2. Packoff 3. Wellhead Adaptor 
Remove Cement Head	1. Double float valves	1. Hydrostatic 2. BOP (annular, VBR)	1. Double float valves 2. Gate valve 	1. Hydrostatic 2. Packoff 3. Wellhead Adaptor 
N/D & Install TA Cap	1. Double float valves 2. BPV	1. Hydrostatic 2. Packoff	1. Double float valves 2. BPV	1. Hydrostatic 2. Packoff

Well Control Response Plan

The following well control response plan for offline cementing is the same as for online cementing.

1. **Pre-job design:** Cement job designed to define max pump rates to reduce ECD and avoid losses during cement job.
2. **Identify the influx / re-route return flow:** If an influx is observed, the cementing manifold would be re-routed to direct flow to the rig choke manifold (instead of the shakers). If gas was encountered or a kick was detected, continue pumping the job through the rig choke / gas buster while controlling annulus back pressure through the rig choke. Shut the well in once the job is finished (to ensure cement does not set up inside casing). Roles & responsibilities are as follows:
 - Onsite well site representative responsible for monitoring and helping to identify if an influx occurred with support from the rig crews.
 - Rig crew responsible for shutting in the well.
 - Onsite well site representative responsible for operating the rig choke manifold.
3. **Monitor pressure:** If well is shut-in, pressure monitored while cement is building compressive strength.
4. **Flow check:** Once sufficient time is allocated to build compressive strength, perform flow check.
5. **Shut-in:** If annulus pressure / flow is observed, shut-in the well at the casing valves.
6. **Kill the well:** Pump kill weight mud or cement (depending on well conditions) via bradenhead squeeze down the annulus using the rig pumps tied into the cementing manifold or the cement truck.
7. **Flow check:** Flow check the well to confirm static.

ExxonMobil



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

SUPO Data Report

03/16/2026

APD ID: 10400101942

Submission Date: 11/19/2024

Highlighted data reflects the most recent changes

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Show Final Text

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

SOPHIA_20_29_32_FEDERAL_STATE_COM_302H_ROAD_MAP_20251111094318.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

2018092191_XTO_ROSS_DRAW_NORTH_PROPOSED_ACCESS_RD_LINE_FINAL_10_29_2025_20251111094442.pdf

New road type: RESOURCE

Length: 1137.16 Feet

Width (ft.): 30

Max slope (%): 2

Max grade (%): 3

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: 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, head cutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.

New road access plan or profile prepared? N

New road access plan

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: GRAVEL

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: STRIPPED

Access other construction information: Approximately 6 inches of topsoil (root zone) will be stripped from the proposed access road prior to any further construction activity.

Access miscellaneous information: All proposed access routes to the well sites as per the 43 CFR requirements have been described in the new road plat issued by the registered surveyor. The same has been attached with the individual APDs under SUPO Section 2. Proposed routes to the individual wells on the well site locations have been shown & identified on the well specific vicinity, topography & access road maps attached in SUPO section 1 of the individual APDs.

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: LOW WATER

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: 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) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Existing Well map Attachment:

SOPHIA_20_29_32_FEDERAL_STATE_COM_1Mile_Radius_Map_20241114161047.pdf

Operator Name: XTO ENERGY INCORPORATED**Well Name:** SOPHIA 20-29-32 FEDERAL STATE COM**Well Number:** 302H**Section 4 - Location of Existing and/or Proposed Production Facilities****Submit or defer a Proposed Production Facilities plan? SUBMIT**

Production Facilities description: Production Facilities. Some production facilities will be located on each of the well pads A, B, C/D. In addition to this, there is a proposed facility with center of the pad located at 2177' FEL & 1290' FNL 19-26S-30E & an existing facility located in NWNW & NENW of 25-26S-29E. Flowlines: Up to 20 composite flex pipe or steel flowlines with a maximum safety pressure rating of 750psi (operating pressure: 125psi) will be within proposed corridors where the oil, gas, and water will be metered and appropriately separated. A plat of the proposed flowline route showing length, beginning, and ending points for the lease is attached. Disposal Facilities: Produced water will be hauled from location to a commercial disposal facility as needed. Flare. Located on the proposed facility pad and will be sized for 60 to 120 mmscf/d with min 150 of distance between all facility equipment, road and well pad locations for safety purposes. Aboveground Structures: All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted earth-tone within BLM Standard Environmental Color Chart (CC-001: June 2008) that reduce the visual impacts of the built environment. Containment Berms: Containment berms constructed completely around production facilities designed to hold fluids. The containment berms will be constructed of compacted subsoil/ Caliche Electrical. All electrical lines will be primary 115kV to properly run expected production equipment. A plat of the proposed electrical showing length, beginning, and ending points is attached.

Production Facilities map:

XTO_ROSS_DRAW_NORTH_CVB_PLOT_20241108145459.pdf

ROSS_DRAW_EXISTING_BATTERY_PLOT_20250629100831.pdf

2018092191_XTO_ROSS_DRAW_NORTH_PROPOSED_CVB_PAD_LAYOUT_FINAL_20250629100833.pdf

ROSS_DRAW_PAD_CD___PLOT_PLAN_20251111094648.pdf

2018092191_XTO_ROSS_DRAW_NORTH_PROPOSED_FLOWLINE_FINAL_10_29_2025_20251111094650.pdf

2018092191_XTO_ROSS_DRAW_NORTH_PROPOSED_ELECTRIC_LINE_FINAL_10_29_2025_20251111094709.pdf

Section 5 - Location and Types of Water Supply**Water Source Table****Water source type:** OTHER**Describe type:** FRESH WATER**Water source use type:** SURFACE CASING

STIMULATION

Source latitude:**Source longitude:****Source datum:****City:****Water source permit type:** PRIVATE CONTRACT**Water source transport method:** TRUCKING**Source land ownership:** COMMERCIAL

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Source transportation land ownership: FEDERAL

Water source volume (barrels): 550000

Source volume (acre-feet): 70.89120298

Source volume (gal): 23100000

Water source type: OTHER

Describe type: RAW PRODUCED WATER

Water source use type: INTERMEDIATE/PRODUCTION CASING

Source latitude:

Source longitude:

Source datum:

City:

Water source permit type: PRIVATE CONTRACT

Water source transport method: PIPELINE

Source land ownership: COMMERCIAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 550000

Source volume (acre-feet): 70.89120298

Source volume (gal): 23100000

Water source type: RECYCLED

Water source use type: INTERMEDIATE/PRODUCTION CASING

Source latitude:

Source longitude:

Source datum:

City:

Water source permit type: PRIVATE CONTRACT

Water source transport method: PIPELINE

Source land ownership: COMMERCIAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 550000

Source volume (acre-feet): 70.89120298

Water source and transportation

SOPHIA_20_29_32_FEDERAL_STATE_COM_302H_VICINITY_MAP_20251111094752.pdf

Water source comments: The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. Water composition depends on the mud type needed per formation to protect useable water. Fresh water is trucked to location for use in surface casing drilling and cementing. All other water is

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

either brackish or raw produced water coming from a third party that is all piped from either a pipeline or a pond (31.998189, -103.941096) to the drilling location. Anticipated water usage for drilling includes an estimated 50,000 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 550,000 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? N

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Caliche Pit location: 32.031466, -103.941974

Construction Materials source location

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: CUTTINGS

Amount of waste: 2100 pounds

Waste disposal frequency : One Time Only

Safe containment description: 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.

Safe containmant attachment:

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

Disposal type description:

Disposal location description: NMOCD Approved Commercial Disposal Facility

Waste type: SEWAGE

Waste content 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.

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 containmant attachment:

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

Disposal type description:

Disposal location description: A licensed 3rd party contractor 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: 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.

Safe containmant attachment:

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

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

Disposal type description:

Disposal location description: NMOCD Approved Commercial Disposal Facility

Waste type: GARBAGE

Waste content 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.

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 containmant attachment:

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

Disposal type description:

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

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location 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 or will be

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Well pad proposed disturbance (acres): 26.744	Well pad interim reclamation (acres): 7.61	Well pad long term disturbance (acres): 19.134
Road proposed disturbance (acres): 0.79	Road interim reclamation (acres): 0	Road long term disturbance (acres): 0.79
Powerline proposed disturbance (acres): 5.82	Powerline interim reclamation (acres): 5.82	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres): 34.17	Pipeline interim reclamation (acres): 34.17	Pipeline long term disturbance (acres): 0
Other proposed disturbance (acres): 9.77	Other interim reclamation (acres): 0	Other long term disturbance (acres): 9.77
Total proposed disturbance: 77.294	Total interim reclamation: 47.6	Total long term disturbance: 29.694

Disturbance Comments:

Reconstruction method: The original stockpiled 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 stockpiled 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, nave (or otherwise approved) plan community will be established on the site with a density sufficient to control erosion and invasion by non-nave 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: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona-Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility.

Existing Vegetation at the well pad

Existing Vegetation Community at the road: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona-Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility.

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona-Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility.

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona-Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility.

Operator Name: XTO ENERGY INCORPORATED	
Well Name: SOPHIA 20-29-32 FEDERAL STATE COM	Well Number: 302H

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

[Seed](#)

[Seed Table](#)

Seed Summary	
Seed Type	Pounds/Acre

Total pounds/Acre:

Seed reclamation

[Operator Contact/Responsible Official](#)

First Name: Robert

Last Name: Bartels

Phone: (406)478-3617

Email: Robert.e.bartels@exxonmobil.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 le 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? N

Existing invasive species treatment description:

Existing invasive species treatment

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Weed treatment plan description: Weed control for all phases will be through the use of approved pesticides and herbicides according to applicable State, Federal and local laws.

Weed treatment plan

Monitoring plan description: Monitoring of invasive and noxious weeds will be visual and as-needed. If it is determined additional methods are required to monitor invasive and noxious weeds, appropriate BLM authorities will be contacted with a plan of action for approval prior to implementation.

Monitoring plan

Success standards: 100% compliance with applicable regulations.

Pit closure description: There will be no reserve pit as each well will be drilled utilizing a closed loop mud system. The closed loop system will meet the NMOCD requirements 19.15.17.

Pit closure attachment:

Section 11 - Surface

Disturbance type: EXISTING 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:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

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: TRANSMISSION LINE

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:

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

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: OTHER

Describe: CENTRAL VESSEL BATTERY

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:

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

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 Forest/Grassland:

USFS Ranger District:

Section 12 - Other

Right of Way needed? Y

Use APD as ROW? Y

ROW Type(s): 281001 ROW - ROADS,285003 ROW – POWER TRANS,288100 ROW – O&G Pipeline,288101 ROW – O&G Facility Sites,289001 ROW- O&G Well Pad

ROW

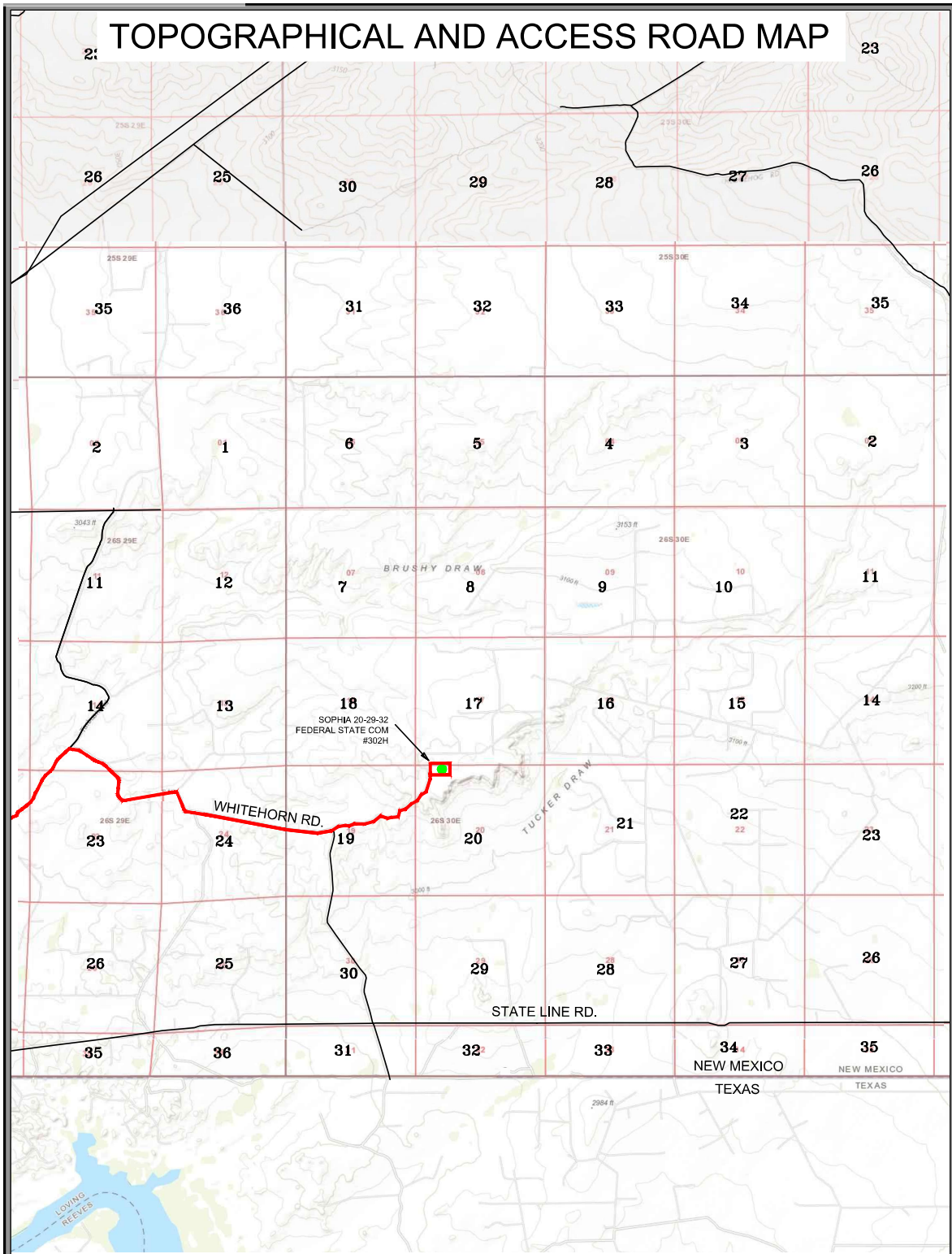
SUPO Additional Information: SUPO written for all wells in section/project area.

Use a previously conducted onsite? Y

Previous Onsite information: The XTO Energy Inc. representatives and BLM NRS were on location for onsite on 05/28/2024.

Other SUPO

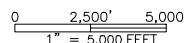
Ross_Draw_SUPO_Updated_20251111095222.pdf



DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF US HIGHWAY 285 S AND WHITEHORN RD, GO EAST ON WHITEHORN RD FOR APPROX. 11.2 MILES TO A LEASE ROAD. GO EAST ON LEASE ROAD FOR APPROX. 1.0 MILE AND THE LOCATION IS TO THE EAST.

SOPHIA 20-29-32 FEDERAL STATE COM #302H
LOCATED 1,020 FEET FROM THE WEST LINE
AND 84 FEET FROM THE NORTH LINE OF
SECTION 20, TOWNSHIP 26 SOUTH, RANGE 30
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO



2205 Walnut Street - Columbus, TX 78934
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10000100
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DATE:	11-4-2025	PROJECT NO:	2024070333
DRAWN BY:	LM	SCALE:	1" = 5,000'
CHECKED BY:	CH	SHEET:	3 OF 3
FIELD CREW:	IR	REVISION:	

SHEET MATCH PAGE 2

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	S 24°46'49" W	324.38'
L2	N 90°00'00" W	131.02'

TOTAL LENGTH = 455.40 FEET OR 27.60 RODS

SECTION 24

TOWNSHIP 26 SOUTH, RANGE 29 EAST
NEW MEXICO PRINCIPAL MERIDIAN

OWNER: U.S.A. SE/4 SE/4

SECTION 19

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: U.S.A.



0 250' 500'
1" = 500 FEET

GENERAL NOTES

1. ALL BEARINGS, DISTANCE, AND COORDINATE VALUES SHOWN HEREON ARE GRID VALUES AND ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE 3001, U.S. SURVEY FEET.



3/4" FOUND IRON PIPE W/ BRASS CAP

LEGEND

- SECTION LINE
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- EXISTING FENCE
- PROPOSED PAD
- PROPOSED 30' ACCESS ROAD
- EXISTING POWER POLE
- FOUND MONUMENT AS NOTED
- EXISTING WELL

SECTION 30

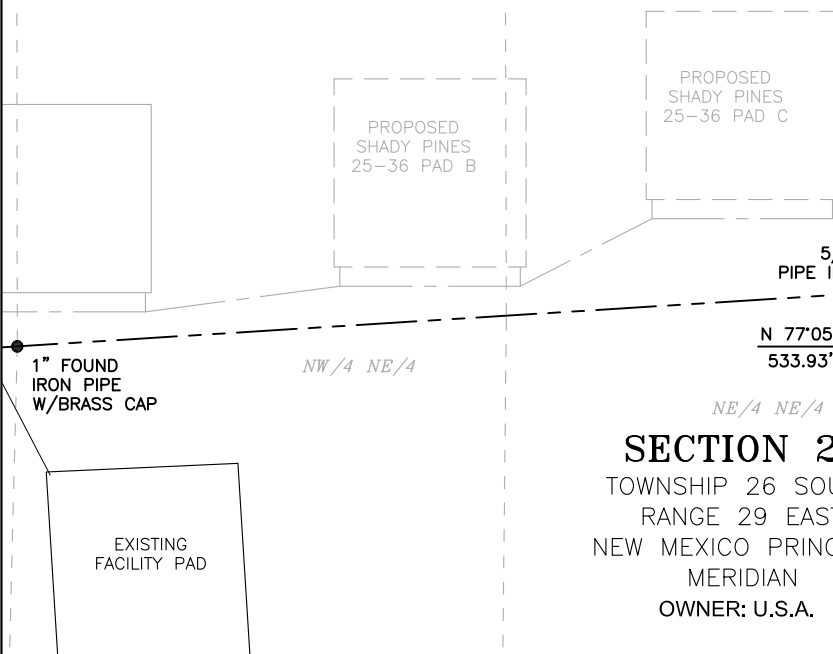
TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: U.S.A.

NE/4 NW/4

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

Tim C. Pappas 29 October 2025

TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209



1" FOUND IRON PIPE W/BRASS CAP

5/8" FOUND IRON PIPE IN STONE MOUND

N 77°05'04" W
533.93' (TIE)

P.O.B. "A"
NAD 83 (NME)
Y = 371,620.08
X = 667,369.92

P.O.T. "A"
NAD 83 (NME)
Y = 371,325.57
X = 667,102.95

EXHIBIT OF:

A PROPOSED CENTERLINE OF A 30' WIDE
ACCESS ROAD FOR:
XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB
SITUATED IN SECTIONS 19 AND 30,
TOWNSHIP 26 SOUTH, RANGE 30 EAST,
NEW MEXICO PRINCIPAL MERIDIAN,
EDDY COUNTY, NEW MEXICO

FSC INC
SURVEYORS+ENGINEERS
2205 Walnut Street -
Columbus, TX 78934
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10000100
www.fscinc.net

DATE: 10-29-2025
DRAWN BY: LM
CHECKED BY: CH
FIELD CREW: RE
PROJECT NO: 2018092191
SCALE: 1" = 500'
SHEET: 1 OF 2
REVISION: 1

13
25

1 1/2" FOUND IRON PIPE W/ BRASS CAP

3/4" FOUND IRON PIPE W/ BRASS CAP

LINE TABLE "B"

L3	N 00°00'00" W	681.76'
----	---------------	---------

TOTAL LENGTH = 681.76 FEET OR 41.32 RODS

NW/4 NW/4

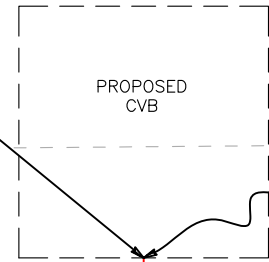
NE/4 NW/4

NW/4 NE/4

N 60°35'14" W
3,244.53' (TIE)

SECTION 19

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: U.S.A.

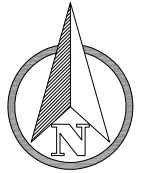


P.O.T. "B"
NAD 83 (NME)
Y = 375,167.81
X = 669,711.54

ROSS DRAW NORTH PROPOSED ACCESS ROADS DESCRIPTION:

SURVEY OF A STRIP OF LAND 30 FEET WIDE AND 1,137.16 FEET, 68.92 RODS, OR 0.22 MILES IN LENGTH CROSSING SECTIONS 19 & 30, TOWNSHIP 26 SOUTH, RANGE 30 EAST N.M.P.M. EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET RIGHT AND 15.0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE SURVEY, COMPRISING OF 0.79 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

- SW/4 SW/4 SECTION 19 = 186.33 FEET = 11.29 RODS = 0.13 OF AN ACRE
- SW/4 NE/4 SECTION 19 = 681.76 FEET = 41.32 RODS = 0.47 OF AN ACRE
- NW/4 NW/4 SECTION 30 = 269.07 FEET = 16.31 RODS = 0.19 OF AN ACRE



0 250' 500'
1" = 500 FEET

SW/4 NW/4

SE/4 NW/4

SW/4 NE/4

LEGEND

- SECTION LINE
- EXISTING PAD
- EXISTING PIPELINE
- OHE --- EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- X --- EXISTING FENCE
- PROPOSED PAD
- PROPOSED 30' ACCESS ROAD
- ⊕ EXISTING POWER POLE
- FOUND MONUMENT AS NOTED

3/4" FOUND IRON PIPE W/ BRASS CAP

P.O.B. "B"
NAD 83 (NME)
Y = 374,486.06
X = 669,711.54

NW/4 SE/4

NE/4 SE/4

NW/4 SW/4

NE/4 SW/4

SHEET MATCH PG. 1

EXHIBIT OF:
A PROPOSED CENTERLINE OF A 30' WIDE
ACCESS ROAD FOR:

XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB
SITUATED IN SECTIONS 19 AND 30,
TOWNSHIP 26 SOUTH, RANGE 30 EAST,
NEW MEXICO PRINCIPAL MERIDIAN,
EDDY COUNTY, NEW MEXICO



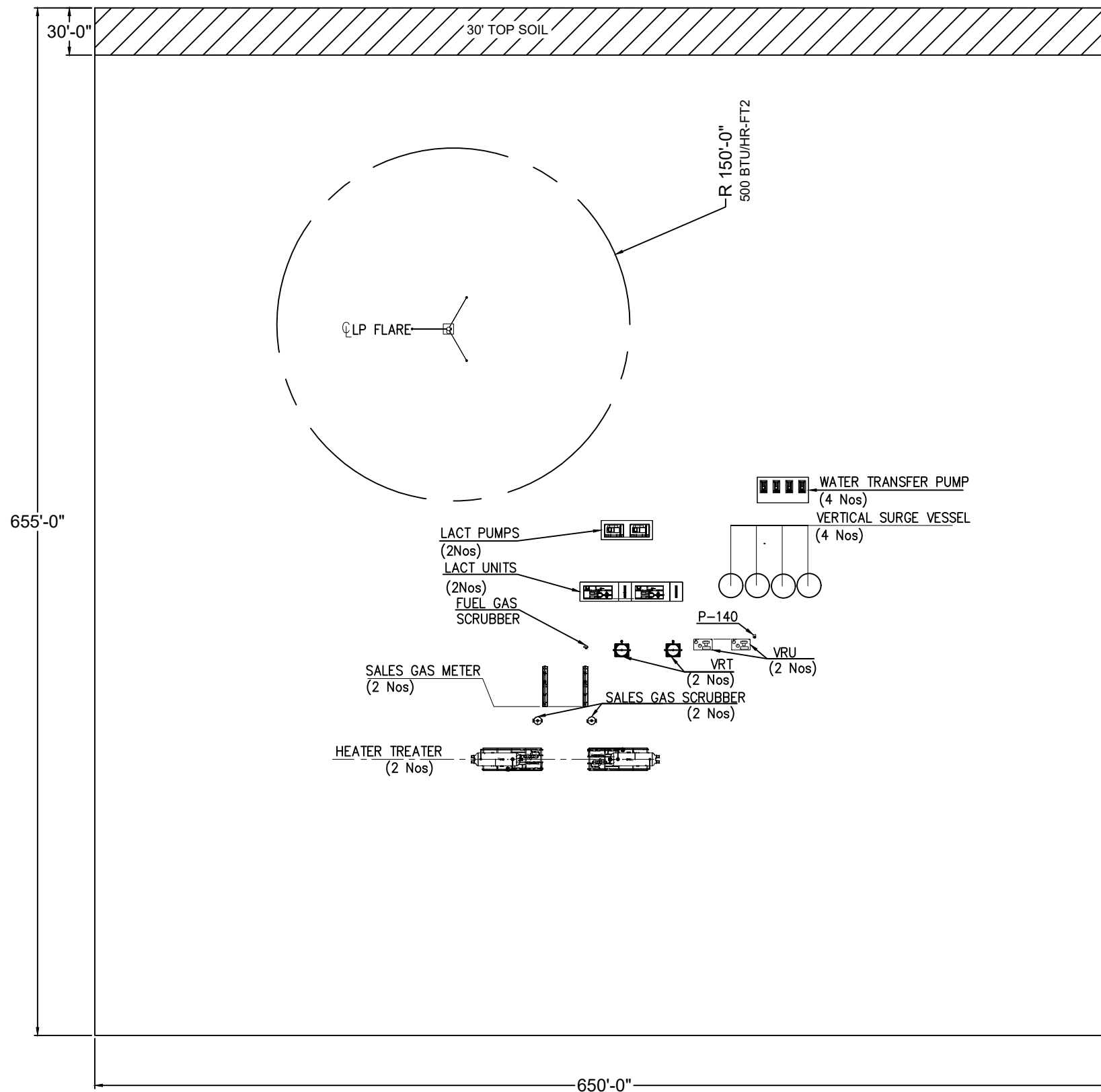
GENERAL NOTES

- ALL BEARINGS, DISTANCE, AND COORDINATE VALUES SHOWN HEREON ARE GRID VALUES AND ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE 3001, U.S. SURVEY FEET.



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2205 Walnut Street -
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www.fscinc.net

DATE: 10-29-2025
DRAWN BY: LM
CHECKED BY: CH
FIELD CREW: RE
PROJECT NO: 2018092191
SCALE: 1" = 500'
SHEET: 2 OF 2
REVISION: 1

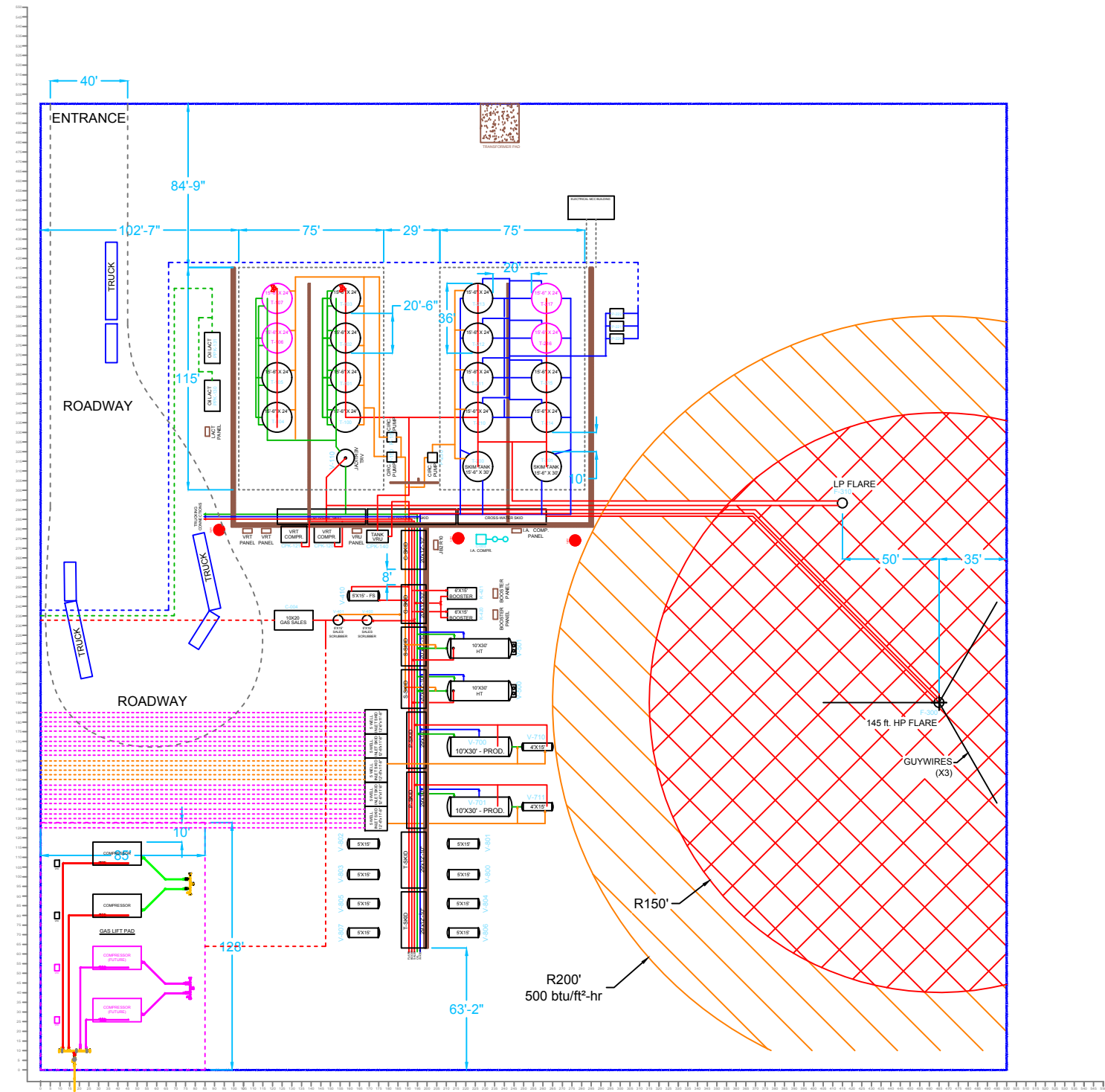


DATE	REV	DESCRIPTION	BY	APPR	ENG
10/25/2025	1	RE-ISSUED FOR CONSTRUCTION	SS	GP	MS
08/20/2024	0	ISSUED FOR CONSTRUCTION	MS	GP	MS



XTO-ROSS DRAW-NORTH
 FACILITY LAYOUT PLAN
 PROPOSED FACILITY PAD
 EDDY COUNTY
 NEW MEXICO

ENGINEER:	MAYANK SINGH	DATE:	08/20/2024	SCALE:	NONE
PROJ. MGR:	GREG POWER	DWG NO.	XTO-ROSS-DRAW-CVB-PLOT-0001	REV.	1
DRAFTED BY:	MAYANK SINGH	CAD FILE NO.	XTO-ROSS-DRAW-CVB-PLOT-0001		
DOC. TYPE:	-				



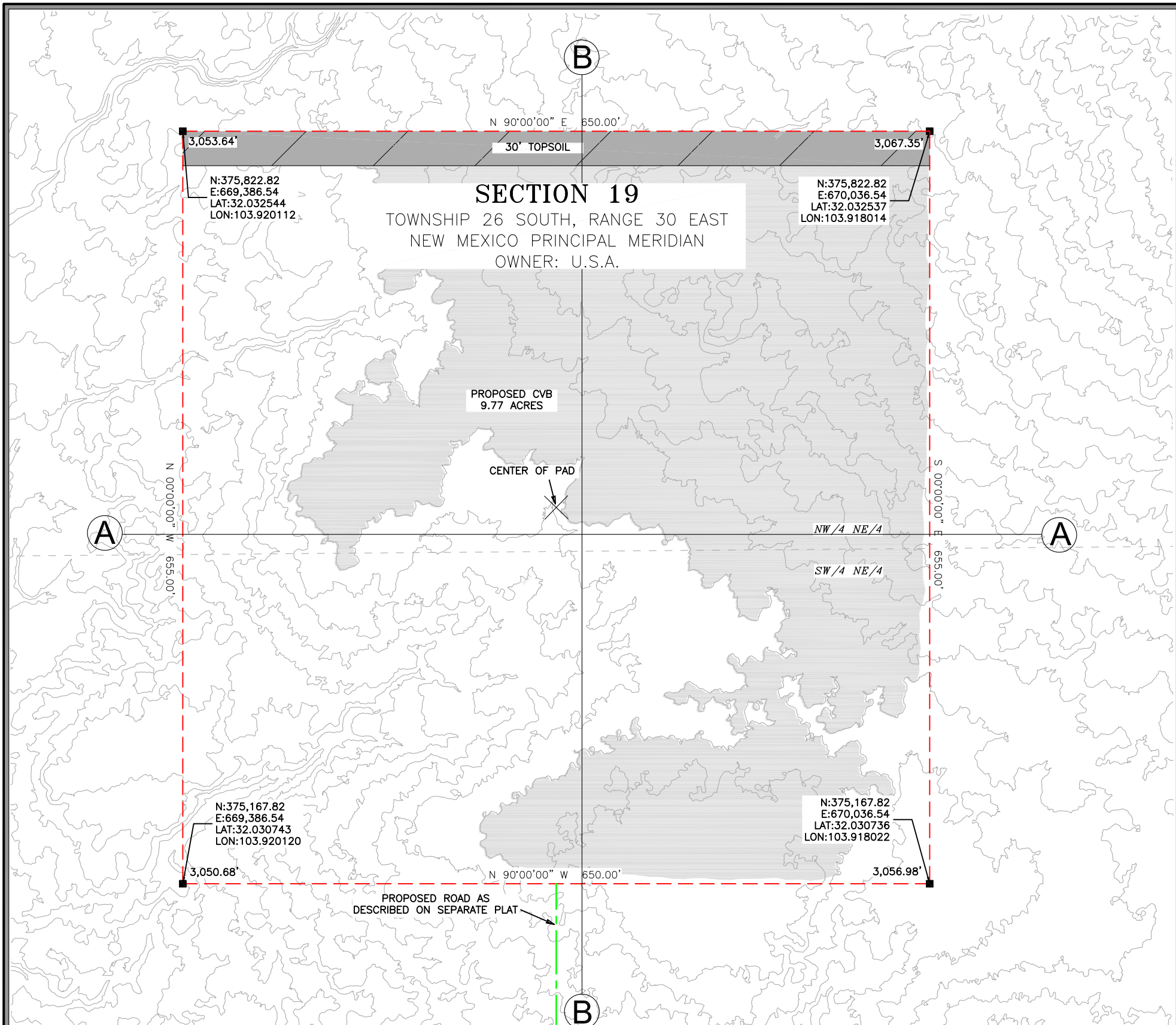
NOTES:
1)
2)

ISSUED FOR CONSTRUCTION

DATE: _____
SIGN: _____

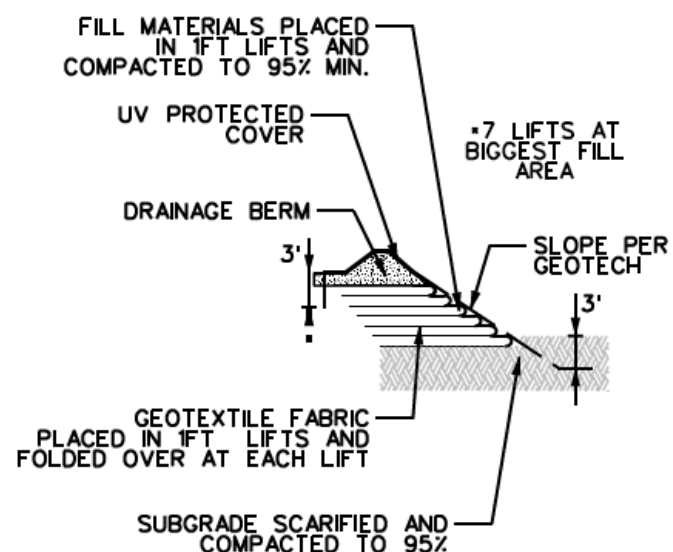
Revision	Description of Change	Date	By
0	ISSUED FOR CONSTRUCTION	11-19-18	JSF
1	CONSTRUCTION UPDATES	12-13-18	JSF
2	UPDATED PER NEW PLAT	01-08-19	JSF
3	ADDED EQPT, & MOVED FACILITY 30' S.	02-18-19	JSF
4	ADDED GAS LIFT PAD & REROUTE FLOWLINES	06-13-19	JSF

		ROSS DRAW 25 20K TANK BATTERY COUNTY	
		PLOT PLAN	
XTO - DB - RD25 - 0TBAT - PLOT - 000 - 0100 - 4			
Company	Division	Field	Facility
Doc Type	Equip	Doc #	Revision



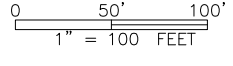
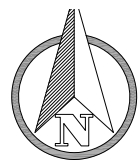
TOTAL DISTURBED AREA=9.77 AC.

CUT=19,789 CY
 FILL=15,409 CY
 6" TOPSOIL=7080 CY
 8" CALICHE BASE=9440 CY



REINFORCED SOIL SLOPE WALL
N.T.S.

- LEGEND
- - - - - PROPOSED PAD
 - - - - - PROPOSED ACCESS ROAD
 - SECTION LINE
 - CUT AREA



I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

Tim C. Pappas 27 June 2025

TIM C. PAPPAS
 REGISTERED PROFESSIONAL LAND SURVEYOR
 STATE OF NEW MEXICO NO. 21209

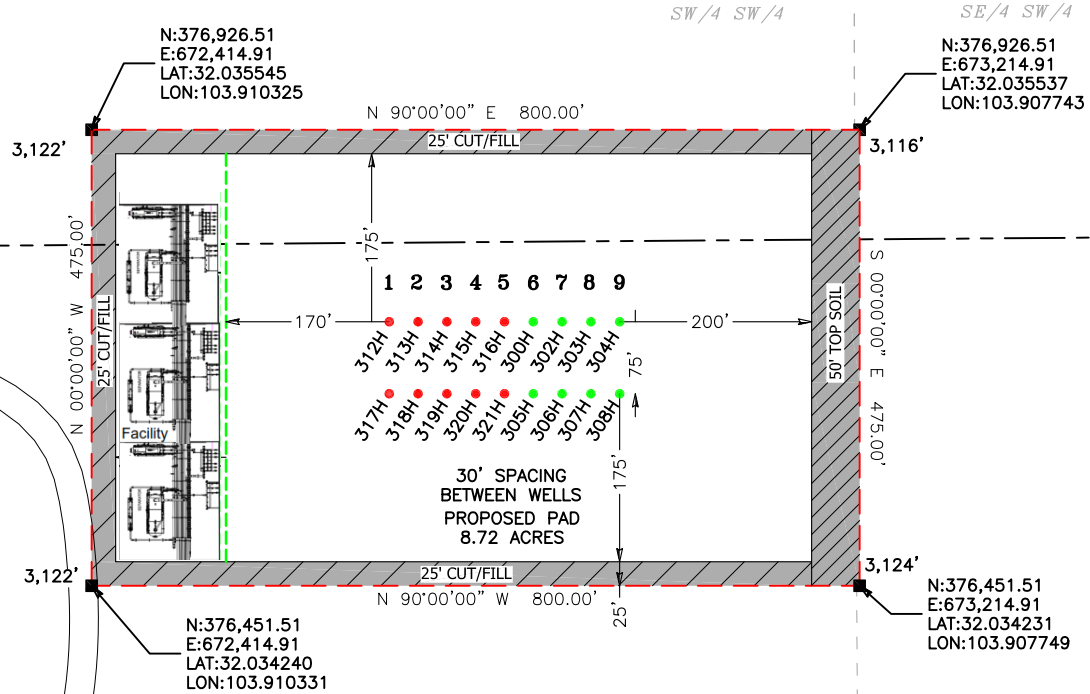
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XTO ENERGY, INC.
 PAD LAYOUT
 ROSS DRAW NORTH CVB PAD
 LOCATED 2,177 FEET FROM THE EAST LINE
 AND 1,290 FEET FROM THE NORTH LINE OF
 SECTION 19, TOWNSHIP 26 SOUTH, RANGE 30
 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	6-27-2025
DRAWN BY:	LM
CHECKED BY:	WL
FIELD CREW:	SL
PROJECT NO:	2018092191
SCALE:	1" = X
SHEET:	1 OF 1
REVISION:	NO

SECTION 17

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.



SECTION 20

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF US HIGHWAY 285 S AND WHITEHORN RD, GO SOUTHEAST ON WHITEHORN RD FOR APPROX. 11.2 MILES. CONTINUE STRAIGHT (EAST) ONTO LEASE RD AND GO APPROX. 1.0 MILE, ARRIVING AT THE LOCATION, TO THE EAST.

GENERAL NOTES

1. BASIS OF BEARINGS AND COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83, GRID.

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

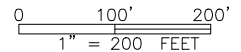
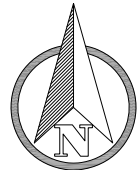
Tim C. Pappas
29 October 2025

TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209



LEGEND

- PROPOSED PAD
- EXISTING ROAD
- - - SECTION LINE
- SOPHIA 20-29-32 FEDERAL STATE COM
- BLANCHE 20-29-32 FEDERAL STATE COM



XTO ENERGY, INC.

PAD LAYOUT

ROSS DRAW NORTH PAD C/D
LOCATED 930 FEET FROM THE WEST LINE
AND 120 FEET FROM THE NORTH LINE OF
SECTION 19, TOWNSHIP 26 SOUTH, RANGE 30
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO



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DATE:	10-29-2025	PROJECT NO:	2018092191
DRAWN BY:	LM	SCALE:	1" = 200'
CHECKED BY:	CH	SHEET:	1 OF 1
FIELD CREW:	RE/DL	REVISION:	2

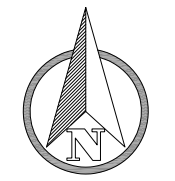
SHEET MATCH PAGE 2

SECTION 24

TOWNSHIP 26 SOUTH, RANGE 29 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 19

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.



GENERAL NOTES

- ALL BEARINGS, DISTANCE, AND COORDINATE VALUES SHOWN HEREON ARE GRID VALUES AND ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE 3001, U.S. SURVEY FEET.



3/4" FOUND IRON PIPE W/ BRASS CAP

LEGEND

- SECTION LINE
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- EXISTING FENCE
- PROPOSED PAD
- PROPOSED 100' FLOW LINE
- PROPOSED 60' FLOW LINE
- PROPOSED 30' ROAD
- EXISTING POWER POLE
- FOUND MONUMENT AS NOTED
- EXISTING WELL

SECTION 30

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 25

TOWNSHIP 26 SOUTH, RANGE 29 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

EXHIBIT OF:
A PROPOSED CENTERLINE OF A 60' & 100' FLOWLINE FOR:

XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB
SITUATED IN SECTIONS 24 AND 25, TOWNSHIP 26 SOUTH, RANGE 29 EAST, AND SECTIONS 19, 20 & 30, TOWNSHIP 26 SOUTH, RANGE 30 EAST, NEW MEXICO PRINCIPAL MERIDIAN, EDDY COUNTY, NEW MEXICO

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

Tim C. Pappas
29 October 2025

TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209



FSC INC
SURVEYORS+ENGINEERS
2205 Walnut Street - Columbus, TX 78934
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10000100
www.fscinc.net

DATE: 10-29-2025
DRAWN BY: LM
CHECKED BY: CH
FIELD CREW: RE
PROJECT NO: 2018092191
SCALE: 1" = 500'
SHEET: 1 OF 4
REVISION: 3

13
25

1 1/2" FOUND IRON PIPE W/ BRASS CAP

3/4" FOUND IRON PIPE W/ BRASS CAP

1 1/2" FOUND IRON PIPE

NW/4 NW/4

NE/4 NW/4

NW/4 NE/4

NE/4 NE/4

PRO PAC

NW/4 NW/4

SECTION 19

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

N 62°41'38" W
3,473.36' (TIE)

PROPOSED PAD B

P.O.T. "D"
NAD 83 (NME)
Y = 376,195.60
X = 671,363.53

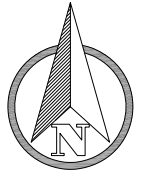
DRY HOLE MARKER

P.O.B. "D"
NAD 83 (NME)
Y = 375,778.53
X = 672,153.72

PROPOSED CVB

P.O.T. "A"
NAD 83 (NME)
Y = 375,167.81
X = 669,646.54

P.O.B. "C"
NAD 83 (NME)
Y = 375,167.81
X = 669,756.54



0 250' 500'
1" = 500 FEET

SW/4 NW/4

SE/4 NW/4

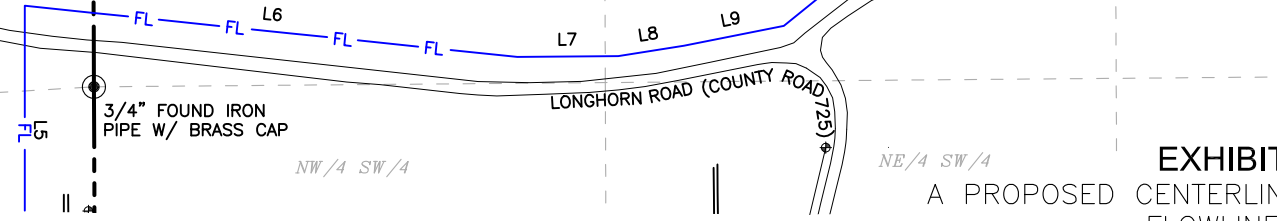
SW/4 NE/4

SE/4 NE/4

SW/4 NW/4

LEGEND

- SECTION LINE
- EXISTING PAD
- EXISTING PIPELINE
- OHE EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- X --- EXISTING FENCE
- PROPOSED PAD
- FL --- PROPOSED 100' FLOW LINE
- FL --- PROPOSED 60' FLOW LINE
- PROPOSED 30' ROAD
- ⊕ EXISTING POWER POLE
- FOUND MONUMENT AS NOTED



SHEET MATCH PG. 1

EXHIBIT OF:

A PROPOSED CENTERLINE OF A 60' & 100' FLOWLINE FOR:
XTO ENERGY, INC.
 ROSS DRAW NORTH PADS A, B, C/D & CVB
 SITUATED IN SECTIONS 24 AND 25,
 TOWNSHIP 26 SOUTH, RANGE 29 EAST, AND
 SECTIONS 19, 20 & 30, TOWNSHIP 26
 SOUTH, RANGE 30 EAST,
 NEW MEXICO PRINCIPAL MERIDIAN,
 EDDY COUNTY, NEW MEXICO



GENERAL NOTES

1. ALL BEARINGS, DISTANCE, AND COORDINATE VALUES SHOWN HEREON ARE GRID VALUES AND ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE 3001, U.S. SURVEY FEET.

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 www.fscinc.net

DATE: 10-29-2025
 DRAWN BY: LM
 CHECKED BY: CH
 FIELD CREW: RE
 PROJECT NO: 2018092191
 SCALE: 1" = 500'
 SHEET: 2 OF 4
 REVISION: 3

SECTION 18

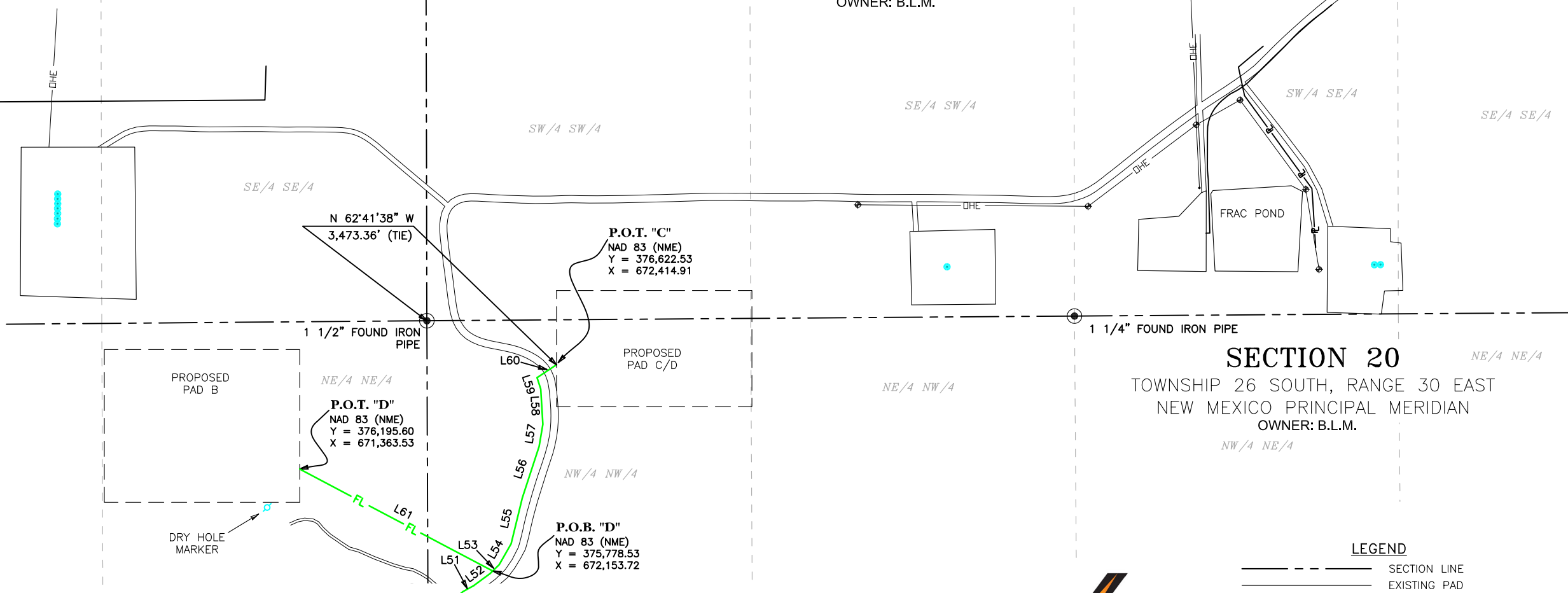
TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 17

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 20

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.



SHEET MATCH PG. 2

EXHIBIT OF:
A PROPOSED CENTERLINE OF A 60' & 100'
FLOWLINE FOR:
XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB



LEGEND

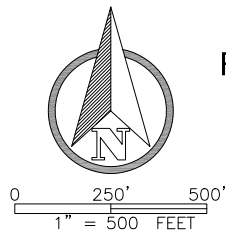
---	SECTION LINE
- - - -	EXISTING PAD
—R—R—	EXISTING PIPELINE
—DHE—	EXISTING OVERHEAD ELECTRIC
—X—X—	EXISTING ROAD
---	EXISTING FENCE
- - - -	PROPOSED PAD
—FL—FL—	PROPOSED 100' FLOW LINE
—FL—FL—	PROPOSED 60' FLOW LINE
---	PROPOSED 30' ROAD
⊕	EXISTING POWER POLE
●	FOUND MONUMENT AS NOTED
●	EXISTING WELL

GENERAL NOTES

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FIELD CREW: RE
PROJECT NO: 2018092191
SCALE: 1" = 500'
SHEET: 3 OF 4
REVISION: 3



SITUATED IN SECTIONS 24 AND 25,
TOWNSHIP 26 SOUTH, RANGE 29 EAST, AND
SECTIONS 19, 20 & 30, TOWNSHIP 26
SOUTH, RANGE 30 EAST,
NEW MEXICO PRINCIPAL MERIDIAN,
EDDY COUNTY, NEW MEXICO

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 00°00'00" W	1,121.07'
L2	N 90°00'00" E	988.01'
L3	N 00°00'00" W	175.43'
L4	N 90°00'00" E	886.11'
L5	N 00°00'00" W	2,041.32'
L6	S 84°04'37" E	1,289.02'
L7	N 89°34'07" E	262.97'
L8	N 80°59'30" E	173.69'
L9	N 78°49'00" E	265.08'
L10	N 50°59'30" E	254.53'
L11	N 73°58'53" E	245.71'
L12	N 89°59'30" E	130.15'
L13	S 83°03'06" E	151.04'
L14	N 74°31'04" E	253.80'
L15	N 89°23'38" E	169.52'
L16	S 85°55'11" E	150.47'
L17	N 00°00'02" E	637.65'

TOTAL LENGTH OF PROPOSED 100' WIDE FLOW LINE
(LINE TABLE "A") =
9,195.57 FEET OR 557.31 RODS

LINE TABLE "B"

L18	N 00°00'00" W	1,037.41'
L19	N 90°00'00" E	988.01'
L20	N 00°00'00" W	175.43'
L21	N 90°00'00" E	1,072.50'
L22	S 00°00'00" E	822.06'

LINE TABLE "D"

L61	N 62°10'28" W	893.51'
-----	---------------	---------

TOTAL LENGTH OF PROPOSED 60' WIDE FLOW LINE
(LINE TABLE "B, C & D") =
9,509.88 FEET OR 576.36 RODS

LINE TABLE "C"

L23	S 00°00'00" E	645.71'
L24	N 70°42'28" E	248.86'
L25	N 77°03'05" E	105.03'
L26	N 45°22'09" E	200.87'
L27	N 51°49'39" E	86.42'
L28	N 75°06'36" E	62.57'
L29	N 84°48'32" E	70.04'
L30	S 84°52'10" E	50.63'
L31	S 68°45'51" E	46.65'
L32	S 57°00'02" E	98.73'
L33	S 70°57'33" E	44.40'
L34	S 86°53'37" E	33.03'
L35	N 80°59'49" E	151.87'
L36	S 88°19'32" E	116.25'
L37	N 78°09'49" E	63.76'
L38	N 40°49'58" E	54.23'
L39	N 05°22'39" E	65.06'
L40	N 18°26'53" E	83.07'
L41	N 40°24'27" E	85.60'
L42	N 59°03'09" E	50.51'
L43	N 66°35'38" E	202.80'
L44	N 50°48'55" E	170.48'
L45	N 55°02'35" E	82.99'
L46	N 63°09'11" E	225.72'
L47	N 47°13'19" E	77.00'
L48	N 35°37'21" E	158.77'
L49	N 40°47'44" E	76.10'
L50	N 49°07'48" E	83.56'
L51	N 60°56'00" E	50.02'
L52	N 53°42'27" E	84.52'
L53	N 45°42'48" E	51.63'
L54	N 29°43'34" E	98.31'
L55	N 13°40'52" E	193.73'
L56	N 18°12'02" E	221.12'
L57	N 09°27'19" E	92.40'
L58	N 03°30'26" W	144.40'
L59	N 17°38'28" W	48.62'
L60	N 56°20'22" E	95.50'

ROSS DRAW NORTH PROPOSED 60' WIDE BURIED AND SURFACE FLOW LINES DESCRIPTION:

SURVEY OF A STRIP OF LAND 60 FEET WIDE AND 9,509.88 FEET, 576.36 RODS, OR 1.80 MILES IN LENGTH CROSSING SECTIONS 24 & 25, TOWNSHIP 26 SOUTH, RANGE 29 EAST AND SECTIONS 19 & 20, TOWNSHIP 26 SOUTH, RANGE 30 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 SURVEY, COMPRISING OF 13.06 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

NW/4 NE/4 SECTION 25 = 340.33 FEET = 20.63 RODS = 0.47 OF AN ACRE
SW/4 SE/4 SECTION 24 = 1,406.78 FEET = 85.26 RODS = 1.94 ACRES
SE/4 SE/4 SECTION 24 = 1,447.65 FEET = 87.74 RODS = 1.99 ACRES
SW/4 SW/4 SECTION 19 = 825.72 FEET = 50.03 RODS = 1.14 ACRES
NW/4 NW/4 SECTION 30 = 74.92 FEET = 4.54 RODS = 0.10 OF AN ACRE
SW/4 NE/4 SECTION 19 = 1,555.42 FEET = 94.27 RODS = 2.14 ACRES
SE/4 NE/4 SECTION 19 = 1,593.83 FEET = 96.60 RODS = 2.20 ACRES
NE/4 NE/4 SECTION 19 = 673.45 FEET = 40.82 RODS = 0.93 OF AN ACRE
NW/4 NW/4 SECTION 20 = 1,591.76 FEET = 96.47 RODS = 2.15 ACRES

ROSS DRAW NORTH PROPOSED 100' WIDE BURIED AND SURFACE FLOW LINES DESCRIPTION:

SURVEY OF A STRIP OF LAND 100 FEET WIDE AND 9,195.57 FEET, 557.31 RODS, OR 1.74 MILES IN LENGTH CROSSING SECTIONS 24 & 25, TOWNSHIP 26 SOUTH, RANGE 29 EAST AND SECTION 19, TOWNSHIP 26 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO AND BEING 50.0 FEET RIGHT AND 50.0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE SURVEY, COMPRISING OF 21.11 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

NW/4 NE/4 SECTION 25 = 338.97 FEET = 20.54 RODS = 0.78 OF AN ACRE
SW/4 SE/4 SECTION 24 = 1,571.61 FEET = 95.25 RODS = 3.61 ACRES
SE/4 SE/4 SECTION 24 = 1,750.00 FEET = 106.06 RODS = 4.02 ACRES
NE/4 SE/4 SECTION 24 = 1,329.70 FEET = 80.59 RODS = 3.05 ACRES
SE/4 NE/4 SECTION 24 = 401.74 FEET = 24.35 RODS = 0.92 OF AN ACRE
SW/4 NW/4 SECTION 19 = 1,338.20 FEET = 81.10 RODS = 3.07 ACRES
SE/4 NW/4 SECTION 19 = 1,409.20 FEET = 85.41 RODS = 3.24 ACRES
SW/4 NE/4 SECTION 19 = 1,056.15 FEET = 64.01 RODS = 2.42 ACRES

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 RELATIVE TO THE NORTH AMERICAN DATUM (NAD83).

EXHIBIT OF:
A PROPOSED CENTERLINE OF A 60' & 100'
FLOWLINE FOR:

XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB
SITUATED IN SECTIONS 24 AND 25,
TOWNSHIP 26 SOUTH, RANGE 29 EAST, AND
SECTIONS 19, 20 & 30, TOWNSHIP 26
SOUTH, RANGE 30 EAST,
NEW MEXICO PRINCIPAL MERIDIAN,
EDDY COUNTY, NEW MEXICO



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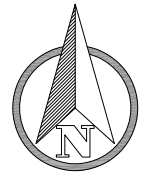
DATE: 10-29-2025
DRAWN BY: LM
CHECKED BY: CH
FIELD CREW: RE
PROJECT NO: 2018092191
SCALE: 1" = 500'
SHEET: 4 OF 4
REVISION: 3

13
25

1 1/2" FOUND IRON PIPE W/ BRASS CAP

3/4" FOUND IRON PIPE W/ BRASS CAP

1 1/2" FOUND IRON PIPE



NW/4 NW/4

NE/4 NW/4

NW/4 NE/4

N 63°49'19" W
3,611.80' (TIE)

SECTION 19

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SW/4 NW/4

SE/4 NW/4

SW/4 NE/4

SE/4 NE/4

GENERAL NOTES

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P.O.B. "A"
NAD 83 (NME)
Y = 375,167.81
X = 669,801.54

P.O.B. "C"
NAD 83 (NME)
Y = 374,587.21
X = 669,801.54

P.O.T. "A"
NAD 83 (NME)
Y = 373,944.64
X = 668,477.38

P.O.T. "D"
NAD 83 (NME)
Y = 376,144.72
X = 671,363.53

P.O.T. "C"
NAD 83 (NME)
Y = 376,466.51
X = 672,414.91

P.O.B. "D"
NAD 83 (NME)
Y = 375,771.21
X = 672,071.18

LEGEND

- SECTION LINE
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- EXISTING FENCE
- PROPOSED PAD
- PROPOSED ELECTRIC LINE
- PROPOSED ACCESS ROAD
- EXISTING POWER POLE
- FOUND MONUMENT AS NOTED

LONGHORN ROAD (COUNTY ROAD 725)

EXHIBIT OF:
A PROPOSED CENTERLINE OF A 30' WIDE
ELECTRIC LINE FOR:
XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB
SITUATED IN SECTIONS 24 AND 25,
TOWNSHIP 26 SOUTH, RANGE 29 EAST, AND
SECTIONS 19, 20 & 30, TOWNSHIP 26
SOUTH, RANGE 30 EAST,
NEW MEXICO PRINCIPAL MERIDIAN,
EDDY COUNTY, NEW MEXICO



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Tim C. Pappas
29 October 2025

TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209

SHEET MATCH PG. 2

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DRAWN BY: LM
CHECKED BY: CH
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PROJECT NO: 2018092191
SCALE: 1" = 500'
SHEET: 1 OF 4
REVISION: 2



SHEET MATCH PAGE 1

SECTION 24

TOWNSHIP 26 SOUTH, RANGE 29 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 19

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

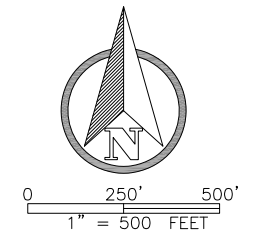
SECTION 25

TOWNSHIP 26 SOUTH,
RANGE 29 EAST
NEW MEXICO PRINCIPAL
MERIDIAN
OWNER: B.L.M.

SECTION 30

TOWNSHIP 26 SOUTH,
RANGE 30 EAST
NEW MEXICO PRINCIPAL
MERIDIAN
OWNER: B.L.M.

EXHIBIT OF:
A PROPOSED CENTERLINE OF A 30' WIDE
ELECTRIC LINE FOR:
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ROSS DRAW NORTH PADS A, B, C/D & CVB
SITUATED IN SECTIONS 24 AND 25,
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EDDY COUNTY, NEW MEXICO



- GENERAL NOTES**
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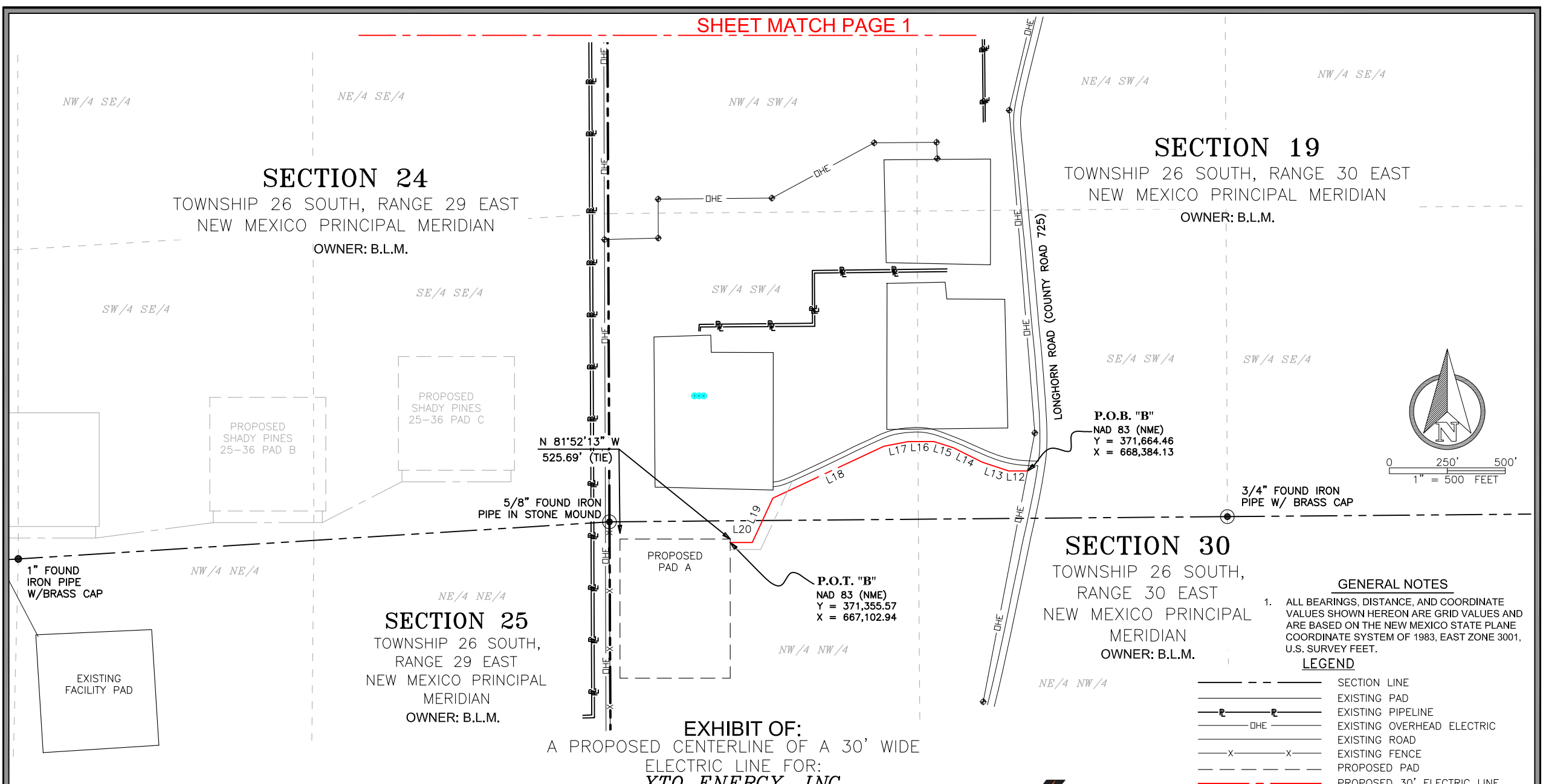
LEGEND

---	SECTION LINE
---	EXISTING PAD
—●—	EXISTING PIPELINE
—DHE—	EXISTING OVERHEAD ELECTRIC
---	EXISTING ROAD
—X—X—	EXISTING FENCE
---	PROPOSED PAD
---	PROPOSED 30' ELECTRIC LINE
---	PROPOSED ACCESS ROAD
+	EXISTING POWER POLE
●	FOUND MONUMENT AS NOTED
●	EXISTING WELL

P.O.B. "B"
NAD 83 (NME)
Y = 371,664.46
X = 668,384.13

P.O.T. "B"
NAD 83 (NME)
Y = 371,355.57
X = 667,102.94

N 81°52'13" W
525.69' (TIE)



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FIELD CREW: RE
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SCALE: 1" = 500'
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REVISION: 2

SECTION 18

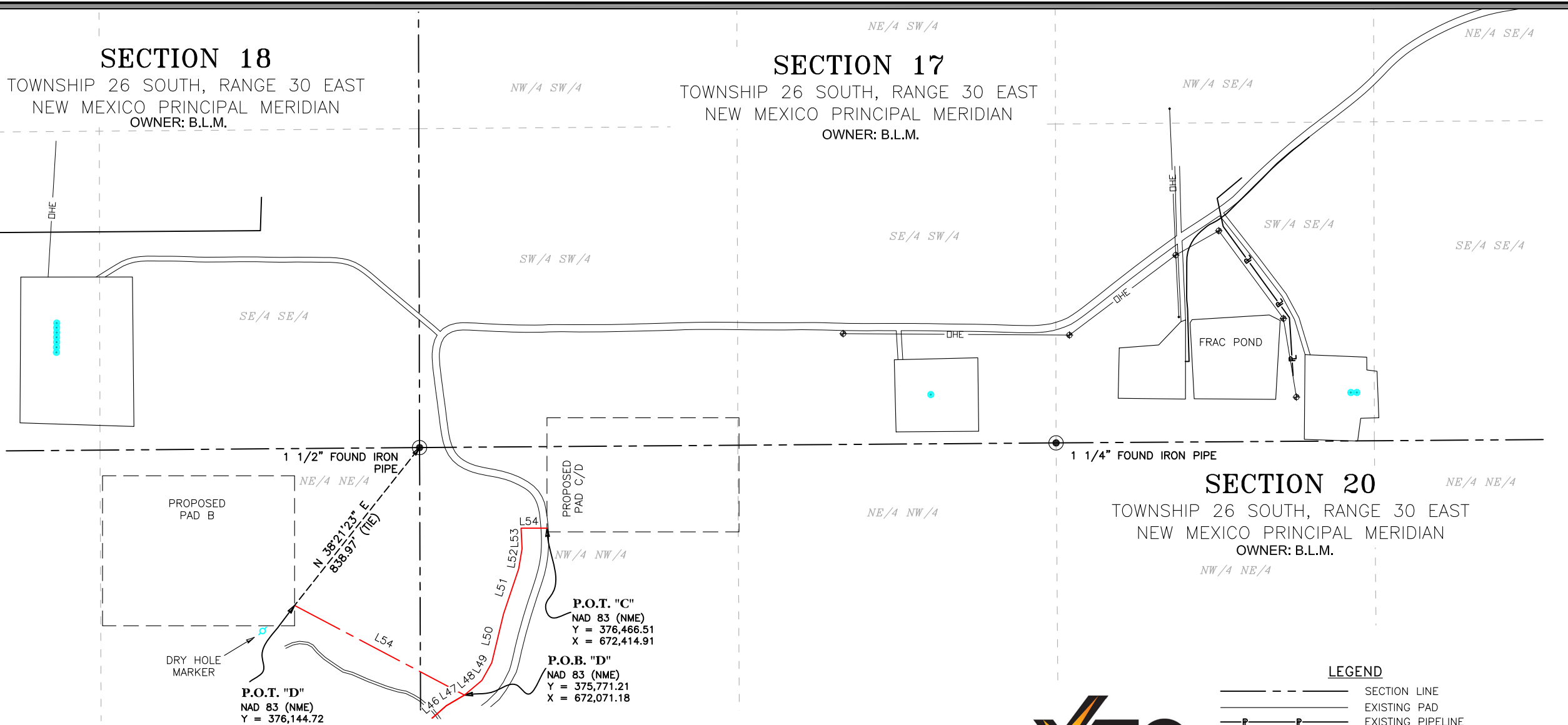
TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 17

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.

SECTION 20

TOWNSHIP 26 SOUTH, RANGE 30 EAST
NEW MEXICO PRINCIPAL MERIDIAN
OWNER: B.L.M.



SHEET MATCH PG. 1

EXHIBIT OF:

A PROPOSED CENTERLINE OF A 30' WIDE
ELECTRIC LINE FOR:
XTO ENERGY, INC.
ROSS DRAW NORTH PADS A, B, C/D & CVB



GENERAL NOTES

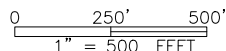
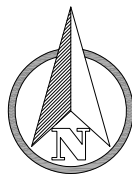
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LEGEND

- SECTION LINE
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- EXISTING FENCE
- PROPOSED PAD
- PROPOSED ELECTRIC LINE
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SCALE: 1" = 500'
SHEET: 3 OF 4
REVISION: 2



LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	S 00°00'00" E	580.60'
L2	N 86°05'08" W	155.17'
L3	N 86°03'13" W	150.95'
L4	S 89°17'56" W	179.44'
L5	S 75°01'24" W	249.18'
L6	N 82°23'33" W	145.86'
L7	S 89°53'08" W	138.52'
L8	S 73°42'37" W	273.63'
L9	S 52°36'35" W	268.80'
L10	S 30°49'32" E	335.18'
L11	S 07°09'02" W	88.88'

LINE TABLE "B"

L12	N 90°00'00" W	82.15'
L13	N 71°37'22" W	118.94'
L14	N 63°27'14" W	139.83'
L15	N 72°22'15" W	87.99'
L16	S 89°48'01" W	110.80'
L17	S 79°15'32" W	106.41'
L18	S 64°55'44" W	527.98'
L19	S 24°50'09" W	211.11'
L20	N 90°00'00" W	94.96'

LINE TABLE "D"

L54	N 62°10'28" W	800.18'
-----	---------------	---------

TOTAL LENGTH (LINE TABLES A, B, C & D) =
8,506.72 FEET OR 515.56 RODS

LINE TABLE "C"

L21	N 70°46'28" E	188.93'
L22	N 77°24'21" E	93.15'
L23	N 45°14'34" E	190.40'
L24	N 52°27'30" E	98.50'
L25	N 74°52'42" E	76.11'
L26	N 83°50'57" E	76.92'
L27	S 84°08'59" E	62.62'
L28	S 69°24'46" E	56.47'
L29	S 56°11'35" E	99.02'
L30	S 77°41'00" E	53.52'
L31	N 80°35'08" E	151.61'
L32	S 87°54'50" E	115.56'
L33	N 78°01'01" E	42.65'
L34	N 40°02'54" E	24.10'
L35	N 05°22'28" E	55.22'
L36	N 18°17'40" E	97.73'
L37	N 41°01'26" E	101.60'
L38	N 59°19'48" E	61.12'
L39	N 66°35'35" E	199.47'
L40	N 50°13'37" E	166.56'
L41	N 55°13'05" E	86.81'
L42	N 63°41'46" E	221.99'
L43	N 46°00'33" E	71.91'
L44	N 34°02'11" E	134.74'
L45	N 40°31'42" E	98.36'
L46	N 48°44'20" E	82.15'
L47	N 59°40'40" E	87.80'
L48	N 49°56'00" E	94.59'
L49	N 29°10'52" E	84.32'
L50	N 13°32'13" E	209.97'
L51	N 18°36'02" E	197.65'
L52	N 09°39'27" E	85.51'
L53	N 02°52'33" W	85.14'
L54	S 90°00'00" E	107.96'

ROSS DRAW NORTH PROPOSED ELECTRIC LINE DESCRIPTION:

SURVEY OF A STRIP OF LAND 30 FEET WIDE AND 8,506.72 FEET, 515.56 RODS, OR 1.61 MILES IN LENGTH CROSSING SECTIONS 19, 20 & 30, TOWNSHIP 26 SOUTH, RANGE 30 EAST N.M.P.M. EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET RIGHT AND 15.0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE SURVEY, COMPRISING OF 5.82 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

SW/4 SW/4 SECTION 19 = 783.73 FEET = 47.50 RODS = 0.54 OF AN ACRE
 SE/4 SW/4 SECTION 19 = 496.91 FEET = 30.12 RODS = 0.34 OF AN ACRE
 NE/4 SW/4 SECTION 19 = 188.62 FEET = 11.43 RODS = 0.13 OF AN ACRE
 SE/4 NW/4 SECTION 19 = 1,223.44 FEET = 74.15 RODS = 0.84 OF AN ACRE
 SW/4 NE/4 SECTION 19 = 2,011.38 FEET = 121.90 RODS = 1.37 ACRES
 SE/4 NE/4 SECTION 19 = 1,517.08 FEET = 91.94 RODS = 1.04 ACRES
 NE/4 NE/4 SECTION 19 = 774.07 FEET = 46.91 RODS = 0.53 OF AN ACRE
 NW/4 NW/4 SECTION 20 = 1,311.95 FEET = 79.51 RODS = 0.89 OF AN ACRE
 NW/4 NW/4 SECTION 30 = 199.55 FEET = 12.09 RODS = 0.14 OF AN ACRE

EXHIBIT OF:

A PROPOSED CENTERLINE OF A 30' WIDE
 ELECTRIC LINE FOR:
XTO ENERGY, INC.
 ROSS DRAW NORTH PADS A, B, C/D & CVB

SITUATED IN SECTIONS 24 AND 25,
 TOWNSHIP 26 SOUTH, RANGE 29 EAST, AND
 SECTIONS 19, 20 & 30, TOWNSHIP 26
 SOUTH, RANGE 30 EAST,
 NEW MEXICO PRINCIPAL MERIDIAN,
 EDDY COUNTY, NEW MEXICO

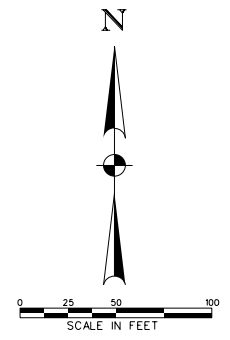
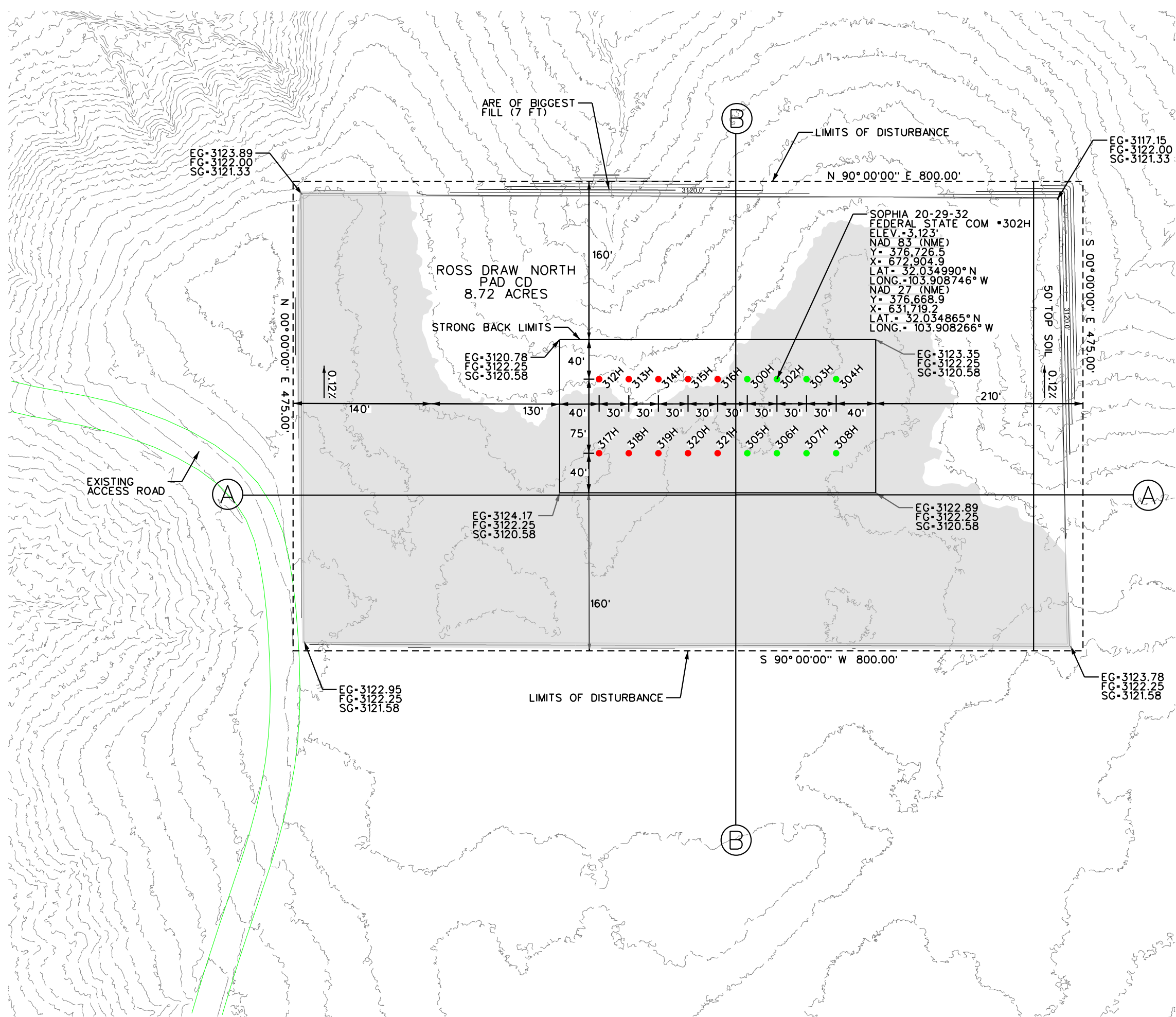


GENERAL NOTES

1. ALL BEARINGS, DISTANCE, AND COORDINATE VALUES SHOWN HEREON ARE GRID VALUES AND ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF 1983, EAST ZONE 3001, U.S. SURVEY FEET.

FSC INC
 SURVEYORS+ENGINEERS
 2205 Walnut Street -
 Columbus, TX 78934
 Ph: 817.349.9800 - Fax: 979.732.5271
 TBPE Firm 17957 | TBPLS Firm 10000100
 www.fscinc.net

DATE: 10-29-2025
 DRAWN BY: LM
 CHECKED BY: CH
 FIELD CREW: RE
 PROJECT NO: 2018092191
 SCALE: 1" = 500'
 SHEET: 4 OF 4
 REVISION: 2



- LEGEND**
- BLANCHE 20-29-32 FEDERAL STATE COM
 - SOPHIA 20-29-32 FEDERAL STATE COM
 - PAD BOUNDARY LINE
 - PROPOSED PIPELINE
 - PROPOSED OVERHEAD ELECTRIC
 - EXIST OVERHEAD ELECTRIC
 - ⊕ POWER POLE
 - ▭ PROPOSED CUT

NOTES:

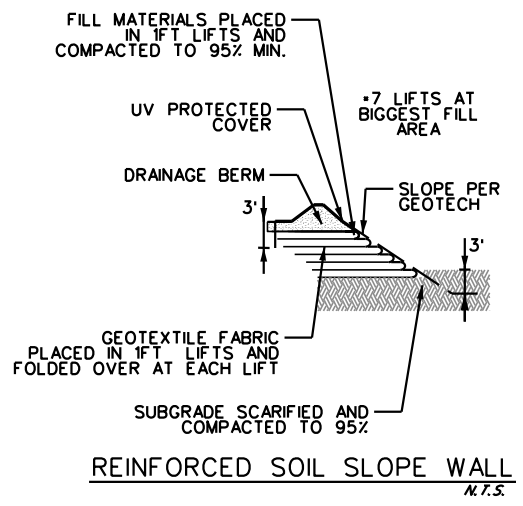
ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY OBTAINED BY AASHTO METHOD T-99. COMPACTION TESTING SHALL BE DONE EVERY 10" ON STRONGBACK AREAS.

STRONG BACK AREA SHALL BE EXCAVATED 12" INCHES BELOW SUBGRADE AND BACKFILLED TO FINAL GRADE WITH 20" OF COMPACTED CALICHE.

TOTAL DISTURBED AREA=8.72 AC.

CUT-9,260 CY
 FILL-9,260 CY
 6" TOPSOIL-4610 CY

8" CALICHE BASE-7,350 CY
 20" STRONG BACK BASE-3,100 CY



XTO PERMAN OPERATING, LLC
 22777 SPRINGWOODS VILLAGE PKWY
 SPRING, TEXAS 7738-1425

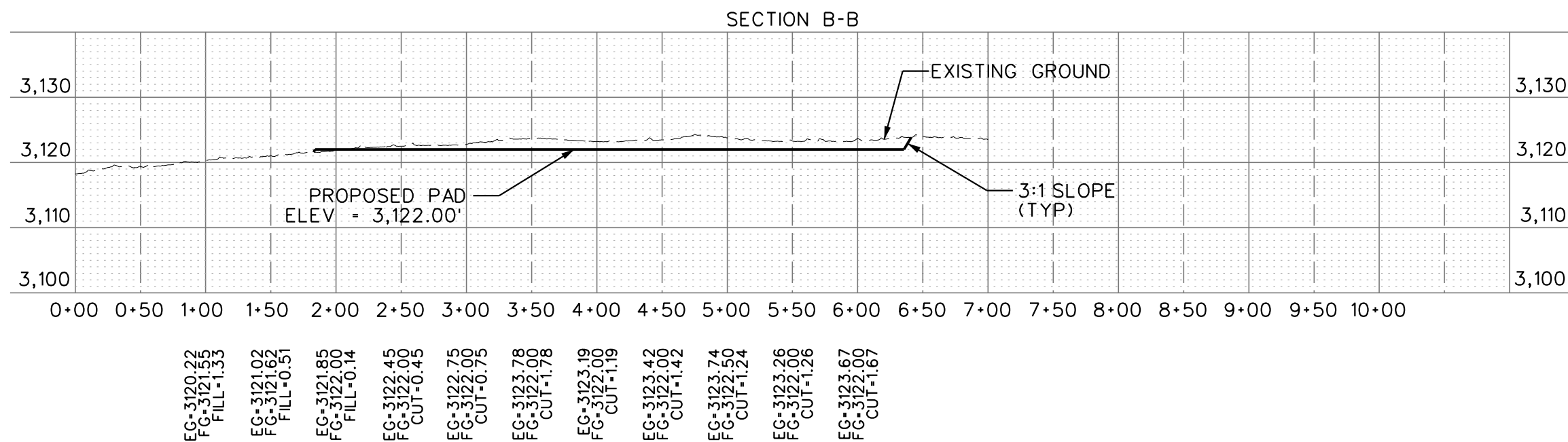
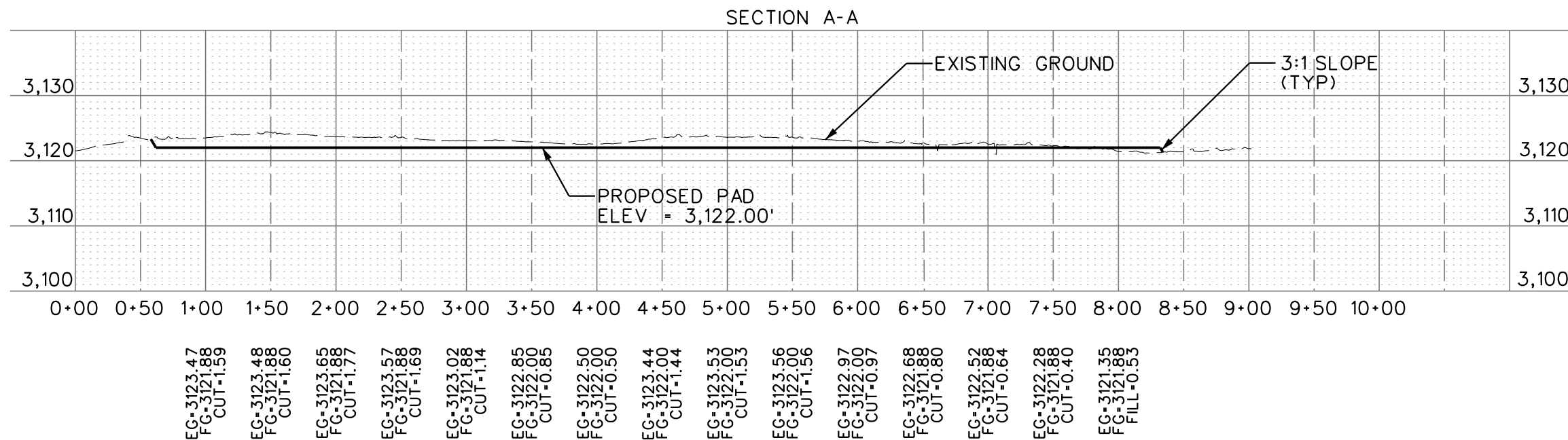


ROSS DRAW NORTH PAD CD
 EDDY COUNTY, NEW MEXICO
WELL - SOPHIA 20-29-32
 FEDERAL STATE COM # 302H

FSC INC
 SURVEYORS & ENGINEERS
 2205 Walnut Street - Columbus, TX 78934
 Toll Free 1.855.637.5725 - www.fscinc.net
 TBP L5 FIRN 10000100 - TBP E FIRN 17957
Driving Performance. Delivering Results.

Project No.: 2024060289
 Issued: 02/05/2025
 Drawn By: FSC
 Checked By: KL

SCALE
H: 1"=100'
V: 1"=20'



XTO PERMAN OPERATING, LLC
22777 SPRINGWOODS VILLAGE PKWY
SPRING, TEXAS 7738-1425



ROSS DRAW NORTH
EDDY COUNTY, NEW MEXICO
PAD B CROSS SECTIONS (A-A & B-B)

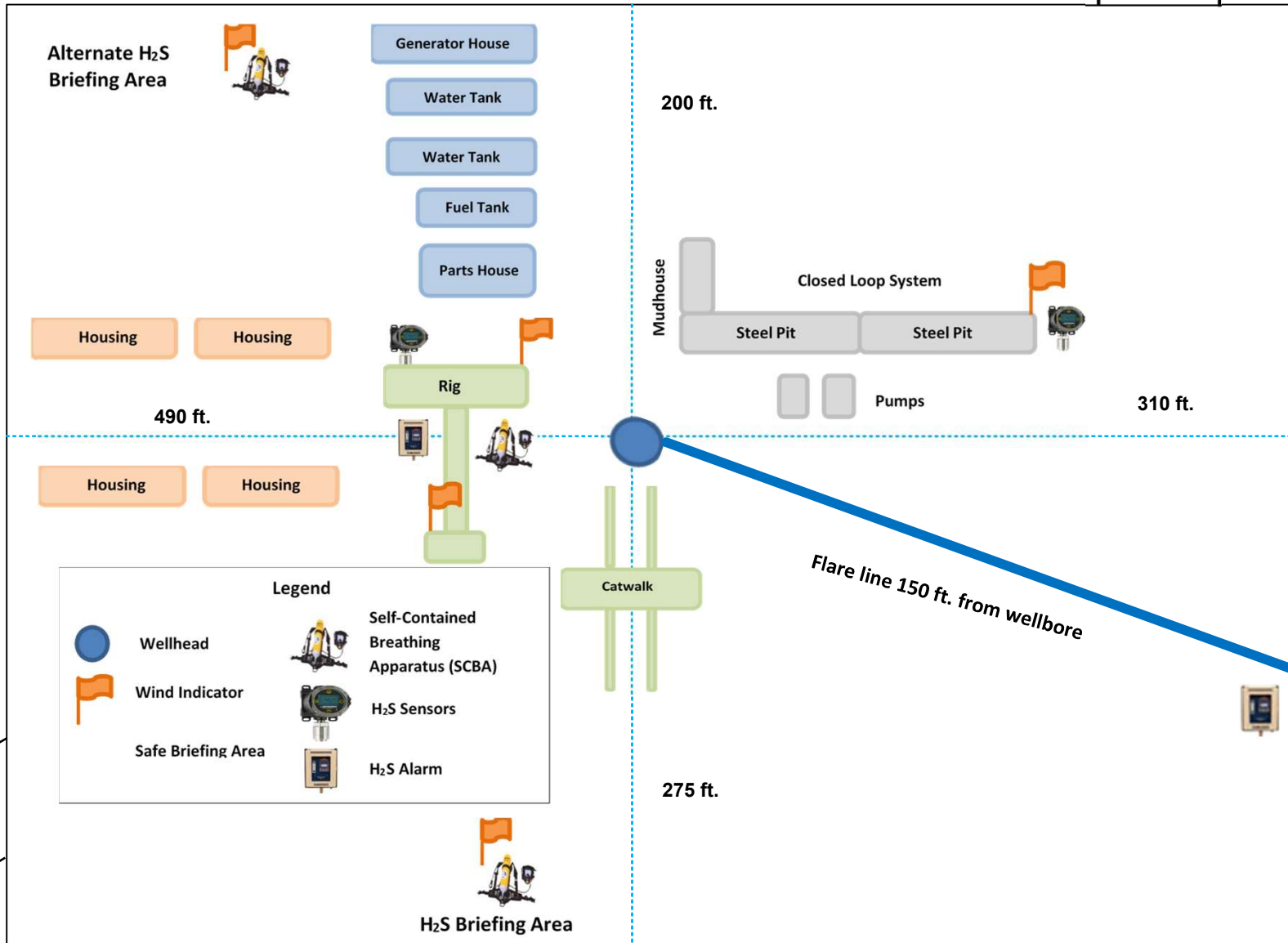


Project No.: 2018010042
Issued: 11/04/2025
Drawn By: FSC
Checked By: KL

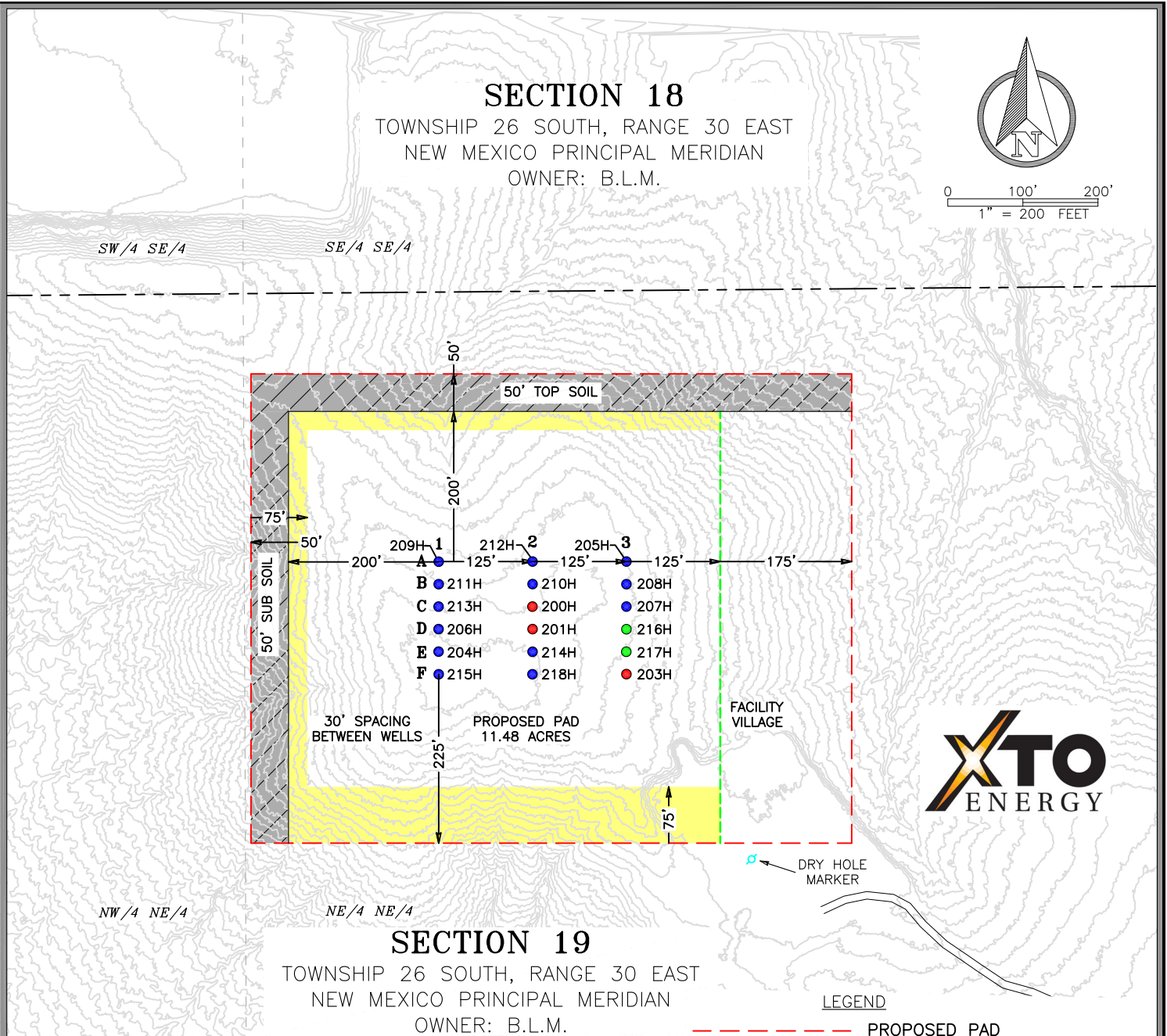


Rig Plat Layout

Secondary Egress



Existing Road



SECTION 19
 TOWNSHIP 26 SOUTH, RANGE 30 EAST
 NEW MEXICO PRINCIPAL MERIDIAN
 OWNER: B.L.M.

ACREAGE INFORMATION	
INITIAL DISTURBED AREA	=11.478 ACRES
INTERIM RECLAMATION	=2.970 ACRES
TOTAL PAD ACREAGE AFTER IR	=8.508 ACRES

LEGEND

	PROPOSED PAD
	EXISTING ROAD
	SECTION LINE
	PERMITTED ROSE 19-31-31
	PERMITTED SOPHIA 20-29-32
	PERMITTED BLANCHE 20-29-32
	INTERIM RECLAMATION AREA

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

27 June 2025



TIM C. PAPPAS
 REGISTERED PROFESSIONAL LAND SURVEYOR
 STATE OF NEW MEXICO NO. 21209

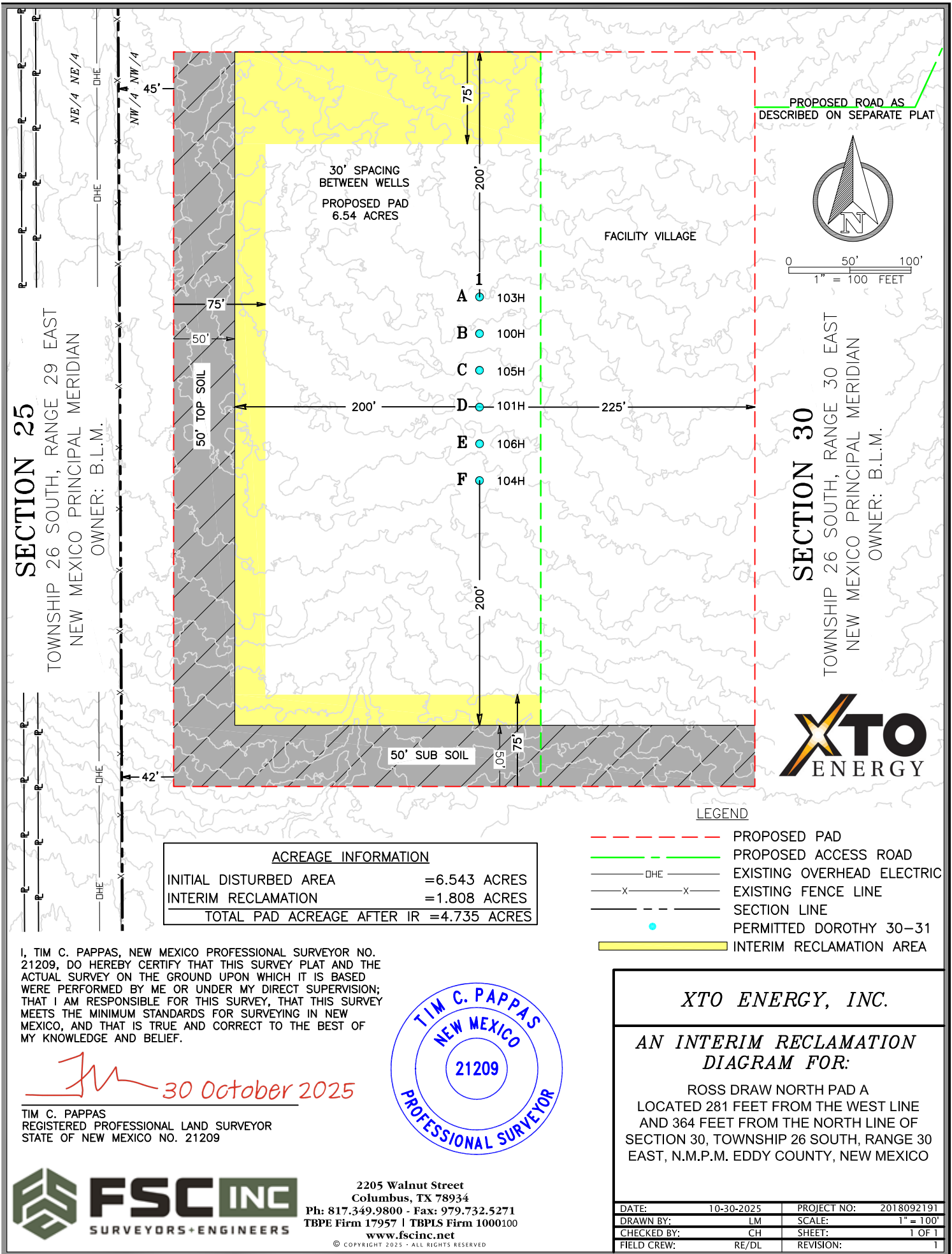
XTO ENERGY, INC.

AN INTERIM RECLAMATION DIAGRAM FOR:

ROSS DRAW NORTH PAD B
 LOCATED 922 FEET FROM THE EAST LINE
 AND 423 FEET FROM THE NORTH LINE OF
 SECTION 19, TOWNSHIP 26 SOUTH, RANGE 30
 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	6-27-2025	PROJECT NO:	2018092191
DRAWN BY:	LM	SCALE:	1" = 200'
CHECKED BY:	CH	SHEET:	1 OF 1
FIELD CREW:	RE/DL	REVISION:	1

2205 Walnut Street
 Columbus, TX 78934
 Ph: 817.349.9800 - Fax: 979.732.5271
 TBPE Firm 17957 | TBPLS Firm 10000100
 www.fscinc.net
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I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

30 October 2025

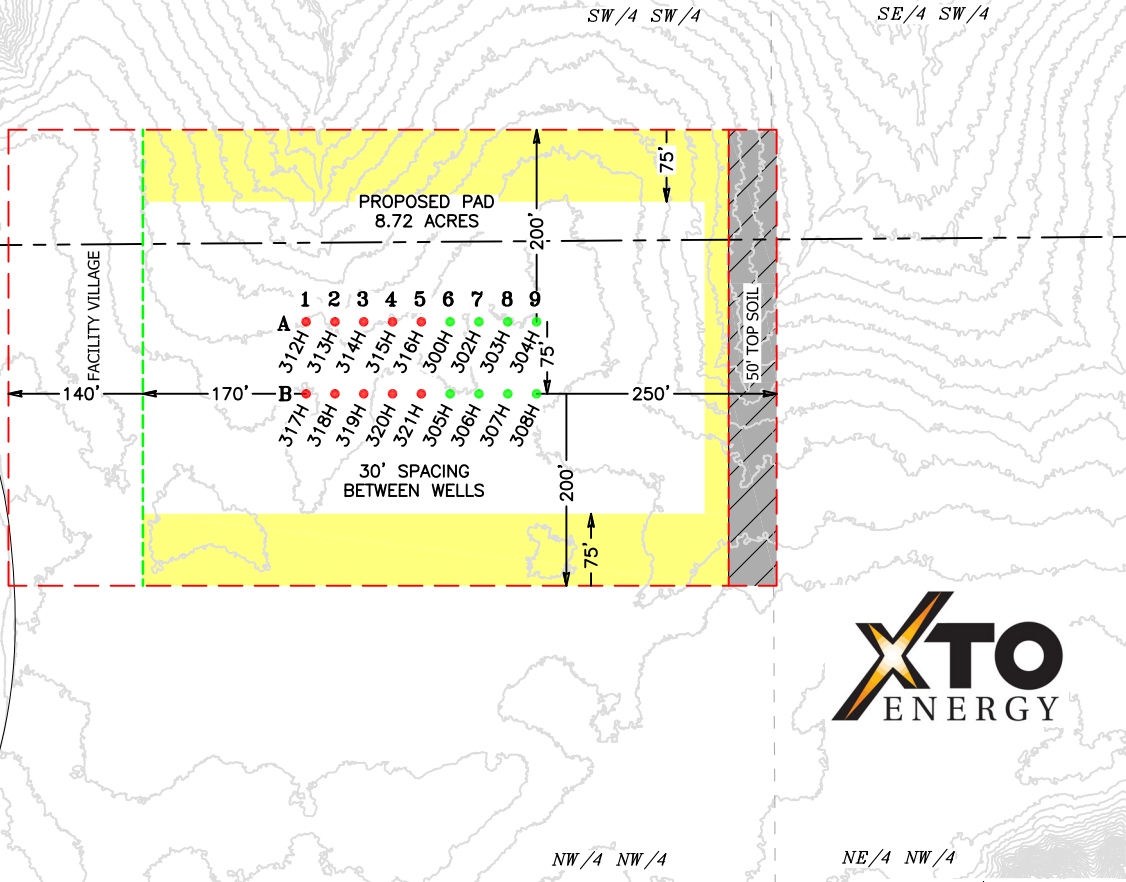
TIM C. PAPPAS
 REGISTERED PROFESSIONAL LAND SURVEYOR
 STATE OF NEW MEXICO NO. 21209



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SECTION 17

TOWNSHIP 26 SOUTH, RANGE 30 EAST
 NEW MEXICO PRINCIPAL MERIDIAN
 OWNER: B.L.M.



SECTION 20

TOWNSHIP 26 SOUTH, RANGE 30 EAST
 NEW MEXICO PRINCIPAL MERIDIAN
 OWNER: B.L.M.

LEGEND

- PROPOSED PAD
- EXISTING ROAD
- SECTION LINE
- PERMITTED BLANCHE 20-29-32 FEDERAL STATE COM
- PERMITTED SOPHIA 20-29-32 FEDERAL STATE COM
- INTERIM RECLAMATION AREA

ACREAGE INFORMATION

INITIAL DISTURBED AREA	=8.723 ACRES
INTERIM RECLAMATION	=2.832 ACRES
TOTAL PAD ACREAGE AFTER IR	=5.891 ACRES

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, 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.

[Signature] 30 October 2025

TIM C. PAPPAS
 REGISTERED PROFESSIONAL LAND SURVEYOR
 STATE OF NEW MEXICO NO. 21209



XTO ENERGY, INC.

AN INTERIM RECLAMATION DIAGRAM FOR:

ROSS DRAW NORTH PAD C/D
 LOCATED 930 FEET FROM THE WEST LINE
 AND 120 FEET FROM THE NORTH LINE OF
 SECTION 20, TOWNSHIP 26 SOUTH, RANGE 30
 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO



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DATE:	10-30-2025	PROJECT NO:	2018092191
DRAWN BY:	LM	SCALE:	1" = 200'
CHECKED BY:	CH	SHEET:	1 OF 1
FIELD CREW:	RE/DL	REVISION:	2

Surface Use Plan of Operations

Well Name	SHL STR	SHL Footages
Dorothy 30 31 Federal Com 100H	30 26S 30E	307 FNL, 294 FWL
Dorothy 30 31 Federal Com 101H	30 26S 30E	367 FNL, 294 FWL
Dorothy 30 31 Federal Com 103H	30 26S 30E	277 FNL, 294 FWL
Dorothy 30 31 Federal Com 104H	30 26S 30E	427 FNL, 294 FWL
Dorothy 30 31 Federal Com 105H	30 26S 30E	337 FNL, 294 FWL
Dorothy 30 31 Federal Com 106H	30 26S 30E	397 FNL, 294 FWL
Blanche 20 29 32 Federal State Com 200H	19 26S 30E	420 FNL, 947 FEL
Blanche 20 29 32 Federal State Com 201H	19 26S 30E	450 FNL, 947 FEL
Blanche 20 29 32 Federal State Com 203H	19 26S 30E	511 FNL, 823 FEL
Rose 19 30 31 Federal State Com 204H	19 26S 30E	479 FNL, 1072 FEL
Rose 19 30 31 Federal State Com 205H	19 26S 30E	361 FNL, 822 FEL
Rose 19 30 31 Federal State Com 206H	19 26S 30E	449 FNL, 1072 FEL
Rose 19 30 31 Federal State Com 207H	19 26S 30E	421 FNL, 822 FEL
Rose 19 30 31 Federal State Com 208H	19 26S 30E	391 FNL, 822 FEL
Rose 19 30 31 Federal State Com 209H	19 26S 30E	359 FNL, 1072 FEL
Rose 19 30 31 Federal State Com 210H	19 26S 30E	390 FNL, 947 FEL
Sophia 20 29 32 Federal State Com 216H	19 26S 30E	451 FNL, 822 FEL
Sophia 20 29 32 Federal State Com 217H	19 26S 30E	481 FNL, 822 FEL
Rose 19 30 31 Federal State Com 211H	19 26S 30E	389 FNL, 1072 FEL
Rose 19 30 31 Federal State Com 212H	19 26S 30E	360 FNL, 947 FEL
Rose 19 30 31 Federal State Com 213H	19 26S 30E	419 FNL, 1072 FEL
Rose 19 30 31 Federal State Com 214H	19 26S 30E	480 FNL, 947 FEL
Rose 19 30 31 Federal State Com 215H	19 26S 30E	509 FNL, 1073 FEL
Rose 19 30 31 Federal State Com 218H	19 26S 30E	510 FNL, 948 FEL
Blanche 20 29 32 Federal State Com 312H	20 26S 30E	82 FNL, 840 FWL
Blanche 20 29 32 Federal State Com 313H	20 26S 30E	82 FNL, 870 FWL
Blanche 20 29 32 Federal State Com 314H	20 26S 30E	83 FNL, 900 FWL
Blanche 20 29 32 Federal State Com 315H	20 26S 30E	83 FNL, 930 FWL
Blanche 20 29 32 Federal State Com 316H	20 26S 30E	83 FNL, 960 FWL
Sophia 20 29 32 Federal State Com 300H	20 26S 30E	83 FNL, 990 FWL
Sophia 20 29 32 Federal State Com 302H	20 26S 30E	84 FNL, 1020 FWL
Sophia 20 29 32 Federal State Com 303H	20 26S 30E	84 FNL, 1050 FWL
Sophia 20 29 32 Federal State Com 304H	20 26S 30E	84 FNL, 1080 FWL
Blanche 20 29 32 Federal State Com 317H	20 26S 30E	157 FNL, 840 FWL
Blanche 20 29 32 Federal State Com 318H	20 26S 30E	157 FNL, 870 FWL
Blanche 20 29 32 Federal State Com 319H	20 26S 30E	158 FNL, 900 FWL
Blanche 20 29 32 Federal State Com 320H	20 26S 30E	158 FNL, 930 FWL
Blanche 20 29 32 Federal State Com 321H	20 26S 30E	158 FNL, 960 FWL
Sophia 20 29 32 Federal State Com 305H	20 26S 30E	158 FNL, 990 FWL
Sophia 20 29 32 Federal State Com 306H	20 26S 30E	159 FNL, 1020 FWL

Sophia 20 29 32 Federal State Com 307H	20 26S 30E	159 FNL, 1050 FWL
Sophia 20 29 32 Federal State Com 308H	20 26S 30E	159 FNL, 1080 FWL

Existing Roads:

Individual well specific vicinity maps, topographical & access road maps issued by the registered surveyor, that show & identify the proposed well sites and access routes to the proposed wells as per the 43 CFR requirements have been attached with the individual APDs under SUPO section 1.

New or Reconstructed Access Roads:

All proposed access routes to the well sites as per the 43 CFR requirements have been described in the new road plat issued by the registered surveyor. The same has been attached with the individual APDs under SUPO Section 2. Proposed routes to the individual wells on the well site locations have been shown & identified on the well specific vicinity, topography & access road maps attached in SUPO section 1 of the individual APDs.

Below are the specifications for the new access roads that will be constructed –

- Road Width: All new access roads that will be constructed will be 30 feet wide
- Maximum Grade: Driving surface for all the new access roads will be made of 6" rolled & compacted caliche
- Crown & Ditch Design: All the new access roads will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. Ditches will be 1 feet deep with a 3:1 slope
- Turnouts: No new turnouts will be constructed during the construction of new access roads
- Cattleguards: No new cattleguards will be constructed during the construction of new access roads
- Major cuts and fills: No significant cuts & fills will be required during the construction of new access roads
- Type of surfacing material: Surface material for all new access roads will be native caliche
- Road Drainage Control Structures: 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.
- Drainage control and new Road Access Erosion Control: 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.

Location of existing wells:

A map including all known wells with-in a one-mile radius of the Ross Draw development area, as per the 43 CFR requirements, is attached under SUPO section 3.

Location of existing and/or proposed production facilities:

Separate certified plats issued by the registered surveyor for the proposed central battery, flowlines & overhead electrical lines, as per the 43 CFR requirements have been attached under SUPO section 4. A detailed facility layout which describes the placement of the proposed facility components on the central battery with appropriate labels, as per the 43 CFR requirements, has also been attached under SUPO section 4.

- A. **Production Facilities.** An attached certified plat provided additional details for the proposed facilities. Some production facilities will be located on each of well pads. In addition to this, there is a proposed facility with center of the pad located at 2177' FEL & 1290' FNL 19-26S-30E & an existing facility located in NWNW & NENW of 25-26S-29E.
- B. **Flowlines:** Up to 20" composite flex pipe or steel flowlines with a maximum safety pressure rating of 750psi (operating pressure: 125psi) will be within proposed corridors where the oil, gas, and water will be metered and appropriately separated. A plat of the proposed flowline route showing length, beginning, and ending points for the lease is attached.
- C. **Disposal Facilities.** Produced water will be hauled from location to a commercial disposal facility as needed.
- D. **Flare.** Located on the proposed facility pad and will be sized for 60 to 120 mmscf/d with min 150' of distance between all facility equipment, road and well pad locations for safety purposes.
- A. **Aboveground Structures.** All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted earth-tone within BLM Standard Environmental Color Chart (CC-001: June 2008) that reduce the visual impacts of the built environment.
- E. **Containment Berms.** Containment berms constructed completely around production facilities designed to hold fluids. The containment berms will be constructed of compacted subsoil/ Caliche.
- F. **Electrical.** All electrical lines will be primary 115kV to properly run expected production equipment. A plat of the proposed electrical showing length, beginning, and ending points is attached.

Location & Types of Water Supply:

The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. Water composition depends on the mud type needed per formation to protect useable water. Fresh water is trucked to location for use in surface casing drilling and cementing. All other water is either brackish or raw produced water coming from a third party that is all piped from either a pipeline or a pond (31.998189, -103.941096) to the drilling location. Anticipated water usage for drilling includes an estimated 50,000 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 ~1.5bbbls 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 550,000 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.

Construction Material:

- Source: 32.031466°, -103.941974°
- Character: Lifts of compacted caliche
- Intended use: surfacing the drill pad, constructing the access roads, and maintenance

Methods for handling waste:

- Cuttings: Drill cuttings will be held in roll-off style mud boxes and will be taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site located at
- Drilling Fluids. These will be contained in steel mud pits and will be taken to an NMOCD approved commercial disposal facility located at
- Produced Fluids:
 - Water produced from the well during completions will be held temporarily in steel tanks and then taken to an NMOCD approved commercial disposal facility.
 - Oil produced during operations will be stored in tanks until sold
- 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 located. 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 the drilling rig is removed, 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
- Sewage: Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completions activities, or as required, the toilet holding tanks will be pumped and the contents thereof will be disposed 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.
- Hazardous Materials:
 - All drilling wastes identified as hazardous substances by the Comprehensive Environmental Response Compensation Liability Act (CERCLA) removed from the location will be disposed of at a hazardous waste facility approved by the U.S. Environmental Protection Agency (EPA) located at and will not be reused at another drilling location
 - No hazardous substances or wastes will be stored on the location after completion of the well.
 - Chemicals brought to location will be on the Toxic Substance Control Act (TSCA) approved inventory list
 - All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in the Notice to Lessees (NTL) 3A will be reported to the BLM Carlsbad Field Office. Major events will be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days

Ancillary Facilities:

- No ancillary facilities will be required for the Ross Draw development.

Well Site Layout:

- Certified well site layouts for the individual wells, issued by the registered surveyor, have been attached under SUPO section 9 of the APD
- Rig layouts for individual wells, as per the 43 CFR requirements, have also been attached under SUPO section of the individual APDs

Plans for surface reclamation:

XTO Energy, Inc., 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. Reseeding of the topsoil stockpile in place will occur to maintain topsoil vitality until interim reclamation ensues. Once activities are completed, XTO will coordinate interim reclamation with the appropriate BLM personnel or use the following plan:

Non-Commercial Well (Not Productive), Interim & Final Reclamation:

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 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.

- Drainage/Erosion Control Construction: 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.
- 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, head cutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.
- Existing Vegetation at the Well Pad, Road, Pipeline and other disturbances: According to the Natural Resources Conservation Service's online database, the project area soil is Pajarito-Dune land complex, loamy sand, 0-3 percent slopes. This soil supports grassland dominated by black grama, dropseeds, and bluestems. Shrubs, such as sand sage, shinnery oak, and mesquite are dispersed throughout. The project area is in a low area of deep sands amongst low to medium height dunes with some gravel and outcrops. Vegetation such as four wing saltbrush, snakeweed and desert sage was viewed in the project area.
- Reconstruction Method and Topsoil Redistribution: The original stockpiled 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) plant 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.

Seeding:

- Seedbed Preparation: 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.
- Weed Treatment Plan Description: Weed control for all phases will be through the use of approved pesticides and herbicides according to applicable State, Federal and local laws.
- Monitoring Plan Description: Monitoring of invasive and noxious weeds will be visual and as-needed. If it is determined additional methods are required to monitor invasive and noxious weeds, appropriate BLM authorities will be contacted with a plan of action for approval prior to implementation.
- Success Standards: 100% compliance with applicable regulations.
- Pit Closure Description: There will be no reserve pit as each well will be drilled utilizing a closed loop mud system. The closed loop system will meet the NMOCD requirements 19.15.17.

Surface Ownership:

100% of the surface under the proposed development of Sophia/Blanche/Rose/Dorothy wells is owned by the New Mexico State Land Office (NMSLO) and Bureau of Land Management (BLM).

Other Information:

The XTO Permian Operating, LLC. representatives for ensuring compliance of the surface use plan are listed below:

Robert Bartels
Project Execution Planner
XTO Energy, Incorporated
6401 Holiday Hill Road Bldg 5
Midland, Texas 79701
robert.e.bartels@exxonmobil.com
Phone: (406) 478-3671



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

PWD Data Report

03/16/2026

APD ID: 10400101942

Submission Date: 11/19/2024

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD Surface Owner Description:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Lined pit Monitor description:

Lined pit Monitor

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres):

PWD surface owner:

Other PWD Surface Owner Description:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Precipitated Solids Permit

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

State

Unlined Produced Water Pit Estimated

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

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD Surface Owner Description:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD Surface Owner Description :

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

PWD Surface Owner Description:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements



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

Bond Info Data

03/16/2026

APD ID: 10400101942

Submission Date: 11/19/2024

Highlighted data reflects the most recent changes
[Show Final Text](#)

Operator Name: XTO ENERGY INCORPORATED

Well Name: SOPHIA 20-29-32 FEDERAL STATE COM

Well Number: 302H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Bond

Federal/Indian APD: FED

BLM Bond number: NMB001207

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 amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

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

Well Name: SOPHIA 20-29-32
FEDERAL STATE COM

Well Location: T26S / R30E / SEC 20 /
NWNW / 32.03499 / -103.908746

County or Parish/State: EDDY /
NM

Well Number: 302H

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM19612

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: XTO ENERGY
INCORPORATED

Notice of Intent

Sundry ID: 2900484

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/13/2026

Time Sundry Submitted: 01:41

Date proposed operation will begin: 03/17/2026

Procedure Description: SOPHIA 20-29-32 FEDERAL STATE COM 302H APD ID:10400101942 XTO Energy Inc., respectfully requests approval to change the name of this well from "SOPHIA 20-29-32 FEDERAL STATE COM 302H" to "SOPHIA 20 FEDERAL COM 302H". C102 reflecting the new name is attached. APD ID for this well is 10400101942.

NOI Attachments

Procedure Description

2024070333_XTO_SOPHIA_20_FEDERAL_COM_302H_C_102_ORIGINAL_FINAL_11_10_2025_UPDATED_NAME_AMENDED_2_5_2026_20260313132303.pdf

Well Name: SOPHIA 20-29-32
FEDERAL STATE COM

Well Location: T26S / R30E / SEC 20 /
NWNW / 32.03499 / -103.908746

County or Parish/State: EDDY /
NM

Well Number: 302H

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM19612

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: XTO ENERGY
INCORPORATED

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: LAURA CHAPMAN

Signed on: MAR 13, 2026 01:40 PM

Name: XTO ENERGY INCORPORATED

Title: Regulatory Analyst

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING

State: TX

Phone: (346) 335-5969

Email address: LAURA.M.CHAPMAN@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: MARIAH HUGHES

BLM POC Title: Land Law Examiner

BLM POC Phone: 5752345972

BLM POC Email Address: MHUGHES@BLM.GOV

Disposition: Approved

Disposition Date: 03/16/2026

Signature: CODY LAYTON ASSISTANT FIELD
MANAGER

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool or Exploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWNW / 84 FNL / 1020 FWL / TWSP: 26S / RANGE: 30E / SECTION: 20 / LAT: 32.03499 / LONG: -103.908746 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 2657 FNL / 1664 FEL / TWSP: 26S / RANGE: 30E / SECTION: 29 / LAT: 32.013332 / LONG: -103.900176 (TVD: 10560 feet, MD: 19100 feet)

PPP: NWNE / 330 FNL / 1655 FEL / TWSP: 26S / RANGE: 30E / SECTION: 20 / LAT: 32.034335 / LONG: -103.90026 (TVD: 10560 feet, MD: 11453 feet)

PPP: NWNE / 0 FNL / 1668 FEL / TWSP: 26S / RANGE: 30E / SECTION: 29 / LAT: 32.020635 / LONG: -103.900206 (TVD: 10560 feet, MD: 16500 feet)

BHL: LOT 2 / 50 FSL / 1655 FEL / TWSP: 26S / RANGE: 30E / SECTION: 32 / LAT: 32.000263 / LONG: -103.900127 (TVD: 10560 feet, MD: 23397 feet)

CONFIDENTIAL

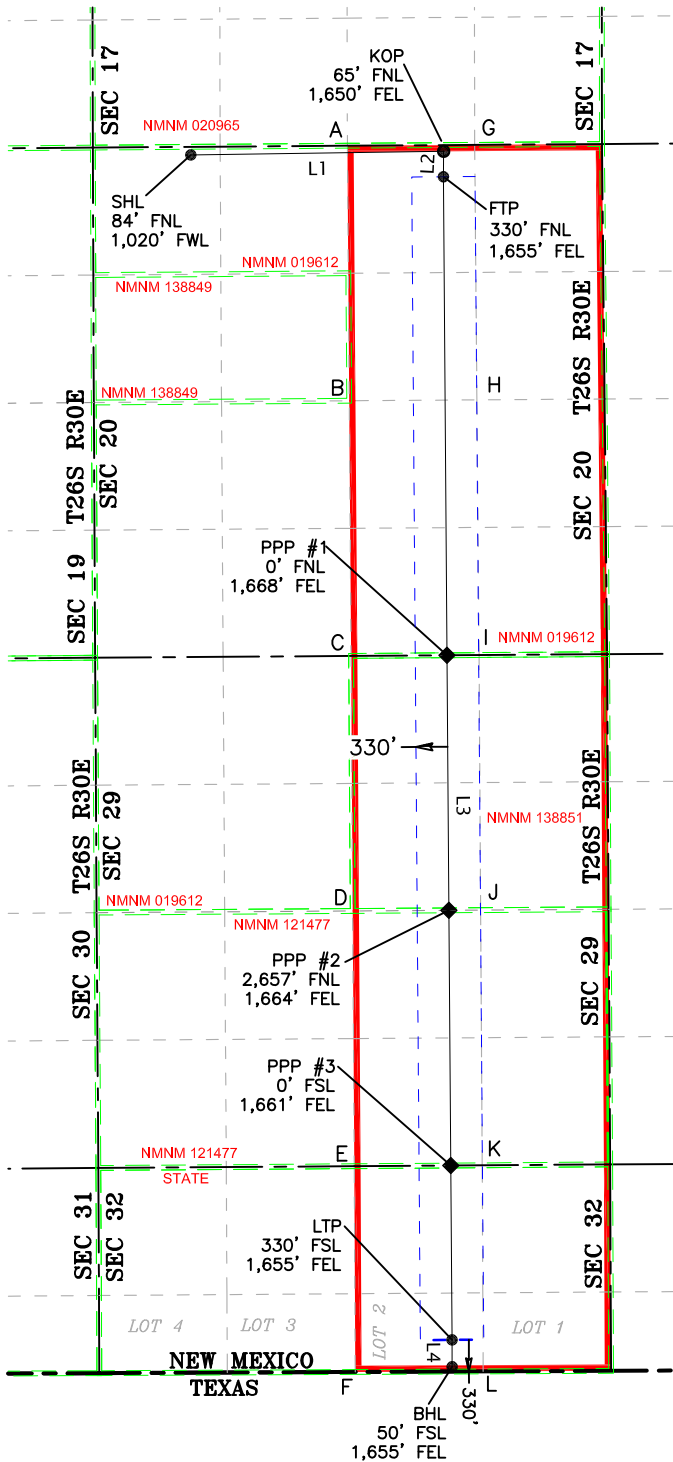
ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is the closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

COORDINATE TABLE

SHL (NAD 83 NME)			FTP (NAD 83 NME)			BHL (NAD 83 NME)			PPP #2 (NAD 83 NME)		
Y =	376,726.5	N	Y =	376,498.7	N	Y =	364,104.4	N	Y =	368,858.2	N
X =	672,904.9	E	X =	675,535.5	E	X =	675,626.5	E	X =	675,592.1	E
LAT. =	32.034990	°N	LAT. =	32.034335	°N	LAT. =	32.000263	°N	LAT. =	32.013332	°N
LONG. =	103.908746	°W	LONG. =	103.900260	°W	LONG. =	103.900127	°W	LONG. =	103.900176	°W
KOP (NAD 83 NME)			LTP (NAD 83 NME)			PPP #1 (NAD 83 NME)			PPP #3 (NAD 83 NME)		
Y =	376,764.1	N	Y =	364,384.4	N	Y =	371,515.0	N	Y =	366,200.3	N
X =	675,538.2	E	X =	675,625.3	E	X =	675,572.4	E	X =	675,611.8	E
LAT. =	32.035065	°N	LAT. =	32.001033	°N	LAT. =	32.020635	°N	LAT. =	32.006025	°N
LONG. =	103.900248	°W	LONG. =	103.900127	°W	LONG. =	103.900206	°W	LONG. =	103.900147	°W
SHL (NAD 27 NME)			FTP (NAD 27 NME)			BHL (NAD 27 NME)			PPP #2 (NAD 27 NME)		
Y =	376,668.9	N	Y =	376,441.1	N	Y =	364,047.2	N	Y =	368,800.8	N
X =	631,719.2	E	X =	634,349.7	E	X =	634,440.4	E	X =	634,406.1	E
LAT. =	32.034865	°N	LAT. =	32.034210	°N	LAT. =	32.000138	°N	LAT. =	32.013206	°N
LONG. =	103.908266	°W	LONG. =	103.899780	°W	LONG. =	103.899648	°W	LONG. =	103.899697	°W
KOP (NAD 27 NME)			LTP (NAD 27 NME)			PPP #1 (NAD 27 NME)			PPP #3 (NAD 27 NME)		
Y =	376,706.5	N	Y =	364,327.2	N	Y =	371,457.6	N	Y =	366,143.0	N
X =	634,352.5	E	X =	634,439.2	E	X =	634,386.5	E	X =	634,425.8	E
LAT. =	32.034940	°N	LAT. =	32.000908	°N	LAT. =	32.020510	°N	LAT. =	32.005900	°N
LONG. =	103.899768	°W	LONG. =	103.899649	°W	LONG. =	103.899726	°W	LONG. =	103.899668	°W



SEC 32 LOT ACREAGE TABLE

LOT 1	-	24.69 ACRES
LOT 2	-	24.59 ACRES
LOT 3	-	24.49 ACRES
LOT 4	-	24.39 ACRES

- SECTION LINE
- PROPOSED WELLBORE
- NEW MEXICO MINERAL LEASE LINE
- 330' BUFFER
- DEDICATED ACREAGE

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	89° 10'55"	2,633.54'
L2	180° 35'08"	265.38'
L3	179° 34'31"	12,114.66'
L4	179° 45'22"	280.00'

CORNER COORDINATES (NAD83 NME)

Point	Y	X	Easting	Northing
A	376,822.0	674,535.4	E	N
B	374,165.7	674,554.7	E	N
C	371,508.0	674,574.0	E	N
D	368,851.6	674,590.4	E	N
E	366,193.3	674,606.8	E	N
F	364,049.9	674,617.1	E	N
G	376,830.9	675,861.3	E	N
H	374,175.0	675,884.4	E	N
I	371,517.3	675,907.1	E	N
J	368,860.3	675,923.2	E	N
K	366,202.6	675,939.7	E	N
L	364,055.9	675,949.4	E	N

CORNER COORDINATES (NAD27 NME)

Point	Y	X	Easting	Northing
A	376,764.4	633,349.7	E	N
B	374,108.2	633,368.9	E	N
C	371,450.6	633,388.1	E	N
D	368,794.2	633,404.5	E	N
E	366,136.0	633,420.8	E	N
F	363,992.7	633,431.0	E	N
G	376,773.3	634,675.5	E	N
H	374,117.5	634,698.6	E	N
I	371,459.9	634,721.2	E	N
J	368,802.9	634,737.2	E	N
K	366,145.3	634,753.6	E	N
L	363,998.7	634,763.3	E	N



2205 Walnut Street
Columbus, TX 78934
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10000100
www.fscinc.net
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DATE: 11-10-2025 PROJECT NO: 2024070333
DRAWN BY: WL SCALE: 1" = 2,000'
CHECKED BY: LM SHEET: 2 OF 2
FIELD CREW: IR REVISION: 0

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 570205

ACKNOWLEDGMENTS

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 570205
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
-------------------------------------	--

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 570205

CONDITIONS

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 570205
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
lchapman	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/1/2026
lchapman	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/1/2026
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	4/21/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	4/21/2026
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	4/21/2026
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	4/21/2026
ward.rikala	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.	4/21/2026
ward.rikala	Post Bradenhead cement squeeze, a CBL will be required. If zonal isolation was not achieved per OCD requirements, then remedial work is required before operations can continue.	4/21/2026