AFMSS

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: 2 file(s)
  -- Casing Taperd String Specs: 2 file(s)
  -- Casing Design Assumptions and Worksheet(s): 4 file(s)
  -- Hydrogen sulfide drilling operations plan: 2 file(s)
  -- Proposed horizontal/directional/multi-lateral plan submission: 1 file(s)
  -- Other Facets: 1 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: 3 file(s)
  -- Water source and transportation map: 1 file(s)
  -- Well Site Layout Diagram: 3 file(s)
  -- Recontouring attachment: 6 file(s)
  -- Other SUPO Attachment: 4 file(s)

- PWD Report
- PWD Attachments
  -- None

- Bond Report
- Bond Attachments
  -- None

Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-015-55529

3a. Address	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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 09/23/2024

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 wen, 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 directionany 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 wen 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 win 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 conects this information to anow 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 09/23/2024

Additional Operator Remarks

Location of Well

0. SHL: NESE / 2515 FSL / 818 FEL / TWSP: 22S / RANGE: 30E / SECTION: 13 / LAT: 32.391762 / LONG: -103.828231 (TVD: 0 feet, MD: 0 feet)

PPP: SWNW / 1650 FNL / 990 FWL / TWSP: 22S / RANGE: 30E / SECTION: 13 / LAT: 32.39485 / LONG: -103.839126 (TVD: 11063 feet, MD: 15600 feet)

PPP: SENE / 1650 FNL / 330 FEL / TWSP: 22S / RANGE: 30E / SECTION: 13 / LAT: 32.394837 / LONG: -103.82665 (TVD: 11103 feet, MD: 11600 feet)

BHL: SWNW / 1650 FNL / 50 FWL / TWSP: 22S / RANGE: 30E / SECTION: 14 / LAT: 32.394872 / LONG: -103.860081 (TVD: 11001 feet, MD: 21892 feet)

BLM Point of Contact

Name: PRISCILLA PEREZ
Title: Legal Instruments Examiner
Phone: (575) 234-5934
Email: PPEREZ@BLM.GOV

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating
LEASE NO.:	NMNM089051
WELL NAME & NO.:	JRU Apache Federal Com 112H
LOCATION:	Sec 24-22S-30E-NMP
COUNTY:	Eddy County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

Break Testing	◉ Yes	○ No

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 Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 721 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the 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 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 cave/karst or potash.**

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

❖ In R111 Potash Areas if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

- Cement should tie-back at least **500 feet** into previous casing string. 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 cave/karst or potash.**

4. The minimum required fill of cement behind the **5** inch production casing is:

- Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. 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).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. 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 OOGO2.III.A.2.i must be followed.

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.
- 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.

BOPE Break Testing Variance (Note: For 5M BOPE or less)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less.
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOPE Break Testing operations.
- 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.
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.

- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

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)

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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

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
      - Notify the BLM when moving in and removing the Spudder Rig.
      - 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.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 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. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a

digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity 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 intergrity 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-P 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

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:

    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. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. 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.

    a. 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 when specified), 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).

b. 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. 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.

e. The results of the test shall be reported to the appropriate BLM office.

f. 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.

g. 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.

h. 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 Onshore Order No. 2.

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.

AFMSS

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

Operator Certification Data Report

06/14/2024

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: CASSIE EVANS **Signed on:** 05/11/2022

Title: Regulatory Analyst

Street Address: 6401 Holiday Hill Road, Bldg 5

City: Midland **State:** TX **Zip:** 79707

Phone: (432)218-3671

Email address: RANELL.KLEIN@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

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

Application Data
06/14/2024

APD ID: 10400085313
Submission Date: 05/24/2022
Operator Name: XTO ENERGY INCORPORATED
Well Name: JRU APACHE FEDERAL COM
Well Number: 112H
Well Type: CONVENTIONAL GAS WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400085313
Tie to previous NOS? N
Submission Date: 05/24/2022
BLM Office: Carlsbad
User: CASSIE EVANS
Title: Regulatory Analyst
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM89051
Lease Acres:
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? YES
Federal or Indian agreement: FEDERAL
Agreement number: NMNM70965X
Agreement name: JAMES RANCH UNIT
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: JRU APACHE FEDERAL COM
Well Number: 112H
Well API Number:
Field/Pool or Exploratory? Field and Pool
Field Name: LOS MEDANOS
Pool Name: WOLFCAMP, SOUTH

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** Y **New surface disturbance?** N

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** JRU APACHE **Number:** A

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: CONVENTIONAL GAS WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: **Distance to nearest well:** 30 FT **Distance to lease line:** 818 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Apache_112H_C102_signed_20240417095529.pdf

Well work start Date: 01/31/2022 **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	2515	FSL	818	FEL	22S	30E	13	Aliquot NESE	32.391762	-103.828231	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 89051	3348	0	0	Y
KOP Leg #1	2515	FSL	818	FEL	22S	30E	13	Aliquot NESE	32.391762	-103.828231	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 89051	-7219	10700	10567	Y
PPP Leg #1-1	1650	FNL	330	FEL	22S	30E	13	Aliquot SENE	32.394837	-103.826655	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 89051	-7755	11600	11103	Y

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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 #1-2	1650	FNL	990	FWL	22S	30E	13	Aliquot SWNW	32.39485	-103.839126	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC064827A	-7715	15600	11063	Y
EXIT Leg #1	1650	FNL	100	FWL	22S	30E	14	Aliquot SWNW	32.394872	-103.859919	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC069877	-7653	21842	11001	Y
BHL Leg #1	1650	FNL	50	FWL	22S	30E	14	Aliquot SWNW	32.394872	-103.860081	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC069877	-7653	21892	11001	Y

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- 55529	96921	Los Medanos; Wolfcamp, North (Gas)

[4] Property Code	[5] Property Name	[6] Well Number
336414	JRU APACHE FEDERAL COM	112H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO ENERGY, INC.	3,348'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	13	22 S	30 E		2,515	SOUTH	818	EAST	EDDY

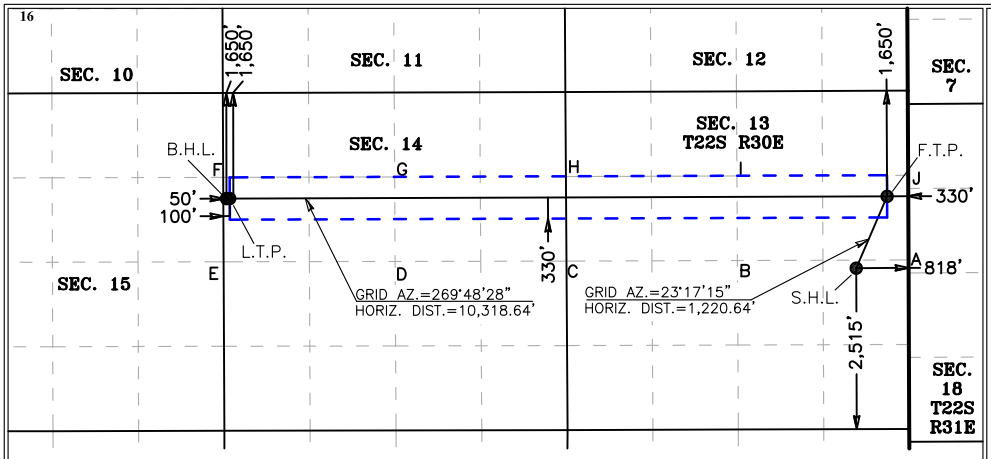
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	22 S	30 E		1,650	NORTH	50	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16



SHL (NAD83 NME)		LTP (NAD83 NME)		SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	506,622.5	Y =	507,709.2	Y =	506,561.9	Y =	507,648.5
X =	697,244.7	X =	687,458.7	X =	656,063.2	X =	646,277.3
LAT. =	32.391762 °N	LAT. =	32.394872 °N	LAT. =	32.391639 °N	LAT. =	32.394749 °N
LONG. =	103.828231 °W	LONG. =	103.859919 °W	LONG. =	103.827737 °W	LONG. =	103.859424 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**		**FTP (NAD27 NME)**		**BHL (NAD27 NME)**	
Y =	507,743.7	Y =	507,709.1	Y =	507,683.0	Y =	507,648.4
X =	697,727.2	X =	687,408.7	X =	656,545.8	X =	646,227.3
LAT. =	32.394837 °N	LAT. =	32.394872 °N	LAT. =	32.394715 °N	LAT. =	32.394749 °N
LONG. =	103.826650 °W	LONG. =	103.860081 °W	LONG. =	103.826156 °W	LONG. =	103.859586 °W

CORNER COORDINATES (NAD83 NME)				CORNER COORDINATES (NAD27 NME)			
A - Y =	506,750.2 N	,	X = 698,061.8 E	A - Y =	506,689.5 N	,	X = 656,880.3 E
B - Y =	506,741.3 N	,	X = 695,389.1 E	B - Y =	506,680.6 N	,	X = 654,207.6 E
C - Y =	506,732.3 N	,	X = 692,717.9 E	C - Y =	506,671.6 N	,	X = 651,536.5 E
D - Y =	506,727.0 N	,	X = 690,042.0 E	D - Y =	506,666.3 N	,	X = 648,860.6 E
E - Y =	506,721.6 N	,	X = 687,363.5 E	E - Y =	506,660.9 N	,	X = 646,182.1 E
F - Y =	508,040.3 N	,	X = 687,357.1 E	F - Y =	507,979.6 N	,	X = 646,175.7 E
G - Y =	508,046.7 N	,	X = 690,034.9 E	G - Y =	507,985.9 N	,	X = 648,853.5 E
H - Y =	508,052.5 N	,	X = 692,709.1 E	H - Y =	507,991.8 N	,	X = 651,527.8 E
I - Y =	508,062.1 N	,	X = 695,381.6 E	I - Y =	508,001.4 N	,	X = 654,200.2 E
J - Y =	508,072.7 N	,	X = 698,055.7 E	J - Y =	508,012.0 N	,	X = 656,874.3 E

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Rusty Klein — 3-18-2024
Signature — Date

RUSTY KLEIN
Printed Name

ranell.klein@exxonmobil.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

03-14-2022
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number — LM — 2021121718

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

Drilling Plan Data Report
06/14/2024

APD ID: 10400085313 **Submission Date:** 05/24/2022

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
8604262	QUATERNARY	3348	0	0	ALLUVIUM	USEABLE WATER	N
8604269	RUSTLER	2894	454	454	SANDSTONE, SILTSTONE	USEABLE WATER	N
8604264	SALADO	2602	746	746	SALT	POTASH	N
8604265	BASE OF SALT	-253	3601	3601	SALT	POTASH	N
8604266	DELAWARE	-512	3860	3860	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13281571	BRUSHY CANYON	-3254	6602	6602	SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
8604267	BONE SPRING	-4412	7760	7760	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13262289	BONE SPRING 1ST	-5452	8800	8800	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13262290	BONE SPRING 2ND	-6182	9530	9530	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13262291	BONE SPRING 3RD	-7202	10550	10550	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13262292	WOLFCAMP	-7642	10990	10990	SANDSTONE, SHALE	NATURAL GAS, OIL, USEABLE WATER	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 11001

Equipment: Once the permanent WH is installed on the surface casing, the blow out preventer equipment (BOP) will consist of a 5M Hydril and a 5M 3-Ram BOP. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M). Also a variance is requested to test the 5M annular to 70% of working pressure at 3500 psi. Wellhead: Permanent Wellhead Multibowl System A. Starting Head: 20" 10M top flange x 13-3/8" SOW bottom B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

Requesting Variance? YES

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Variance request: A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.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. Based on discussions with the BLM on February 27th 2020, 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 (First well will be the deepest Intermediate) 2. When skidding to drill an intermediate section does not penetrate into the Wolfcamp 3. Full BOP test will be required prior to drilling the production hole. Permanent Permanent Wellhead – Cactus CRC-MBU-3T-CFL Multibowl System Permanent Wellhead – Multibowl System A. Starting Head: 13-5/8" 10M top flange x 13-3/8" SOW bottom B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange · Wellhead will be installed by manufacturer's representatives. · Manufacturer will monitor welding process to ensure appropriate temperature of seal. · Operator will test the 7-5/8" casing per BLM Onshore Order 2 · Wellhead Manufacturer representative will not be present for BOP test plug installation

Testing Procedure: All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 70% of the working pressure. When nippling up on the surface casing, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

Choke Diagram Attachment:

Apache_5MCM_20240317171127.pdf

BOP Diagram Attachment:

Apache_5MBOP_20211110052936.pdf

Apache_5M10M_BOP_20240508095537.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	721	0	721	3348	2627	721	J-55	54.5	OTHER - BTC	3.46	2.31	DRY	21.71	DRY	21.71
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3701	0	3679	3344	-331	3701	J-55	40	OTHER - BTC	2.14	1.39	DRY	4.26	DRY	4.26
3	INTERMEDIATE	8.75	7.625	NEW	API	Y	0	10015	0	9893	0	-6545	10015	L-80	29.7	OTHER - Flush Joint	2.66	1.9	DRY	2.2	DRY	2.2
4	PRODUCTION	6.75	5.0	NEW	API	Y	0	21892	0	11001	3344	-7653	21892	P-110	18	OTHER - Semi-Premium	2.22	1.16	DRY	7.7	DRY	7.7

Casing Attachments

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Apache_112H_Csg_20220511231033.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Apache_112H_Csg_20220511230908.pdf

Casing ID: 3 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Apache_112H_Csg_20220511231059.pdf

Casing Design Assumptions and Worksheet(s):

Apache_112H_Csg_20220511231119.pdf

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Casing Attachments

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Apache_112H_Csg_20220511230927.pdf

Casing Design Assumptions and Worksheet(s):

Apache_112H_Csg_20220511230942.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	721	310	1.87	12.9	579.7	100	EconoCem-HLTRRC	None
SURFACE	Tail		0	721	300	1.35	14.8	405	100	Class C	2% CaCl
INTERMEDIATE	Lead		0	3701	1530	1.39	12.9	2126.7	100	Class C	None
INTERMEDIATE	Tail		0	3701	130	1.35	14.8	175.5	100	Class C	2% CaCl
INTERMEDIATE	Lead		3501	6602	310	1.35	14.8	418.5	100	Class C	None
INTERMEDIATE	Tail		6602	10015	390	1.33	14.8	518.7	100	Class C	None
PRODUCTION	Lead		9515	10800	50	2.69	11.5	134.5	20	NeoCem	None
PRODUCTION	Tail		10800	21892	1060	1.51	13.2	1600.6	20	VersaCem	None

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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 Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

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: Spud with fresh water/native mud. Drill out from under surface casing with brine solution. A brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco 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	721	WATER-BASED MUD	8.7	9.2							
721	3701	SALT SATURATED	10.4	10.9							
3701	10015	OTHER : FW / Cut Brine	9.7	10.2							
10015	21892	OIL-BASED MUD	10.5	11							

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Section 6 - Test, Logging, Coring

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

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.Open hole logging will not be done on this well.

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

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

Coring operation description for the well:

No Coring Operations for Well

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6062 **Anticipated Surface Pressure:** 3619

Anticipated Bottom Hole Temperature(F): 195

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Apache_H2S_Dia_20211111055301.pdf
Apache_H2S_Plan_20211110054100.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Apache_112H_DD_20220511231226.pdf

Other proposed operations facets description:

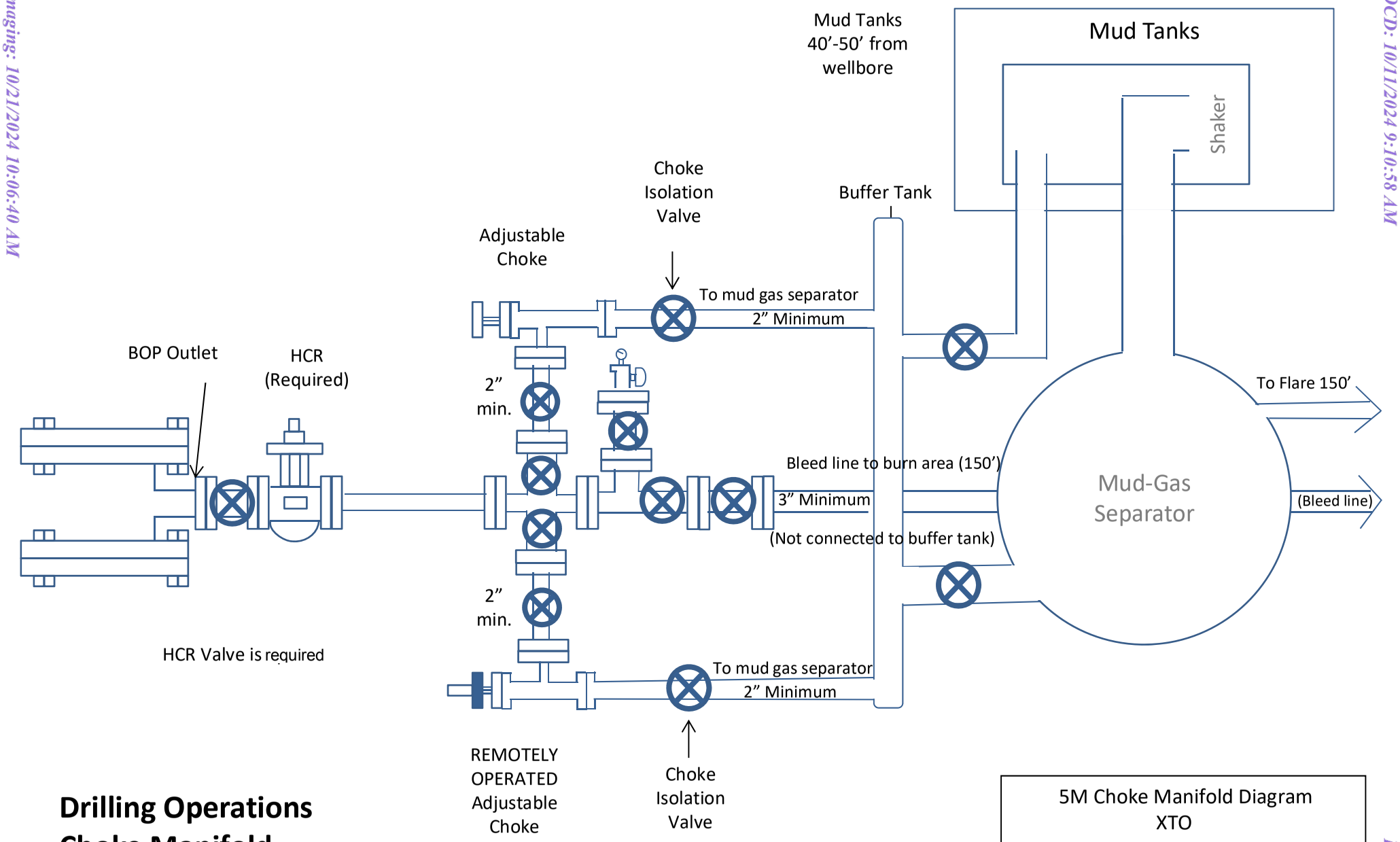
Other proposed operations facets attachment:

Apache_112H_Cmt_20240416193929.pdf

Other Variance attachment:

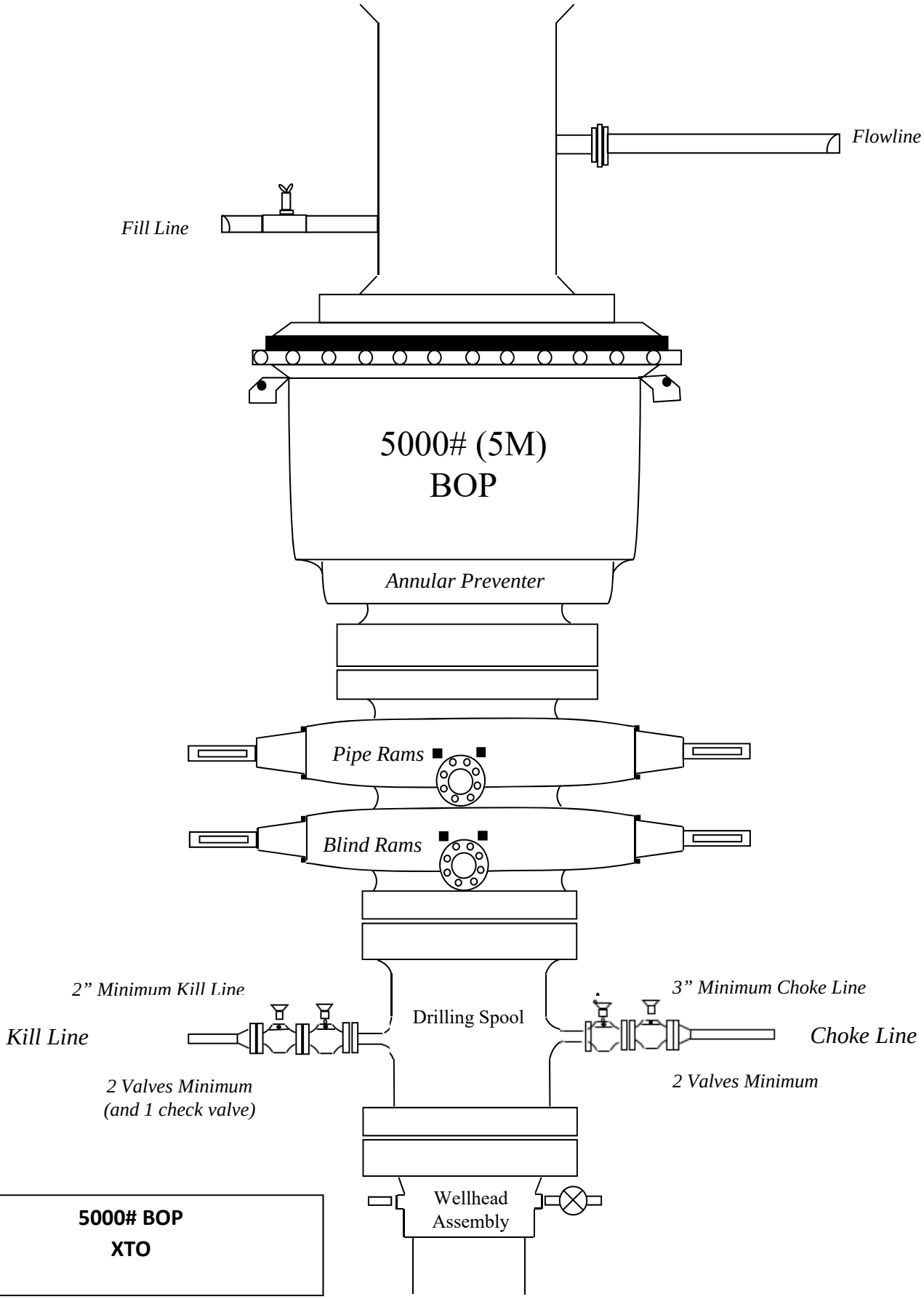
Apache_Break_20211110054144.pdf
Apache_FH_20211110054152.pdf
Apache_OFCV_20211110054200.pdf
Apache_Spud_20211110054211.pdf
Apache_MBS_20240508101033.pdf

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

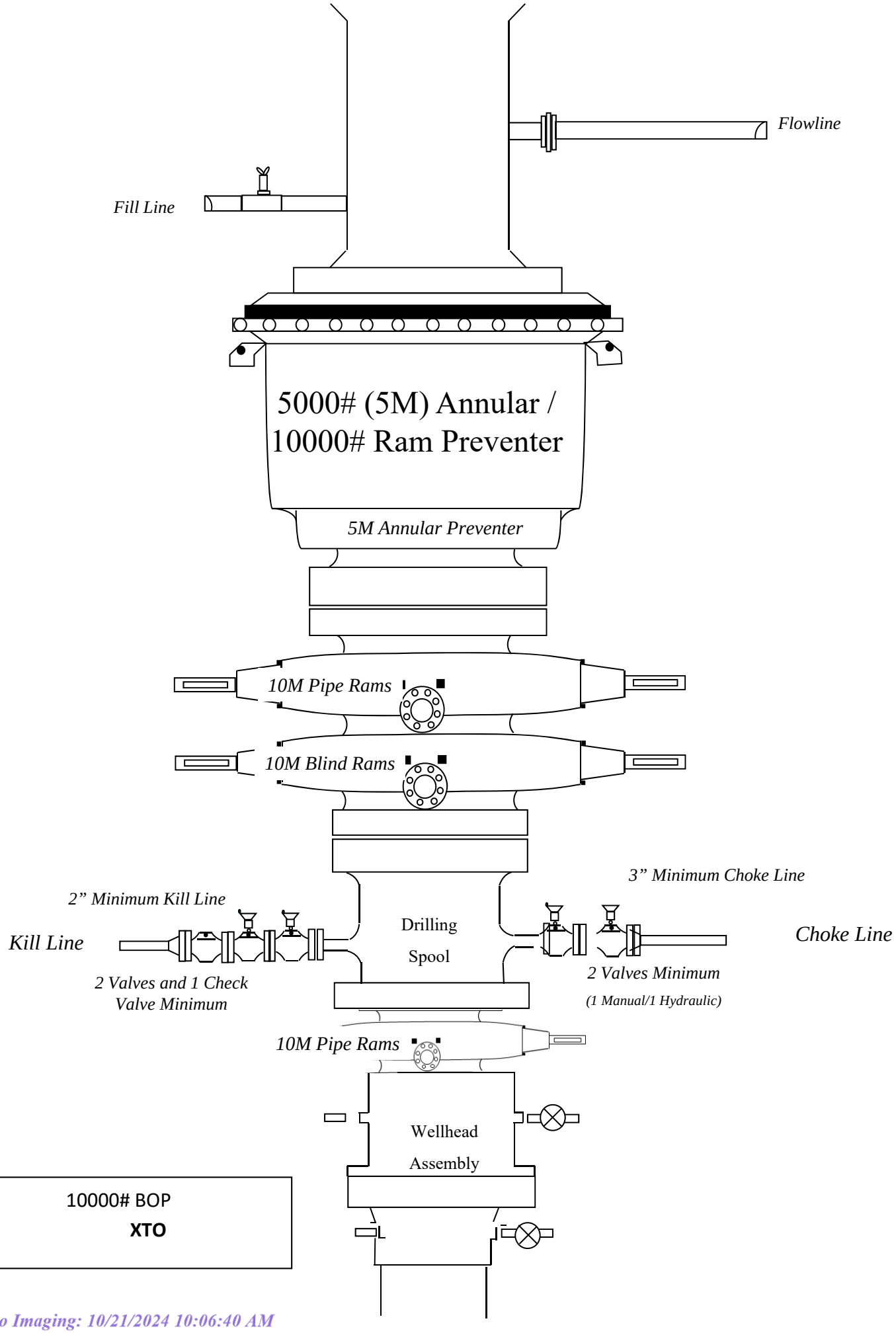


Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
XTO


Flowline
Fill Line
5000# (5M)
BOP
Annular Preventer
Pipe Rams
Blind Rams
2" Minimum Kill Line
3" Minimum Choke Line
Kill Line
Drilling Spool
Choke Line
2 Valves Minimum
(and 1 check valve)
2 Valves Minimum
Wellhead
Assembly

5000# BOP
XTO



10000# BOP

XTO

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 721'	13.375	54.5	J-55	BTC	New	2.31	3.46	21.71
12.25	0' – 3701'	9.625	40	J-55	BTC	New	1.39	2.14	4.26
8.75	0' – 3801'	7.625	29.7	RY P-110	Flush Joint	New	2.61	2.79	1.88
8.75	3801' – 10015'	7.625	29.7	HC L-80	Flush Joint	New	1.90	2.66	2.20
6.75	0' – 9915'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.69	2.22
6.75	9915' - 11000'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.42	6.04
6.75	11000' - 21892'	5	18	RY P-110	Semi-Premium	New	1.16	2.22	7.70

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 721'	13.375	54.5	J-55	BTC	New	2.31	3.46	21.71
12.25	0' – 3701'	9.625	40	J-55	BTC	New	1.39	2.14	4.26
8.75	0' – 3801'	7.625	29.7	RY P-110	Flush Joint	New	2.61	2.79	1.88
8.75	3801' – 10015'	7.625	29.7	HC L-80	Flush Joint	New	1.90	2.66	2.20
6.75	0' – 9915'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.69	2.22
6.75	9915' - 11000'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.42	6.04
6.75	11000' - 21892'	5	18	RY P-110	Semi-Premium	New	1.16	2.22	7.70

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 721'	13.375	54.5	J-55	BTC	New	2.31	3.46	21.71
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8.75	0' – 3801'	7.625	29.7	RY P-110	Flush Joint	New	2.61	2.79	1.88
8.75	3801' – 10015'	7.625	29.7	HC L-80	Flush Joint	New	1.90	2.66	2.20
6.75	0' – 9915'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.69	2.22
6.75	9915' - 11000'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.42	6.04
6.75	11000' - 21892'	5	18	RY P-110	Semi-Premium	New	1.16	2.22	7.70

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 721'	13.375	54.5	J-55	BTC	New	2.31	3.46	21.71
12.25	0' – 3701'	9.625	40	J-55	BTC	New	1.39	2.14	4.26
8.75	0' – 3801'	7.625	29.7	RY P-110	Flush Joint	New	2.61	2.79	1.88
8.75	3801' – 10015'	7.625	29.7	HC L-80	Flush Joint	New	1.90	2.66	2.20
6.75	0' – 9915'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.69	2.22
6.75	9915' - 11000'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.42	6.04
6.75	11000' - 21892'	5	18	RY P-110	Semi-Premium	New	1.16	2.22	7.70

Casing Assumptions

Casing Design

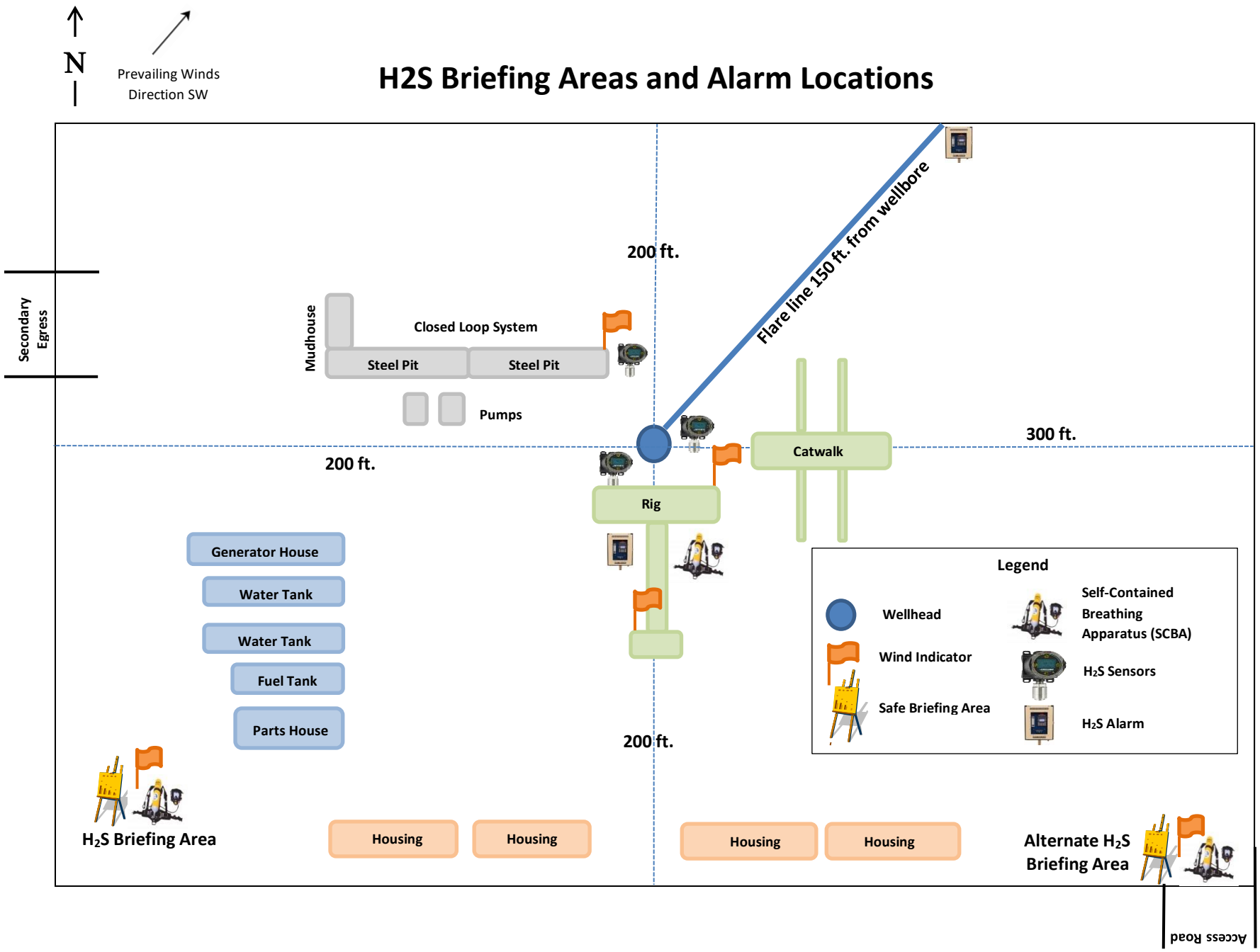
Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 721'	13.375	54.5	J-55	BTC	New	2.31	3.46	21.71
12.25	0' – 3701'	9.625	40	J-55	BTC	New	1.39	2.14	4.26
8.75	0' – 3801'	7.625	29.7	RY P-110	Flush Joint	New	2.61	2.79	1.88
8.75	3801' – 10015'	7.625	29.7	HC L-80	Flush Joint	New	1.90	2.66	2.20
6.75	0' – 9915'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.69	2.22
6.75	9915' - 11000'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.42	6.04
6.75	11000' - 21892'	5	18	RY P-110	Semi-Premium	New	1.16	2.22	7.70

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 721'	13.375	54.5	J-55	BTC	New	2.31	3.46	21.71
12.25	0' – 3701'	9.625	40	J-55	BTC	New	1.39	2.14	4.26
8.75	0' – 3801'	7.625	29.7	RY P-110	Flush Joint	New	2.61	2.79	1.88
8.75	3801' – 10015'	7.625	29.7	HC L-80	Flush Joint	New	1.90	2.66	2.20
6.75	0' – 9915'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.69	2.22
6.75	9915' - 11000'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.42	6.04
6.75	11000' - 21892'	5	18	RY P-110	Semi-Premium	New	1.16	2.22	7.70

H2S Briefing Areas and Alarm Locations



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 H_2S, 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 H_2S 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
    - Detection of H_2S, and
    - Measures for protection against the gas,
    - 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 (SO_2). 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 H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = I	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:

Kendall Decker, Drilling Manager	903-521-6477
Milton Turman, Drilling Superintendent	817-524-5107
Jeff Raines, Construction Foreman	432-557-3159
Toady Sanders, EH & S Manager	903-520-1601
Wes McSpadden, Production Foreman	575-441-1147

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

XTO Energy

Eddy County, NM (NAD-27)
JRU APACHE FEDERAL COM
112H

Wellbore #1

Plan: PERMIT

Standard Planning Report

17 March, 2022

XTO ENERGY

Project: Eddy County, NM (NAD-27)
Site: JRU APACHE FEDERAL COM
Well: 112H
Wellbore: Wellbore #1
Design: PERMIT

WELL DETAILS: 112H

Rig Name: TBD
RKB = 32' @ 3380.00usft (TBD)
Ground Level: 3348.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	506561.90	656063.20	32.3916392	-103.8277370

SECTION DETAILS

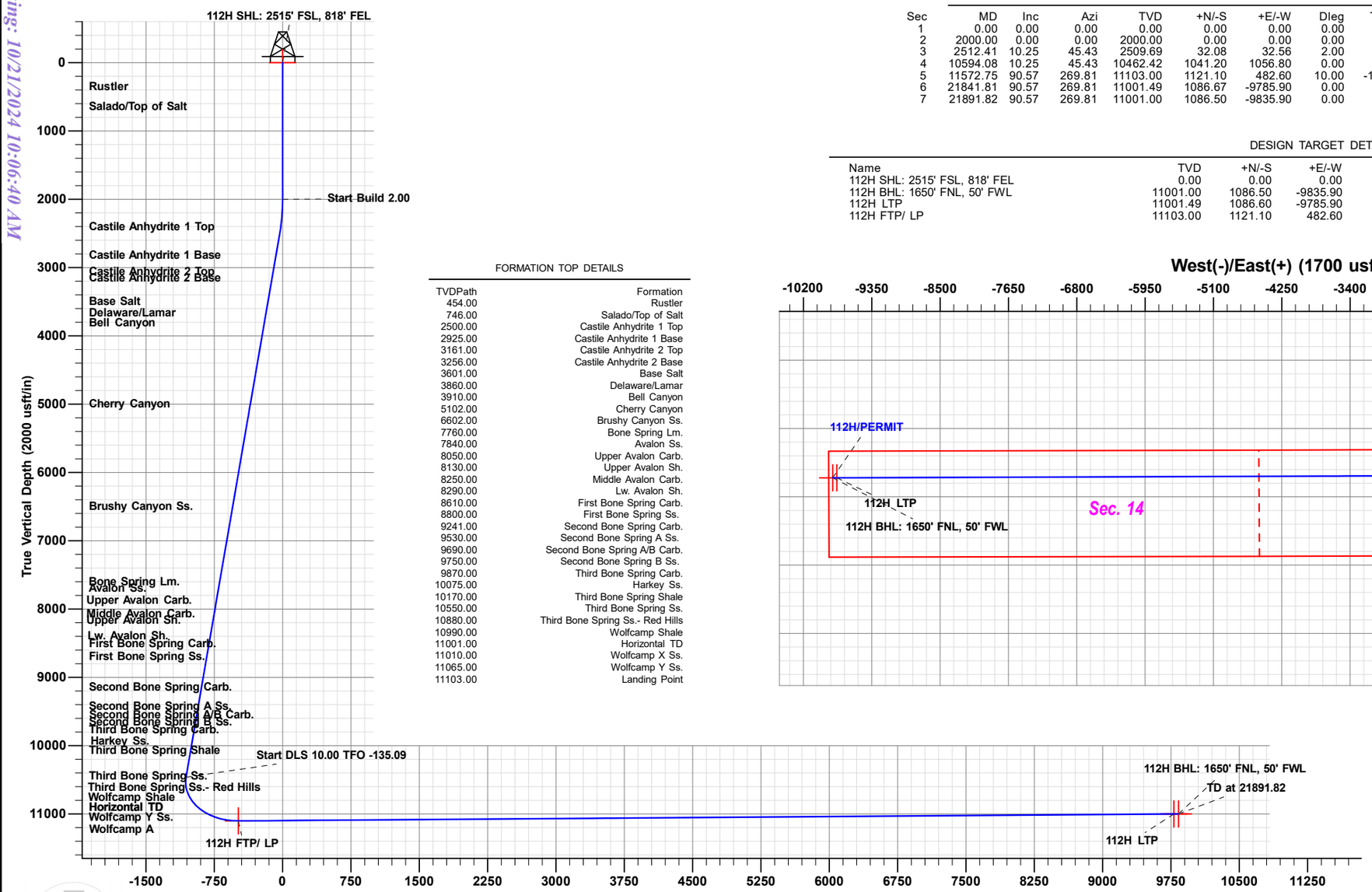
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3	2512.41	10.25	45.43	2509.69	32.08	32.56	2.00	45.43	-32.66	
4	10594.08	10.25	45.43	10462.42	1041.20	1056.80	0.00	0.00	-1060.24	
5	11572.75	90.57	269.81	11103.00	1121.10	482.60	10.00	-135.09	-486.32	112H FTP/ LP
6	21841.81	90.57	269.81	11001.49	1086.67	-9785.90	0.00	0.00	9782.24	112H LTP
7	21891.82	90.57	269.81	11001.00	1086.50	-9835.90	0.00	0.00	9832.24	112H BHL: 1650' FNL, 50' FWL

DESIGN TARGET DETAILS

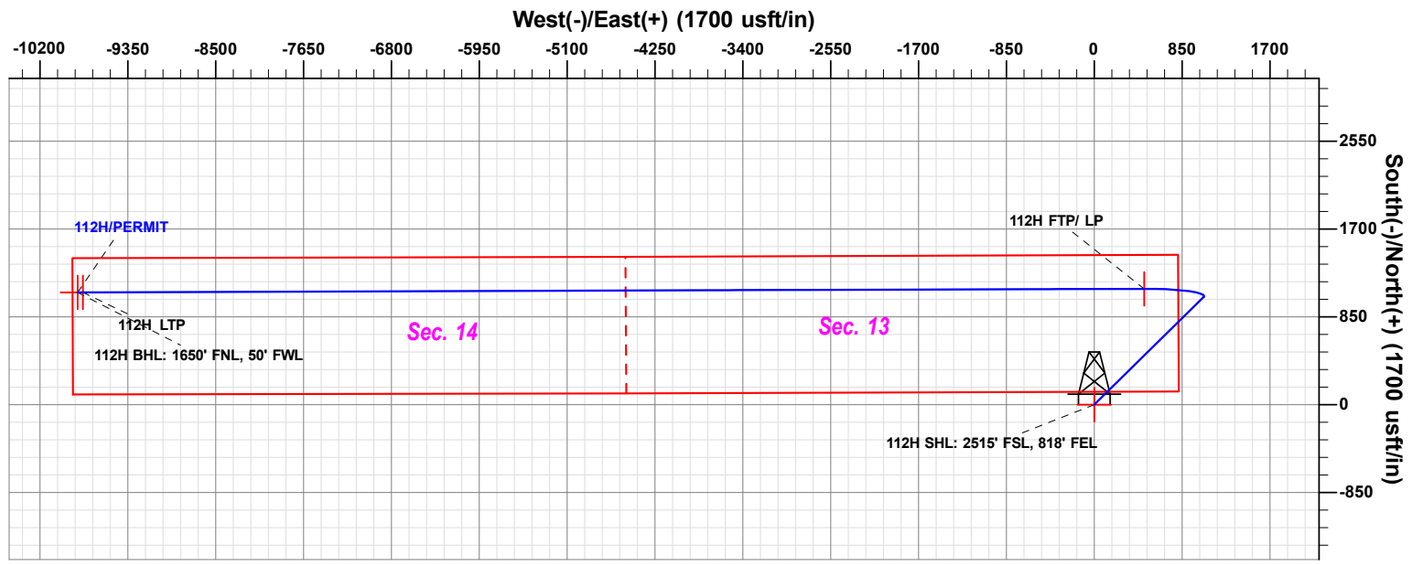
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
112H SHL: 2515' FSL, 818' FEL	0.00	0.00	0.00	506561.90	656063.20	32.3916392	-103.8277370	Point
112H BHL: 1650' FNL, 50' FWL	11001.00	1086.50	-9835.90	507648.40	646227.30	32.3947496	-103.8595857	Point
112H LTP	11001.49	1086.60	-9785.90	507648.50	646277.30	32.3947492	-103.8594237	Point
112H FTP/ LP	11103.00	1121.10	482.60	507683.00	656545.80	32.3947146	-103.8261564	Point

FORMATION TOP DETAILS

TVDPath	Formation
454.00	Rustler
746.00	Salado/Top of Salt
2500.00	Castile Anhydrite 1 Top
2925.00	Castile Anhydrite 1 Base
3161.00	Castile Anhydrite 2 Top
3256.00	Castile Anhydrite 2 Base
3601.00	Base Salt
3860.00	Delaware/Lamar
3910.00	Bell Canyon
5102.00	Cherry Canyon
6602.00	Brushy Canyon Ss.
7760.00	Bone Spring Lm.
7840.00	Avalon Ss.
8050.00	Upper Avalon Carb.
8130.00	Upper Avalon Sh.
8250.00	Middle Avalon Carb.
8290.00	Lw. Avalon Sh.
8610.00	First Bone Spring Carb.
8800.00	First Bone Spring Ss.
9241.00	Second Bone Spring Carb.
9530.00	Second Bone Spring A Ss.
9690.00	Second Bone Spring A/B Carb.
9750.00	Second Bone Spring B Ss.
9870.00	Third Bone Spring Carb.
10075.00	Harkey Ss.
10170.00	Third Bone Spring Shale
10550.00	Third Bone Spring Ss.
10880.00	Third Bone Spring Ss.- Red Hills
10990.00	Wolfcamp Shale
11001.00	Horizontal TD
11010.00	Wolfcamp X Ss.
11065.00	Wolfcamp Y Ss.
11103.00	Landing Point



Vertical Section at 269.81° (1500 usft/in)



PROJECT DETAILS: Eddy County, NM (NAD-27)

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

Plan: PERMIT (112H/Wellbore #1)

Created By: Matthew May Date: 12:31, March 17 2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-		

[4] Property Code	[5] Property Name	[6] Well Number
	JRU APACHE FEDERAL COM	112H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO ENERGY, INC.	3,348'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	13	22 S	30 E		2,515	SOUTH	818	EAST	EDDY

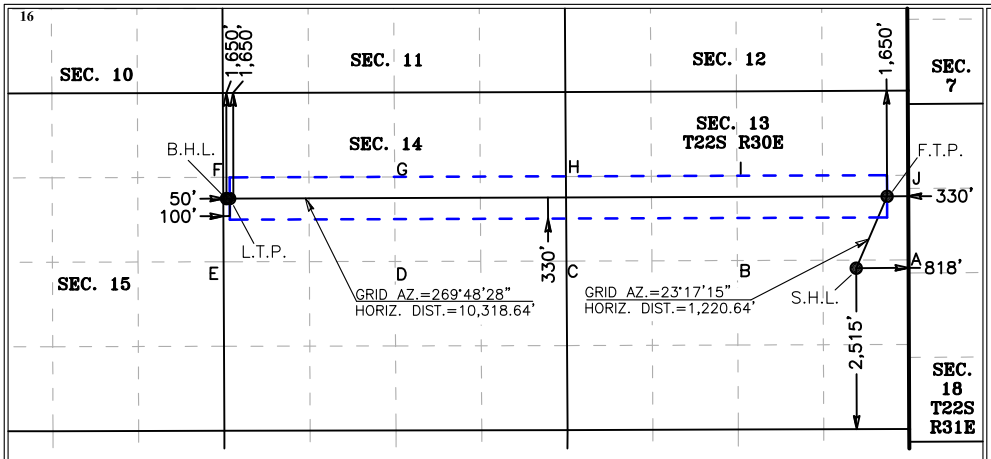
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	22 S	30 E		1,650	NORTH	50	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16



SHL (NAD83 NME)		LTP (NAD83 NME)		SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	506,622.5	Y =	507,709.2	Y =	506,561.9	Y =	507,648.5
X =	697,244.7	X =	687,458.7	X =	656,063.2	X =	646,277.3
LAT. =	32.391762 °N	LAT. =	32.394872 °N	LAT. =	32.391639 °N	LAT. =	32.394749 °N
LONG. =	103.828231 °W	LONG. =	103.859919 °W	LONG. =	103.827737 °W	LONG. =	103.859424 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**		**FTP (NAD27 NME)**		**BHL (NAD27 NME)**	
Y =	507,743.7	Y =	507,709.1	Y =	507,683.0	Y =	507,648.4
X =	697,727.2	X =	687,408.7	X =	656,545.8	X =	646,227.3
LAT. =	32.394837 °N	LAT. =	32.394872 °N	LAT. =	32.394715 °N	LAT. =	32.394749 °N
LONG. =	103.826650 °W	LONG. =	103.860081 °W	LONG. =	103.826156 °W	LONG. =	103.859586 °W

CORNER COORDINATES (NAD83 NME)				CORNER COORDINATES (NAD27 NME)			
A - Y =	506,750.2 N	,	X = 698,061.8 E	A - Y =	506,689.5 N	,	X = 656,880.3 E
B - Y =	506,741.3 N	,	X = 695,389.1 E	B - Y =	506,680.6 N	,	X = 654,207.6 E
C - Y =	506,732.3 N	,	X = 692,717.9 E	C - Y =	506,671.6 N	,	X = 651,536.5 E
D - Y =	506,727.0 N	,	X = 690,042.0 E	D - Y =	506,666.3 N	,	X = 648,860.6 E
E - Y =	506,721.6 N	,	X = 687,363.5 E	E - Y =	506,660.9 N	,	X = 646,182.1 E
F - Y =	508,040.3 N	,	X = 687,357.1 E	F - Y =	507,979.6 N	,	X = 646,175.7 E
G - Y =	508,046.7 N	,	X = 690,034.9 E	G - Y =	507,985.9 N	,	X = 648,853.5 E
H - Y =	508,052.5 N	,	X = 692,709.1 E	H - Y =	507,991.8 N	,	X = 651,527.8 E
I - Y =	508,062.1 N	,	X = 695,381.6 E	I - Y =	508,001.4 N	,	X = 654,200.2 E
J - Y =	508,072.7 N	,	X = 698,055.7 E	J - Y =	508,012.0 N	,	X = 656,874.3 E

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

03-14-2022
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP 23786
Certificate Number LM 2021121718

XTO ENERGY

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 112H
Company:	XTO Energy	**TVD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Project Eddy County, NM (NAD-27)

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 JRU APACHE FEDERAL COM

Site Position:		**Northing:**	506,623.30 usft	**Latitude:**	32.3918094
From:	Map	**Easting:**	655,954.00 usft	**Longitude:**	-103.8280898
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.27 °

Well 112H

Well Position	**+N/-S**	-61.40 usft	**Northing:**	506,561.90 usft	**Latitude:**	32.3916392
	+E/-W	109.20 usft	**Easting:**	656,063.20 usft	**Longitude:**	-103.8277370
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,348.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	03/17/22	6.59	59.99	47,489

Design PERMIT

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.81

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,512.41	10.25	45.43	2,509.69	32.08	32.56	2.00	2.00	0.00	45.43	
10,594.08	10.25	45.43	10,462.42	1,041.20	1,056.80	0.00	0.00	0.00	0.00	
11,572.75	90.57	269.81	11,103.00	1,121.10	482.60	10.00	8.21	-13.86	-135.09	112H FTP/ LP
21,841.81	90.57	269.81	11,001.49	1,086.67	-9,785.90	0.00	0.00	0.00	0.00	112H LTP
21,891.82	90.57	269.81	11,001.00	1,086.50	-9,835.90	0.00	0.00	0.00	0.00	112H BHL: 1650' FI

XTO ENERGY

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 112H
Company:	XTO Energy	**TVD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
454.00	0.00	0.00	454.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
746.00	0.00	0.00	746.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado/Top of Salt									
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	2.00	45.43	2,099.98	1.22	1.24	-1.25	2.00	2.00	0.00
2,200.00	4.00	45.43	2,199.84	4.90	4.97	-4.99	2.00	2.00	0.00
2,300.00	6.00	45.43	2,299.45	11.01	11.18	-11.22	2.00	2.00	0.00
2,400.00	8.00	45.43	2,398.70	19.57	19.86	-19.92	2.00	2.00	0.00
2,500.00	10.00	45.43	2,497.47	30.55	31.00	-31.10	2.00	2.00	0.00
2,502.57	10.05	45.43	2,500.00	30.86	31.32	-31.42	2.00	2.00	0.00
Castile Anhydrite 1 Top									
2,512.41	10.25	45.43	2,509.69	32.08	32.56	-32.66	2.00	2.00	0.00
2,600.00	10.25	45.43	2,595.87	43.01	43.66	-43.80	0.00	0.00	0.00
2,700.00	10.25	45.43	2,694.28	55.50	56.33	-56.52	0.00	0.00	0.00
2,800.00	10.25	45.43	2,792.68	67.99	69.01	-69.23	0.00	0.00	0.00
2,900.00	10.25	45.43	2,891.09	80.47	81.68	-81.95	0.00	0.00	0.00
2,934.46	10.25	45.43	2,925.00	84.78	86.05	-86.33	0.00	0.00	0.00
Castile Anhydrite 1 Base									
3,000.00	10.25	45.43	2,989.49	92.96	94.35	-94.66	0.00	0.00	0.00
3,100.00	10.25	45.43	3,087.90	105.45	107.03	-107.37	0.00	0.00	0.00
3,174.29	10.25	45.43	3,161.00	114.72	116.44	-116.82	0.00	0.00	0.00
Castile Anhydrite 2 Top									
3,200.00	10.25	45.43	3,186.30	117.93	119.70	-120.09	0.00	0.00	0.00
3,270.83	10.25	45.43	3,256.00	126.78	128.68	-129.10	0.00	0.00	0.00
Castile Anhydrite 2 Base									
3,300.00	10.25	45.43	3,284.71	130.42	132.37	-132.80	0.00	0.00	0.00
3,400.00	10.25	45.43	3,383.11	142.91	145.05	-145.52	0.00	0.00	0.00
3,500.00	10.25	45.43	3,481.52	155.39	157.72	-158.23	0.00	0.00	0.00
3,600.00	10.25	45.43	3,579.92	167.88	170.39	-170.95	0.00	0.00	0.00
3,621.42	10.25	45.43	3,601.00	170.55	173.11	-173.67	0.00	0.00	0.00
Base Salt									
3,700.00	10.25	45.43	3,678.33	180.37	183.07	-183.66	0.00	0.00	0.00

XTO ENERGY

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 112H
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Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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)
3,800.00	10.25	45.43	3,776.73	192.85	195.74	-196.38	0.00	0.00	0.00
3,884.62	10.25	45.43	3,860.00	203.42	206.47	-207.14	0.00	0.00	0.00
Delaware/Lamar									
3,900.00	10.25	45.43	3,875.13	205.34	208.41	-209.09	0.00	0.00	0.00
3,935.43	10.25	45.43	3,910.00	209.76	212.91	-213.60	0.00	0.00	0.00
Bell Canyon									
4,000.00	10.25	45.43	3,973.54	217.82	221.09	-221.81	0.00	0.00	0.00
4,100.00	10.25	45.43	4,071.94	230.31	233.76	-234.52	0.00	0.00	0.00
4,200.00	10.25	45.43	4,170.35	242.80	246.44	-247.24	0.00	0.00	0.00
4,300.00	10.25	45.43	4,268.75	255.28	259.11	-259.95	0.00	0.00	0.00
4,400.00	10.25	45.43	4,367.16	267.77	271.78	-272.67	0.00	0.00	0.00
4,500.00	10.25	45.43	4,465.56	280.26	284.46	-285.38	0.00	0.00	0.00
4,600.00	10.25	45.43	4,563.97	292.74	297.13	-298.10	0.00	0.00	0.00
4,700.00	10.25	45.43	4,662.37	305.23	309.80	-310.81	0.00	0.00	0.00
4,800.00	10.25	45.43	4,760.78	317.72	322.48	-323.53	0.00	0.00	0.00
4,900.00	10.25	45.43	4,859.18	330.20	335.15	-336.24	0.00	0.00	0.00
5,000.00	10.25	45.43	4,957.59	342.69	347.82	-348.96	0.00	0.00	0.00
5,100.00	10.25	45.43	5,055.99	355.18	360.50	-361.67	0.00	0.00	0.00
5,146.76	10.25	45.43	5,102.00	361.01	366.42	-367.62	0.00	0.00	0.00
Cherry Canyon									
5,200.00	10.25	45.43	5,154.39	367.66	373.17	-374.39	0.00	0.00	0.00
5,300.00	10.25	45.43	5,252.80	380.15	385.85	-387.10	0.00	0.00	0.00
5,400.00	10.25	45.43	5,351.20	392.64	398.52	-399.82	0.00	0.00	0.00
5,500.00	10.25	45.43	5,449.61	405.12	411.19	-412.53	0.00	0.00	0.00
5,600.00	10.25	45.43	5,548.01	417.61	423.87	-425.25	0.00	0.00	0.00
5,700.00	10.25	45.43	5,646.42	430.10	436.54	-437.96	0.00	0.00	0.00
5,800.00	10.25	45.43	5,744.82	442.58	449.21	-450.68	0.00	0.00	0.00
5,900.00	10.25	45.43	5,843.23	455.07	461.89	-463.39	0.00	0.00	0.00
6,000.00	10.25	45.43	5,941.63	467.56	474.56	-476.11	0.00	0.00	0.00
6,100.00	10.25	45.43	6,040.04	480.04	487.23	-488.82	0.00	0.00	0.00
6,200.00	10.25	45.43	6,138.44	492.53	499.91	-501.54	0.00	0.00	0.00
6,300.00	10.25	45.43	6,236.85	505.02	512.58	-514.25	0.00	0.00	0.00
6,400.00	10.25	45.43	6,335.25	517.50	525.25	-526.97	0.00	0.00	0.00
6,500.00	10.25	45.43	6,433.65	529.99	537.93	-539.68	0.00	0.00	0.00
6,600.00	10.25	45.43	6,532.06	542.47	550.60	-552.40	0.00	0.00	0.00
6,671.08	10.25	45.43	6,602.00	551.35	559.61	-561.44	0.00	0.00	0.00
Brushy Canyon Ss.									
6,700.00	10.25	45.43	6,630.46	554.96	563.28	-565.11	0.00	0.00	0.00
6,800.00	10.25	45.43	6,728.87	567.45	575.95	-577.83	0.00	0.00	0.00
6,900.00	10.25	45.43	6,827.27	579.93	588.62	-590.54	0.00	0.00	0.00
7,000.00	10.25	45.43	6,925.68	592.42	601.30	-603.26	0.00	0.00	0.00
7,100.00	10.25	45.43	7,024.08	604.91	613.97	-615.97	0.00	0.00	0.00
7,200.00	10.25	45.43	7,122.49	617.39	626.64	-628.69	0.00	0.00	0.00
7,300.00	10.25	45.43	7,220.89	629.88	639.32	-641.40	0.00	0.00	0.00
7,400.00	10.25	45.43	7,319.30	642.37	651.99	-654.12	0.00	0.00	0.00
7,500.00	10.25	45.43	7,417.70	654.85	664.66	-666.83	0.00	0.00	0.00
7,600.00	10.25	45.43	7,516.11	667.34	677.34	-679.55	0.00	0.00	0.00
7,700.00	10.25	45.43	7,614.51	679.83	690.01	-692.26	0.00	0.00	0.00
7,800.00	10.25	45.43	7,712.91	692.31	702.69	-704.98	0.00	0.00	0.00
7,847.85	10.25	45.43	7,760.00	698.29	708.75	-711.06	0.00	0.00	0.00
Bone Spring Lm.									
7,900.00	10.25	45.43	7,811.32	704.80	715.36	-717.69	0.00	0.00	0.00
7,929.15	10.25	45.43	7,840.00	708.44	719.05	-721.40	0.00	0.00	0.00

XTO ENERGY

Planning Report

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Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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)
Avalon Ss.									
8,000.00	10.25	45.43	7,909.72	717.29	728.03	-730.41	0.00	0.00	0.00
8,100.00	10.25	45.43	8,008.13	729.77	740.71	-743.12	0.00	0.00	0.00
8,142.55	10.25	45.43	8,050.00	735.09	746.10	-748.53	0.00	0.00	0.00
Upper Avalon Carb.									
8,200.00	10.25	45.43	8,106.53	742.26	753.38	-755.84	0.00	0.00	0.00
8,223.85	10.25	45.43	8,130.00	745.24	756.40	-758.87	0.00	0.00	0.00
Upper Avalon Sh.									
8,300.00	10.25	45.43	8,204.94	754.75	766.05	-768.55	0.00	0.00	0.00
8,345.79	10.25	45.43	8,250.00	760.46	771.86	-774.37	0.00	0.00	0.00
Middle Avalon Carb.									
8,386.44	10.25	45.43	8,290.00	765.54	777.01	-779.54	0.00	0.00	0.00
Lw. Avalon Sh.									
8,400.00	10.25	45.43	8,303.34	767.23	778.73	-781.27	0.00	0.00	0.00
8,500.00	10.25	45.43	8,401.75	779.72	791.40	-793.98	0.00	0.00	0.00
8,600.00	10.25	45.43	8,500.15	792.21	804.07	-806.70	0.00	0.00	0.00
8,700.00	10.25	45.43	8,598.56	804.69	816.75	-819.41	0.00	0.00	0.00
8,711.63	10.25	45.43	8,610.00	806.14	818.22	-820.89	0.00	0.00	0.00
First Bone Spring Carb.									
8,800.00	10.25	45.43	8,696.96	817.18	829.42	-832.13	0.00	0.00	0.00
8,900.00	10.25	45.43	8,795.37	829.66	842.10	-844.84	0.00	0.00	0.00
8,904.71	10.25	45.43	8,800.00	830.25	842.69	-845.44	0.00	0.00	0.00
First Bone Spring Ss.									
9,000.00	10.25	45.43	8,893.77	842.15	854.77	-857.56	0.00	0.00	0.00
9,100.00	10.25	45.43	8,992.17	854.64	867.44	-870.27	0.00	0.00	0.00
9,200.00	10.25	45.43	9,090.58	867.12	880.12	-882.99	0.00	0.00	0.00
9,300.00	10.25	45.43	9,188.98	879.61	892.79	-895.70	0.00	0.00	0.00
9,352.86	10.25	45.43	9,241.00	886.21	899.49	-902.42	0.00	0.00	0.00
Second Bone Spring Carb.									
9,400.00	10.25	45.43	9,287.39	892.10	905.46	-908.42	0.00	0.00	0.00
9,500.00	10.25	45.43	9,385.79	904.58	918.14	-921.13	0.00	0.00	0.00
9,600.00	10.25	45.43	9,484.20	917.07	930.81	-933.85	0.00	0.00	0.00
9,646.55	10.25	45.43	9,530.00	922.88	936.71	-939.76	0.00	0.00	0.00
Second Bone Spring A Ss.									
9,700.00	10.25	45.43	9,582.60	929.56	943.48	-946.56	0.00	0.00	0.00
9,800.00	10.25	45.43	9,681.01	942.04	956.16	-959.28	0.00	0.00	0.00
9,809.14	10.25	45.43	9,690.00	943.18	957.32	-960.44	0.00	0.00	0.00
Second Bone Spring A/B Carb.									
9,870.11	10.25	45.43	9,750.00	950.80	965.04	-968.19	0.00	0.00	0.00
Second Bone Spring B Ss.									
9,900.00	10.25	45.43	9,779.41	954.53	968.83	-971.99	0.00	0.00	0.00
9,992.06	10.25	45.43	9,870.00	966.03	980.50	-983.70	0.00	0.00	0.00
Third Bone Spring Carb.									
10,000.00	10.25	45.43	9,877.82	967.02	981.50	-984.71	0.00	0.00	0.00
10,100.00	10.25	45.43	9,976.22	979.50	994.18	-997.42	0.00	0.00	0.00
10,200.00	10.25	45.43	10,074.62	991.99	1,006.85	-1,010.14	0.00	0.00	0.00
10,200.38	10.25	45.43	10,075.00	992.04	1,006.90	-1,010.18	0.00	0.00	0.00
Harkey Ss.									
10,296.92	10.25	45.43	10,170.00	1,004.09	1,019.14	-1,022.46	0.00	0.00	0.00
Third Bone Spring Shale									
10,300.00	10.25	45.43	10,173.03	1,004.48	1,019.53	-1,022.85	0.00	0.00	0.00
10,400.00	10.25	45.43	10,271.43	1,016.96	1,032.20	-1,035.57	0.00	0.00	0.00

XTO ENERGY

Planning Report

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Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
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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)
10,500.00	10.25	45.43	10,369.84	1,029.45	1,044.87	-1,048.28	0.00	0.00	0.00
10,594.08	10.25	45.43	10,462.42	1,041.20	1,056.80	-1,060.24	0.00	0.00	0.00
10,600.00	9.84	42.98	10,468.25	1,041.94	1,057.52	-1,060.97	10.00	-6.93	-41.33
10,650.00	7.41	13.21	10,517.70	1,048.21	1,061.17	-1,064.64	10.00	-4.85	-59.55
10,682.56	7.38	347.71	10,550.00	1,052.30	1,061.20	-1,064.69	10.00	-0.10	-78.30
Third Bone Spring Ss.									
10,700.00	7.93	335.25	10,567.29	1,054.48	1,060.46	-1,063.95	10.00	3.15	-71.43
10,750.00	10.98	310.63	10,616.62	1,060.72	1,055.40	-1,058.91	10.00	6.10	-49.26
10,800.00	15.10	297.87	10,665.33	1,066.87	1,046.02	-1,049.56	10.00	8.24	-25.50
10,850.00	19.62	290.68	10,713.05	1,072.88	1,032.41	-1,035.96	10.00	9.05	-14.38
10,900.00	24.33	286.14	10,759.40	1,078.71	1,014.65	-1,018.22	10.00	9.41	-9.08
10,950.00	29.13	283.01	10,804.05	1,084.32	992.88	-996.47	10.00	9.60	-6.26
11,000.00	33.98	280.71	10,846.65	1,089.66	967.28	-970.89	10.00	9.71	-4.61
11,041.23	38.01	279.20	10,880.00	1,093.83	943.42	-947.04	10.00	9.77	-3.65
Third Bone Spring Ss.- Red Hills									
11,050.00	38.87	278.92	10,886.87	1,094.69	938.04	-941.66	10.00	9.79	-3.25
11,100.00	43.78	277.47	10,924.41	1,099.38	905.37	-909.01	10.00	9.82	-2.89
11,150.00	48.70	276.27	10,958.98	1,103.68	869.53	-873.18	10.00	9.85	-2.41
11,199.45	53.58	275.24	10,990.00	1,107.52	831.23	-834.90	10.00	9.87	-2.08
Wolfcamp Shale									
11,200.00	53.63	275.23	10,990.33	1,107.57	830.79	-834.46	10.00	9.88	-1.94
11,218.40	55.45	274.88	11,001.00	1,108.89	815.86	-819.53	10.00	9.88	-1.89
Horizontal TD									
11,234.60	57.05	274.59	11,010.00	1,110.00	802.44	-806.11	10.00	9.89	-1.82
Wolfcamp X Ss.									
11,250.00	58.58	274.32	11,018.20	1,111.01	789.44	-793.12	10.00	9.89	-1.75
11,300.00	63.52	273.50	11,042.40	1,113.98	745.81	-749.50	10.00	9.90	-1.64
11,350.00	68.48	272.74	11,062.73	1,116.46	700.21	-703.91	10.00	9.90	-1.51
11,356.28	69.10	272.65	11,065.00	1,116.73	694.37	-698.07	10.00	9.91	-1.45
Wolfcamp Y Ss.									
11,400.00	73.43	272.04	11,079.04	1,118.42	653.00	-656.71	10.00	9.91	-1.40
11,450.00	78.39	271.37	11,091.21	1,119.86	604.54	-608.25	10.00	9.92	-1.34
11,500.00	83.35	270.73	11,099.14	1,120.76	555.20	-558.91	10.00	9.92	-1.29
11,550.00	88.31	270.09	11,102.78	1,121.12	505.35	-509.07	10.00	9.92	-1.26
11,572.75	90.57	269.81	11,103.00	1,121.10	482.60	-486.32	10.00	9.92	-1.26
Landing Point									
11,600.00	90.57	269.81	11,102.73	1,121.01	455.36	-459.07	0.00	0.00	0.00
11,700.00	90.57	269.81	11,101.74	1,120.67	355.36	-359.07	0.00	0.00	0.00
11,800.00	90.57	269.81	11,100.75	1,120.34	255.37	-259.08	0.00	0.00	0.00
11,900.00	90.57	269.81	11,099.77	1,120.00	155.37	-159.08	0.00	0.00	0.00
12,000.00	90.57	269.81	11,098.78	1,119.67	55.38	-59.09	0.00	0.00	0.00
12,100.00	90.57	269.81	11,097.79	1,119.33	-44.62	40.91	0.00	0.00	0.00
12,200.00	90.57	269.81	11,096.80	1,119.00	-144.61	140.90	0.00	0.00	0.00
12,300.00	90.57	269.81	11,095.81	1,118.66	-244.61	240.90	0.00	0.00	0.00
12,400.00	90.57	269.81	11,094.82	1,118.33	-344.60	340.89	0.00	0.00	0.00
12,500.00	90.57	269.81	11,093.83	1,117.99	-444.60	440.89	0.00	0.00	0.00
12,600.00	90.57	269.81	11,092.85	1,117.66	-544.59	540.88	0.00	0.00	0.00
12,700.00	90.57	269.81	11,091.86	1,117.32	-644.59	640.88	0.00	0.00	0.00
12,800.00	90.57	269.81	11,090.87	1,116.99	-744.58	740.87	0.00	0.00	0.00
12,900.00	90.57	269.81	11,089.88	1,116.65	-844.57	840.87	0.00	0.00	0.00
13,000.00	90.57	269.81	11,088.89	1,116.31	-944.57	940.86	0.00	0.00	0.00
13,100.00	90.57	269.81	11,087.90	1,115.98	-1,044.56	1,040.86	0.00	0.00	0.00
13,200.00	90.57	269.81	11,086.92	1,115.64	-1,144.56	1,140.85	0.00	0.00	0.00

XTO ENERGY

Planning Report

Database:	EDM 5000.1.13 Single User Db	**Local Co-ordinate Reference:**	Well 112H
Company:	XTO Energy	**TVD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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)
13,300.00	90.57	269.81	11,085.93	1,115.31	-1,244.55	1,240.85	0.00	0.00	0.00
13,400.00	90.57	269.81	11,084.94	1,114.97	-1,344.55	1,340.84	0.00	0.00	0.00
13,500.00	90.57	269.81	11,083.95	1,114.64	-1,444.54	1,440.84	0.00	0.00	0.00
13,600.00	90.57	269.81	11,082.96	1,114.30	-1,544.54	1,540.83	0.00	0.00	0.00
13,700.00	90.57	269.81	11,081.97	1,113.97	-1,644.53	1,640.83	0.00	0.00	0.00
13,800.00	90.57	269.81	11,080.98	1,113.63	-1,744.53	1,740.82	0.00	0.00	0.00
13,900.00	90.57	269.81	11,080.00	1,113.30	-1,844.52	1,840.82	0.00	0.00	0.00
14,000.00	90.57	269.81	11,079.01	1,112.96	-1,944.51	1,940.81	0.00	0.00	0.00
14,100.00	90.57	269.81	11,078.02	1,112.63	-2,044.51	2,040.81	0.00	0.00	0.00
14,200.00	90.57	269.81	11,077.03	1,112.29	-2,144.50	2,140.80	0.00	0.00	0.00
14,300.00	90.57	269.81	11,076.04	1,111.96	-2,244.50	2,240.80	0.00	0.00	0.00
14,400.00	90.57	269.81	11,075.05	1,111.62	-2,344.49	2,340.79	0.00	0.00	0.00
14,500.00	90.57	269.81	11,074.07	1,111.28	-2,444.49	2,440.79	0.00	0.00	0.00
14,600.00	90.57	269.81	11,073.08	1,110.95	-2,544.48	2,540.78	0.00	0.00	0.00
14,700.00	90.57	269.81	11,072.09	1,110.61	-2,644.48	2,640.78	0.00	0.00	0.00
14,800.00	90.57	269.81	11,071.10	1,110.28	-2,744.47	2,740.77	0.00	0.00	0.00
14,900.00	90.57	269.81	11,070.11	1,109.94	-2,844.47	2,840.77	0.00	0.00	0.00
15,000.00	90.57	269.81	11,069.12	1,109.61	-2,944.46	2,940.76	0.00	0.00	0.00
15,100.00	90.57	269.81	11,068.13	1,109.27	-3,044.45	3,040.76	0.00	0.00	0.00
15,200.00	90.57	269.81	11,067.15	1,108.94	-3,144.45	3,140.75	0.00	0.00	0.00
15,300.00	90.57	269.81	11,066.16	1,108.60	-3,244.44	3,240.75	0.00	0.00	0.00
15,400.00	90.57	269.81	11,065.17	1,108.27	-3,344.44	3,340.74	0.00	0.00	0.00
15,500.00	90.57	269.81	11,064.18	1,107.93	-3,444.43	3,440.74	0.00	0.00	0.00
15,600.00	90.57	269.81	11,063.19	1,107.60	-3,544.43	3,540.73	0.00	0.00	0.00
15,700.00	90.57	269.81	11,062.20	1,107.26	-3,644.42	3,640.73	0.00	0.00	0.00
15,800.00	90.57	269.81	11,061.22	1,106.93	-3,744.42	3,740.72	0.00	0.00	0.00
15,900.00	90.57	269.81	11,060.23	1,106.59	-3,844.41	3,840.72	0.00	0.00	0.00
16,000.00	90.57	269.81	11,059.24	1,106.26	-3,944.41	3,940.72	0.00	0.00	0.00
16,100.00	90.57	269.81	11,058.25	1,105.92	-4,044.40	4,040.71	0.00	0.00	0.00
16,200.00	90.57	269.81	11,057.26	1,105.58	-4,144.39	4,140.71	0.00	0.00	0.00
16,300.00	90.57	269.81	11,056.27	1,105.25	-4,244.39	4,240.70	0.00	0.00	0.00
16,400.00	90.57	269.81	11,055.28	1,104.91	-4,344.38	4,340.70	0.00	0.00	0.00
16,500.00	90.57	269.81	11,054.30	1,104.58	-4,444.38	4,440.69	0.00	0.00	0.00
16,600.00	90.57	269.81	11,053.31	1,104.24	-4,544.37	4,540.69	0.00	0.00	0.00
16,700.00	90.57	269.81	11,052.32	1,103.91	-4,644.37	4,640.68	0.00	0.00	0.00
16,800.00	90.57	269.81	11,051.33	1,103.57	-4,744.36	4,740.68	0.00	0.00	0.00
16,900.00	90.57	269.81	11,050.34	1,103.24	-4,844.36	4,840.67	0.00	0.00	0.00
17,000.00	90.57	269.81	11,049.35	1,102.90	-4,944.35	4,940.67	0.00	0.00	0.00
17,100.00	90.57	269.81	11,048.37	1,102.57	-5,044.35	5,040.66	0.00	0.00	0.00
17,200.00	90.57	269.81	11,047.38	1,102.23	-5,144.34	5,140.66	0.00	0.00	0.00
17,300.00	90.57	269.81	11,046.39	1,101.90	-5,244.33	5,240.65	0.00	0.00	0.00
17,400.00	90.57	269.81	11,045.40	1,101.56	-5,344.33	5,340.65	0.00	0.00	0.00
17,500.00	90.57	269.81	11,044.41	1,101.23	-5,444.32	5,440.64	0.00	0.00	0.00
17,600.00	90.57	269.81	11,043.42	1,100.89	-5,544.32	5,540.64	0.00	0.00	0.00
17,700.00	90.57	269.81	11,042.43	1,100.56	-5,644.31	5,640.63	0.00	0.00	0.00
17,800.00	90.57	269.81	11,041.45	1,100.22	-5,744.31	5,740.63	0.00	0.00	0.00
17,900.00	90.57	269.81	11,040.46	1,099.88	-5,844.30	5,840.62	0.00	0.00	0.00
18,000.00	90.57	269.81	11,039.47	1,099.55	-5,944.30	5,940.62	0.00	0.00	0.00
18,100.00	90.57	269.81	11,038.48	1,099.21	-6,044.29	6,040.61	0.00	0.00	0.00
18,200.00	90.57	269.81	11,037.49	1,098.88	-6,144.29	6,140.61	0.00	0.00	0.00
18,300.00	90.57	269.81	11,036.50	1,098.54	-6,244.28	6,240.60	0.00	0.00	0.00
18,400.00	90.57	269.81	11,035.52	1,098.21	-6,344.27	6,340.60	0.00	0.00	0.00
18,500.00	90.57	269.81	11,034.53	1,097.87	-6,444.27	6,440.59	0.00	0.00	0.00
18,600.00	90.57	269.81	11,033.54	1,097.54	-6,544.26	6,540.59	0.00	0.00	0.00

XTO ENERGY

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Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

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)
18,700.00	90.57	269.81	11,032.55	1,097.20	-6,644.26	6,640.58	0.00	0.00	0.00
18,800.00	90.57	269.81	11,031.56	1,096.87	-6,744.25	6,740.58	0.00	0.00	0.00
18,900.00	90.57	269.81	11,030.57	1,096.53	-6,844.25	6,840.57	0.00	0.00	0.00
19,000.00	90.57	269.81	11,029.58	1,096.20	-6,944.24	6,940.57	0.00	0.00	0.00
19,100.00	90.57	269.81	11,028.60	1,095.86	-7,044.24	7,040.56	0.00	0.00	0.00
19,200.00	90.57	269.81	11,027.61	1,095.53	-7,144.23	7,140.56	0.00	0.00	0.00
19,300.00	90.57	269.81	11,026.62	1,095.19	-7,244.23	7,240.55	0.00	0.00	0.00
19,400.00	90.57	269.81	11,025.63	1,094.86	-7,344.22	7,340.55	0.00	0.00	0.00
19,500.00	90.57	269.81	11,024.64	1,094.52	-7,444.21	7,440.54	0.00	0.00	0.00
19,600.00	90.57	269.81	11,023.65	1,094.18	-7,544.21	7,540.54	0.00	0.00	0.00
19,700.00	90.57	269.81	11,022.67	1,093.85	-7,644.20	7,640.53	0.00	0.00	0.00
19,800.00	90.57	269.81	11,021.68	1,093.51	-7,744.20	7,740.53	0.00	0.00	0.00
19,900.00	90.57	269.81	11,020.69	1,093.18	-7,844.19	7,840.52	0.00	0.00	0.00
20,000.00	90.57	269.81	11,019.70	1,092.84	-7,944.19	7,940.52	0.00	0.00	0.00
20,100.00	90.57	269.81	11,018.71	1,092.51	-8,044.18	8,040.51	0.00	0.00	0.00
20,200.00	90.57	269.81	11,017.72	1,092.17	-8,144.18	8,140.51	0.00	0.00	0.00
20,300.00	90.57	269.81	11,016.73	1,091.84	-8,244.17	8,240.51	0.00	0.00	0.00
20,400.00	90.57	269.81	11,015.75	1,091.50	-8,344.17	8,340.50	0.00	0.00	0.00
20,500.00	90.57	269.81	11,014.76	1,091.17	-8,444.16	8,440.50	0.00	0.00	0.00
20,600.00	90.57	269.81	11,013.77	1,090.83	-8,544.15	8,540.49	0.00	0.00	0.00
20,700.00	90.57	269.81	11,012.78	1,090.50	-8,644.15	8,640.49	0.00	0.00	0.00
20,800.00	90.57	269.81	11,011.79	1,090.16	-8,744.14	8,740.48	0.00	0.00	0.00
20,900.00	90.57	269.81	11,010.80	1,089.83	-8,844.14	8,840.48	0.00	0.00	0.00
21,000.00	90.57	269.81	11,009.82	1,089.49	-8,944.13	8,940.47	0.00	0.00	0.00
21,100.00	90.57	269.81	11,008.83	1,089.15	-9,044.13	9,040.47	0.00	0.00	0.00
21,200.00	90.57	269.81	11,007.84	1,088.82	-9,144.12	9,140.46	0.00	0.00	0.00
21,300.00	90.57	269.81	11,006.85	1,088.48	-9,244.12	9,240.46	0.00	0.00	0.00
21,400.00	90.57	269.81	11,005.86	1,088.15	-9,344.11	9,340.45	0.00	0.00	0.00
21,500.00	90.57	269.81	11,004.87	1,087.81	-9,444.11	9,440.45	0.00	0.00	0.00
21,600.00	90.57	269.81	11,003.88	1,087.48	-9,544.10	9,540.44	0.00	0.00	0.00
21,700.00	90.57	269.81	11,002.90	1,087.14	-9,644.09	9,640.44	0.00	0.00	0.00
21,800.00	90.57	269.81	11,001.91	1,086.81	-9,744.09	9,740.43	0.00	0.00	0.00
21,841.81	90.57	269.81	11,001.49	1,086.67	-9,785.90	9,782.24	0.00	0.00	0.00
21,891.82	90.57	269.81	11,001.00	1,086.50	-9,835.90	9,832.24	0.00	0.00	0.00

XTO ENERGY

Planning Report

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Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 32' @ 3380.00usft (TBD)
Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
112H SHL: 2515' FSL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	506,561.90	656,063.20	32.3916392	-103.8277370
112H BHL: 1650' FNL - plan hits target center - Point	0.00	0.00	11,001.00	1,086.50	-9,835.90	507,648.40	646,227.30	32.3947496	-103.8595857
112H LTP - plan misses target center by 0.07usft at 21841.81usft MD (11001.49 TVD, 1086.67 N, -9785.90 E) - Point	0.00	0.00	11,001.49	1,086.60	-9,785.90	507,648.50	646,277.30	32.3947492	-103.8594237
112H FTP/ LP - plan hits target center - Point	0.00	0.00	11,103.00	1,121.10	482.60	507,683.00	656,545.80	32.3947146	-103.8261564

XTO ENERGY

Planning Report

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Site:	JRU APACHE FEDERAL COM	**North Reference:**	Grid
Well:	112H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
454.00	454.00	Rustler			
746.00	746.00	Salado/Top of Salt			
2,502.57	2,500.00	Castile Anhydrite 1 Top			
2,934.46	2,925.00	Castile Anhydrite 1 Base			
3,174.29	3,161.00	Castile Anhydrite 2 Top			
3,270.83	3,256.00	Castile Anhydrite 2 Base			
3,621.42	3,601.00	Base Salt			
3,884.62	3,860.00	Delaware/Lamar			
3,935.43	3,910.00	Bell Canyon			
5,146.76	5,102.00	Cherry Canyon			
6,671.08	6,602.00	Brushy Canyon Ss.			
7,847.85	7,760.00	Bone Spring Lm.			
7,929.15	7,840.00	Avalon Ss.			
8,142.55	8,050.00	Upper Avalon Carb.			
8,223.85	8,130.00	Upper Avalon Sh.			
8,345.79	8,250.00	Middle Avalon Carb.			
8,386.44	8,290.00	Lw. Avalon Sh.			
8,711.63	8,610.00	First Bone Spring Carb.			
8,904.71	8,800.00	First Bone Spring Ss.			
9,352.86	9,241.00	Second Bone Spring Carb.			
9,646.55	9,530.00	Second Bone Spring A Ss.			
9,809.14	9,690.00	Second Bone Spring A/B Carb.			
9,870.11	9,750.00	Second Bone Spring B Ss.			
9,992.06	9,870.00	Third Bone Spring Carb.			
10,200.38	10,075.00	Harkey Ss.			
10,296.92	10,170.00	Third Bone Spring Shale			
10,682.56	10,550.00	Third Bone Spring Ss.			
11,041.23	10,880.00	Third Bone Spring Ss.- Red Hills			
11,199.45	10,990.00	Wolfcamp Shale			
11,218.40	11,001.00	Horizontal TD			
11,234.60	11,010.00	Wolfcamp X Ss.			
11,356.28	11,065.00	Wolfcamp Y Ss.			
11,572.75	11,103.00	Landing Point			

Cement Variance Request

Intermediate Casing :

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6602') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to 3501'. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing :

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO 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. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

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 (OOGO) No. 2, 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. OOGO No. 2, Section I.D.2 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 OOGO No. 2, Section IV., XTO Energy submits this request for the variance.

Supporting Documentation

OOGO No. 2 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 OOGO No. 2 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. OOGO No. 2 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[ac] psig (MPa)	Pressure Test—High Pressure[ac]	
		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[bd]	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	

[a] 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.

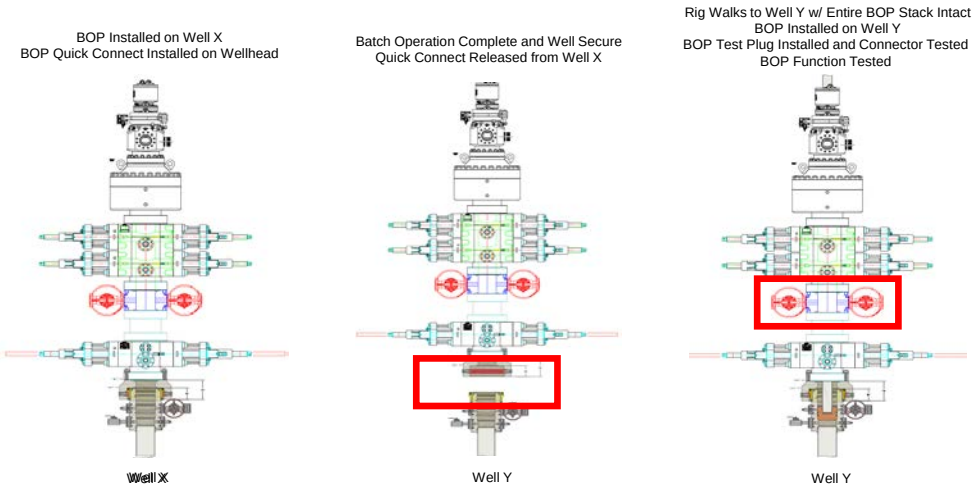
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of OOGO No. 2 (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 OOGO No.2.

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.

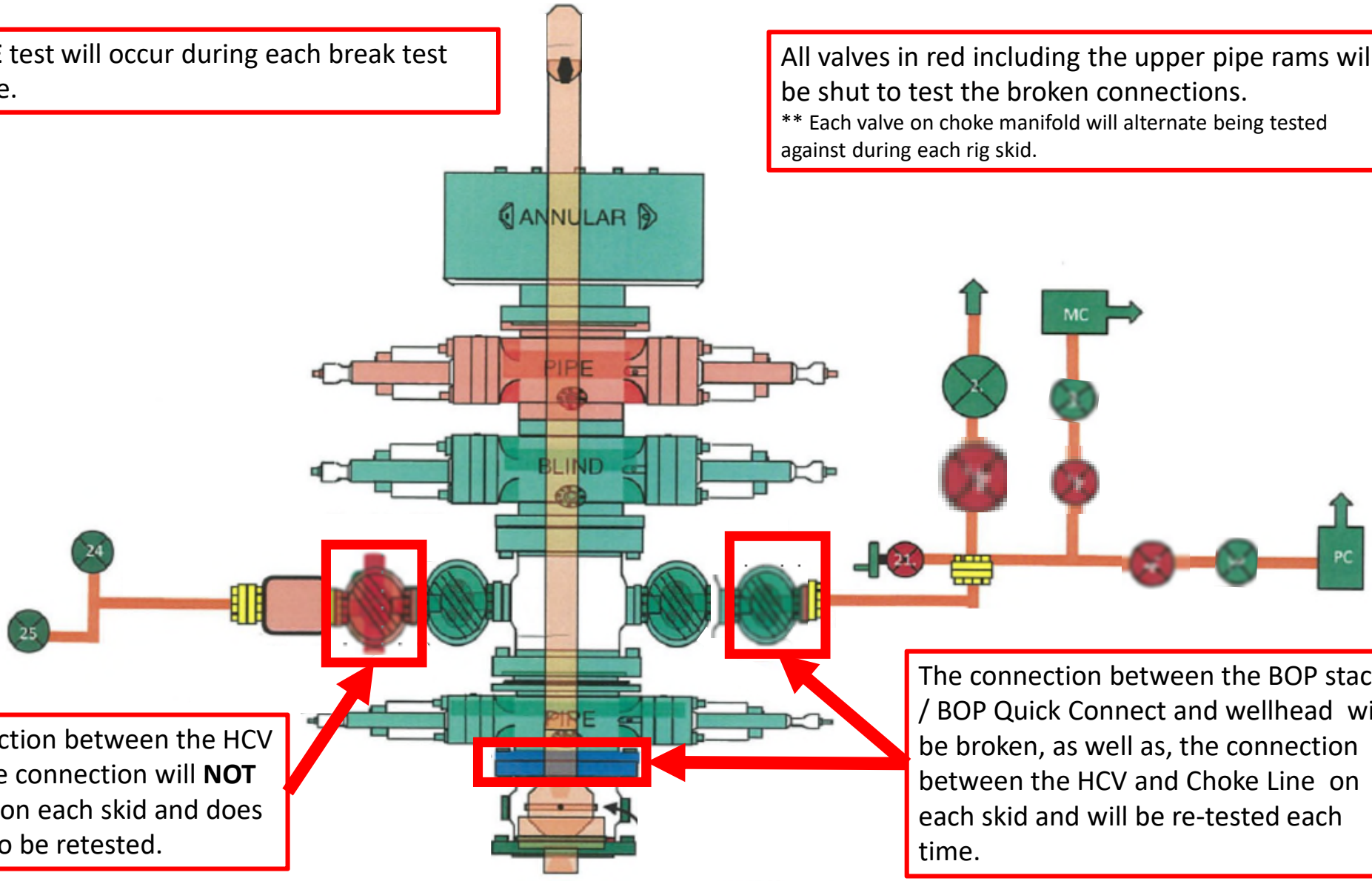
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

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 rig 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.

GATES E & S NORTH AMERICA, INC
DU-TEX
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: crpe&s@gates.com
WEB: www.gates.com

GRADE D PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

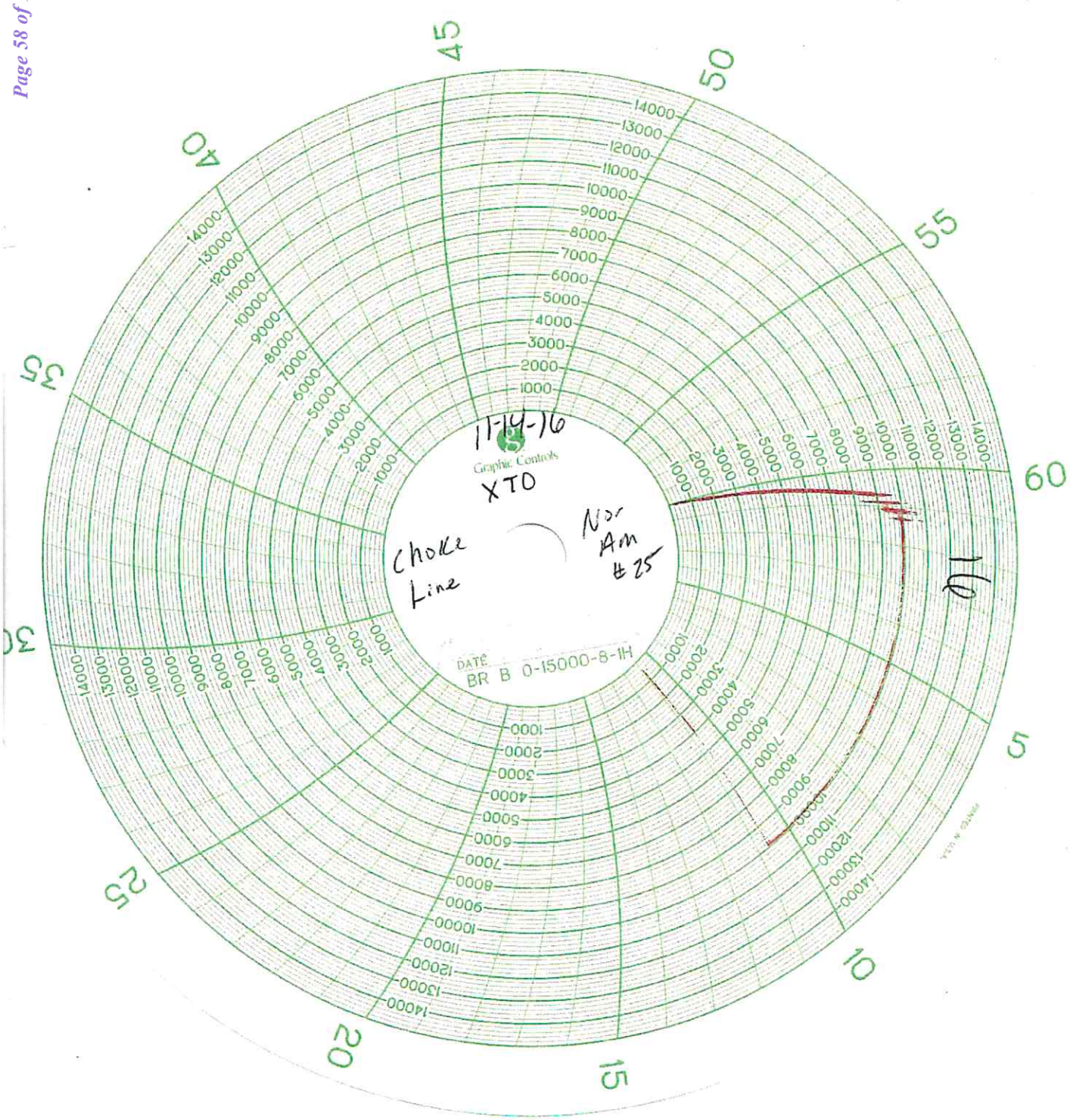
Product Description:	FD3.042.0R41/16.5KFLGE/E LE

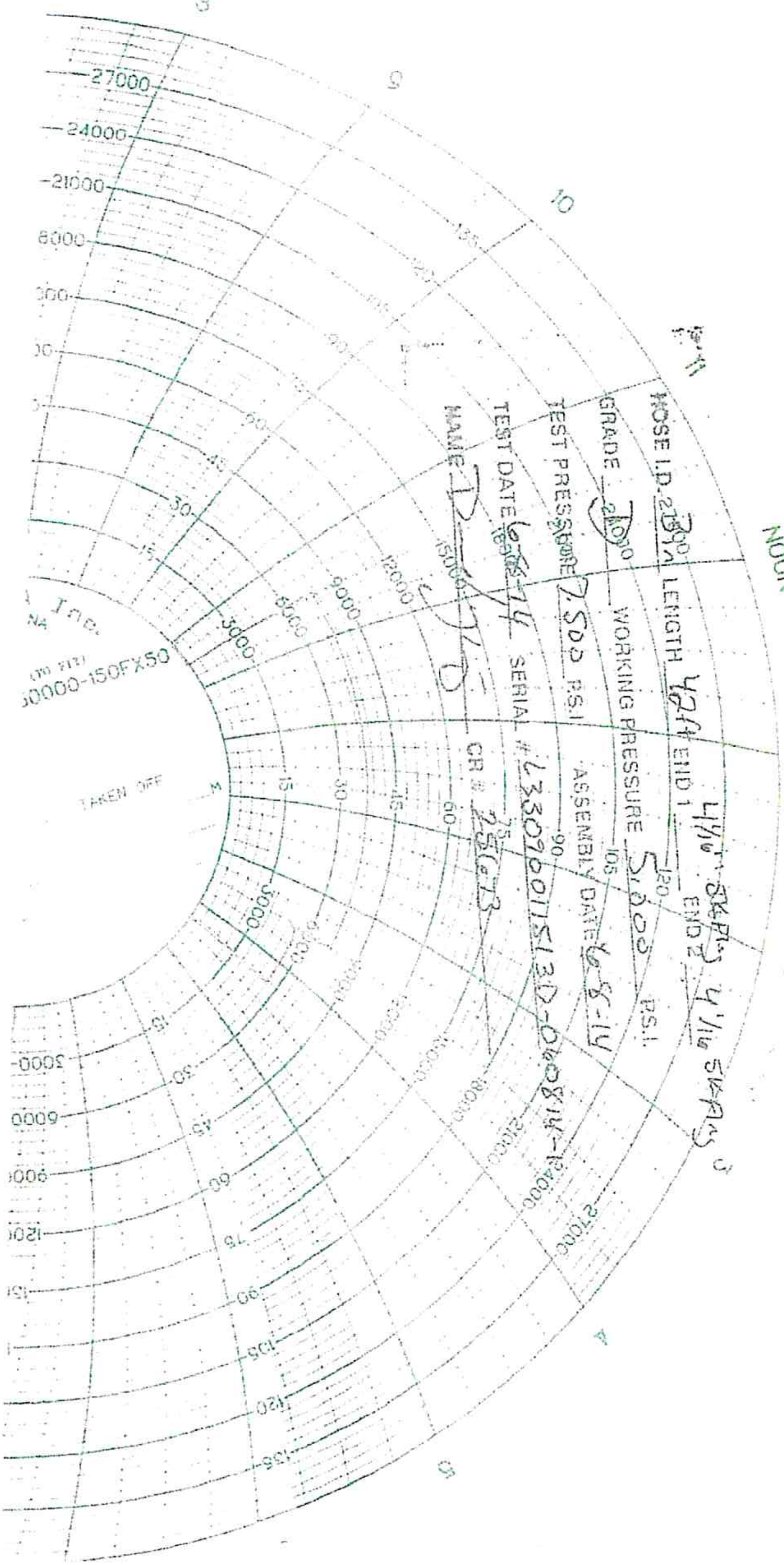
End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :		Signature :	

Form PTC - 01 Rev.0 2





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.

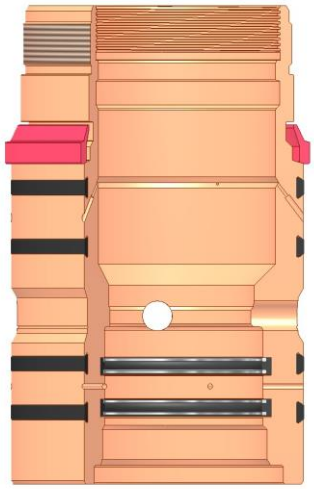
1. Cement Program

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

2. Offline Cementing Procedure

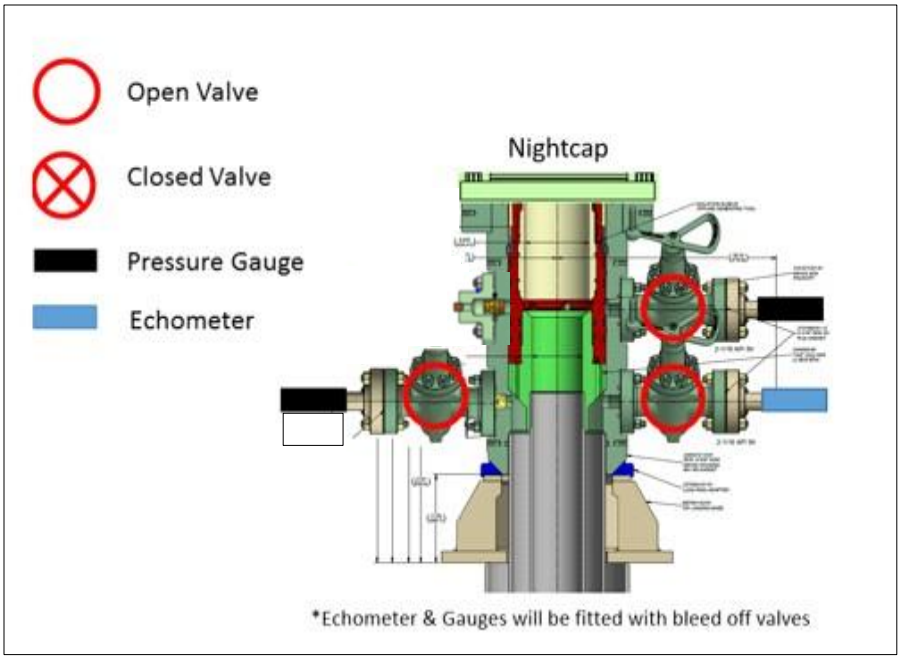
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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 nippled 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

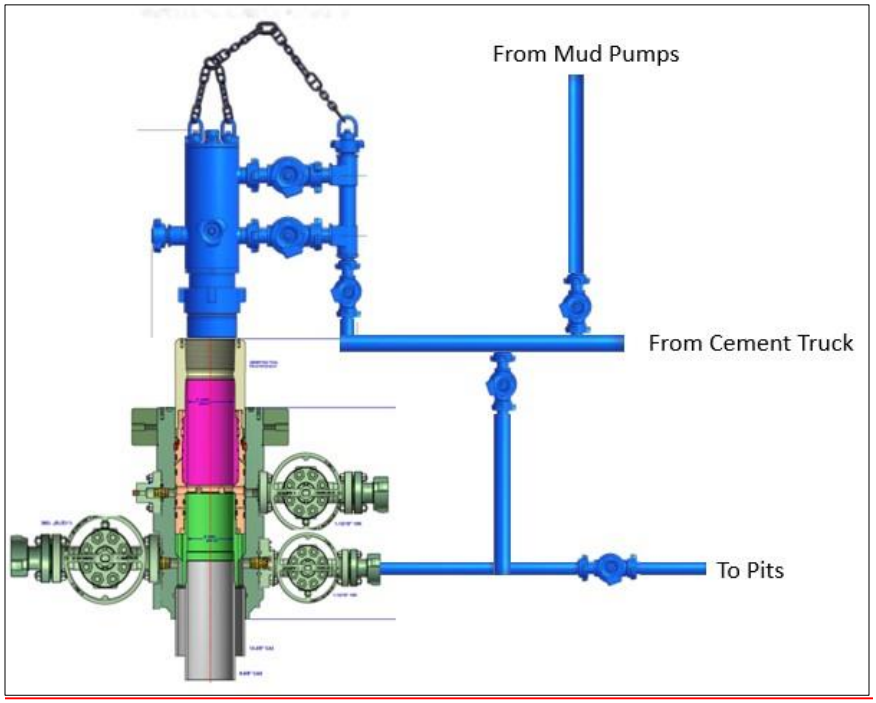
XTO Permian Operating, LLC Offline Cementing Variance Request



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 nippling 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



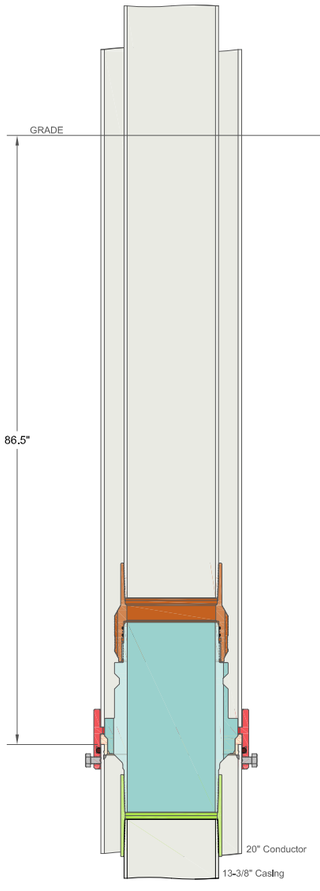
Wellhead diagram during offline cementing operations

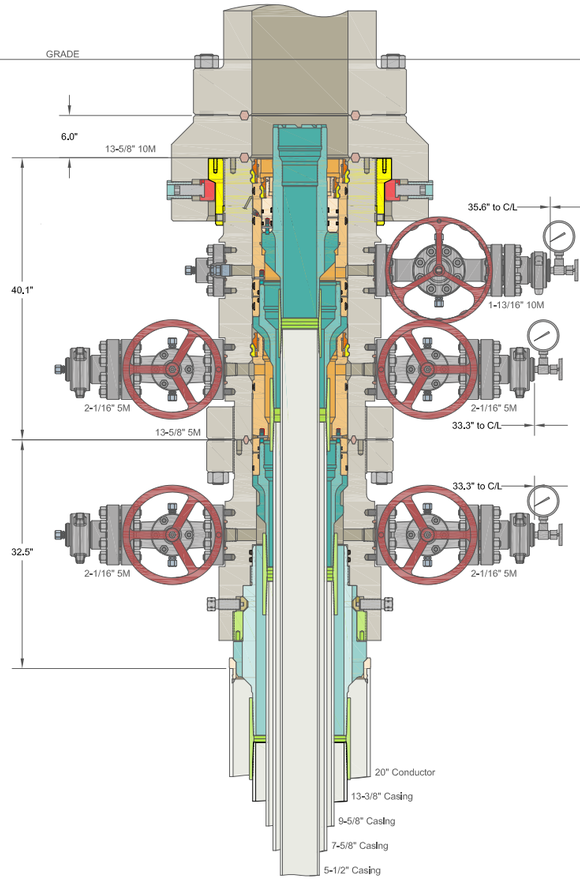
10. Circulate bottoms up with cement truck
    a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
    b. Max anticipated time before circulating with cement truck is 6 hrs
11. Perform cement job taking returns from the annulus wellhead 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.

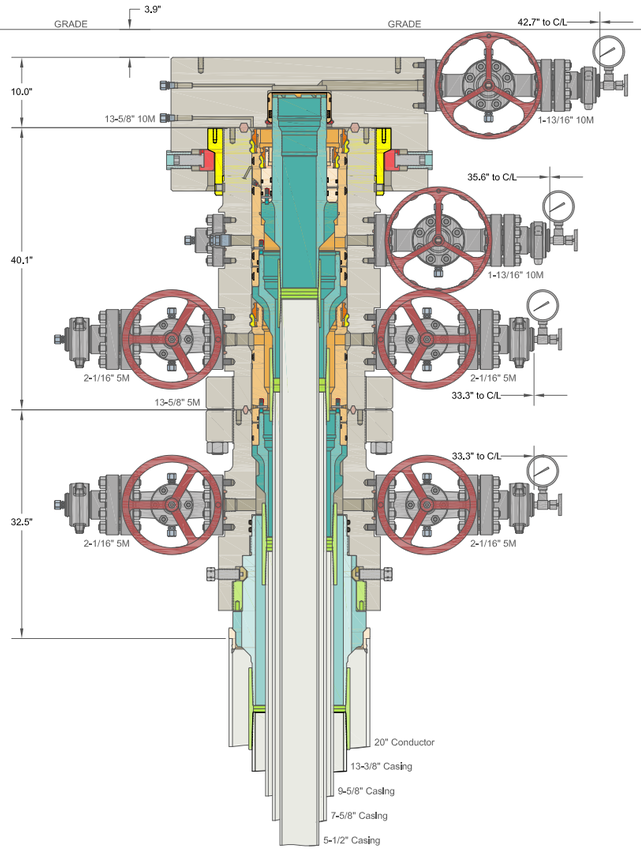
XTO respectfully requests approval to utilize a spudder rig to pre-set surface casing.

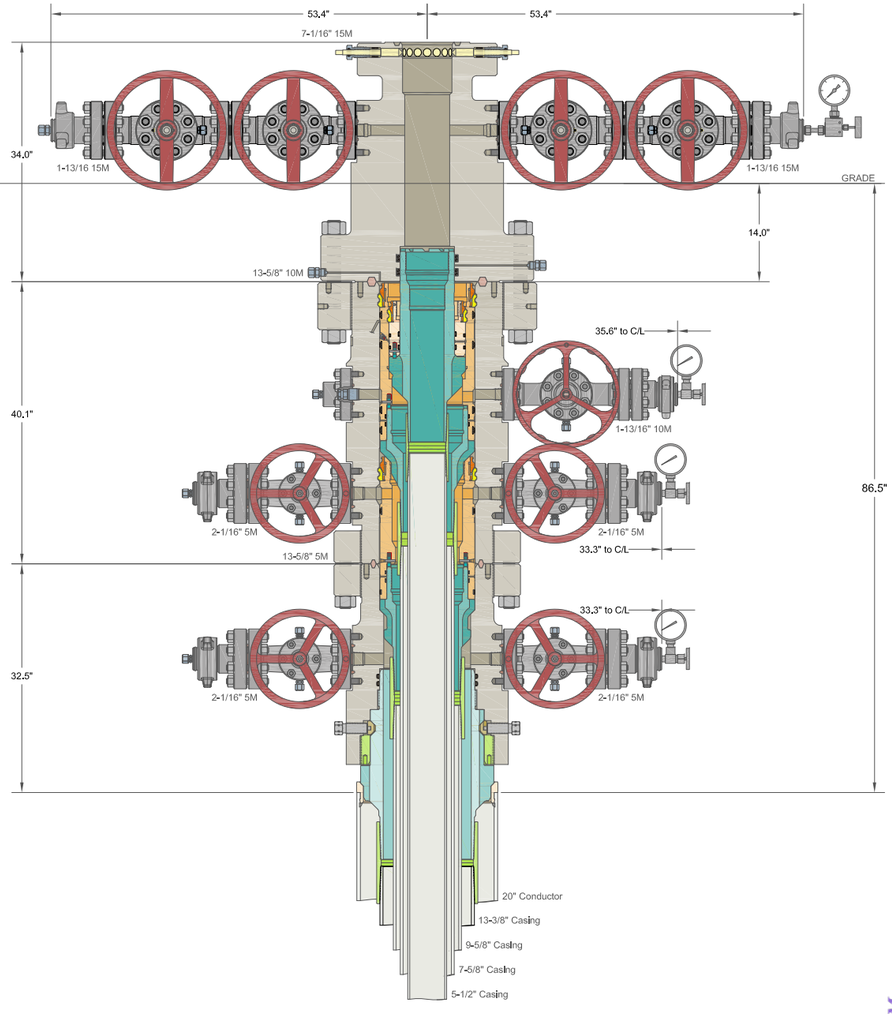
Description of Operations:

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 nippled up and tested on the wellhead before drilling operations resume on each well.
    a. The larger rig will move back onto the location within 180 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.









ALL DIMENSIONS APPROXIMA

CACTUS WELLHEAD LLC

(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

XTO ENERGY INC
DELAWARE BASIN

DRAWN	VJK	31MAR22
APPRV		

DRAWING NO. SDT-3301

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

SUPO Data Report
06/14/2024

APD ID: 10400085313
Submission Date: 05/24/2022
Operator Name: XTO ENERGY INCORPORATED
Well Name: JRU APACHE FEDERAL COM
Well Number: 112H
Well Type: CONVENTIONAL GAS WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Apache_112H_Road_20220511231414.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:

Apache_Road_20211110051658.pdf

New road type: LOCAL

Length: 4897.61 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: 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.

New road access plan or profile prepared? N

New road access plan

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: 6" Rolled & Compacted Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

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

Access other construction information: A. The JRU Apache development area is accessed from the intersection of Hwy 128 (Jal Hwy) and Cimarron Ro go North on Cimarron Road approximately 2.2 miles. Turn right (east) on leas road approximately 1.3 miles then turn right (southeast) on lease road for approximately .2miles. Then turn left (east) on lease road for approximately .8 miles, then turn left (north) on lease road for approximately .6 miles then turn left (North) on lease road for approximately .9 miles. Then turn right (East) for approximately .1 miles. Then turn left (north0 for .8 miles arriving at proposed road. Location is to the West. Transportation Plan identifying existing roads that will be used to access the project area is included from FSC, Inc. marked as, Vicinity Map.

Access miscellaneous information: After well completion, travel to each well site will included one lease operator truck and two oil trucks per day until the Central Tank Battery is completed. Upon completion of the Central Tank Battery, one lease operator truck will continue to travel to each well site to monitor the working order of the wells and to check well equipment for proper operation. Two oil trucks will continue to travel to the Central Tank Battery only for oil hauling. Additional traffic will include one maintenance truck periodically throughout the year for pad upkeep and weed removal. Well service trips will include only the traffic necessary to work on the wells or provide chemical treatments periodically and as needed throughout the year.

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

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Apache_1Mile_20211110051954.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Production Facilities. One (1) 600x600 pad was staked with the BLM for construction and use as a Central Tank Battery (JRU Apache CTB). The proposed pad is located in the SWSW, Section 24-T22S-R30E (Centerpoint: 1715FEL & 955FSL). Only the area necessary to maintain facilities will be disturbed. A 3160-5 sundry notification will be submitted after construction possessing a site-security diagram and layout of the facility with associated equipment. Buried & Surface Flowlines. In the event the JRU Apache wells are found productive, two-hundred and sixty-two (262) 10in. or less buried composite flexpipe or steel flowlines with a maximum safety pressure rating of 1400psi (operating pressure: 750 psi) for transport of oil, gas, frac water, gas lift, fuel gas, and produced water are requested to the JRU Apache CTB. If XTO decides to run surface lines, one-hundred and thirty-one (131) 4in. or less composite flexpipe or steel flowlines with a max. safety psi rating of 750 (op. psi: 125psi) for transport of oil, gas and produced water will be required to the JRU Apache facility. The proposed corridor for flowlines: 17997.82ft long, 100ft. wide and 6417.82ft long, 30ft wide. Total Length of Flowlines: 24415.64ft. Total Acreage Associated with Flowlines: 45.73 Acres. Gas & Oil Pipeline. No additional oil or gas pipeline will be required for this project. Disposal Facilities. Produced water will be hauled from location to a commercial disposal facility as needed. Once wells are drilled and completed, a 3160-5 sundry notification will be submitted to BLM in compliance with Onshore Order 7. Flare. A flare independent of the proposed CTB location is not necessary for this project. 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 colors such as shale green that reduce the visual impacts of the built environment. Containment Berms. Containment berms will be constructed completely around any production facilities designed to hold fluids. The containment berms will be constructed of compacted subsoil, be sufficiently impervious, hold 1 times the capacity of the largest tank and away from cut or fill areas. Electrical. All lines will be primary 25kv to properly run expected production equipment. 18,218.31ft of electrical will be run from the anticipated tie-in point with a request for 30 ROW construction and maintenance buffer. This distance is a max. approximation and may vary based on lease road corridors, varying elevations and terrain in the area. A plat of the proposed electrical is attached.

Production Facilities map:

Apache_CTB_20211110052053.pdf

Apache_FL_20211110052102.pdf

Apache_OHE_20211110052114.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Water source type: OTHER

Describe type: Fresh Water; Section27-25S-30E

Water source use type: DUST CONTROL
SURFACE CASING
INTERMEDIATE/PRODUCTION CASING
STIMULATION

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: PIPELINE
TRUCKING

Source land ownership: COMMERCIAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 300000 **Source volume (acre-feet):** 38.6679289

Source volume (gal): 12600000

Water source type: OTHER

Describe type: Fresh Water; Section 6-25S-29E

Water source use type: DUST CONTROL
SURFACE CASING
INTERMEDIATE/PRODUCTION CASING
STIMULATION

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING
PIPELINE

Source land ownership: COMMERCIAL

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Source transportation land ownership: FEDERAL

Water source volume (barrels): 300000 **Source volume (acre-feet):** 38.6679289

Source volume (gal): 12600000

Water source and transportation

Apache_112H_Wtr_20220511231523.pdf

Water source comments: Water for drilling, completion and dust control will be supplied by Texas Pacific Water Resources for sale to XTO Permian Operating, LLC. from Section 27, T25S-R30E, Eddy County, New Mexico. In the event that Texas Pacific Water Resources does not have the appropriate water for XTO Permian Operating, LLC. at time of drilling and completion, then XTO Permian Operating, LLC. water will come from Intrepid Potash Company with the location of the water being in Section 6, T25S-R29E, Eddy County, New Mexico. Anticipated water usage for drilling includes an estimated 35,000 barrels of water to drill a horizontal well in a combination of fresh water and brine as detailed in the mud program in the drilling plans. These volumes are calculated for ~1.5bbls per foot of hole drilled with excess to accommodate any lost circulation or wash out that may occur. Actual water volumes used during operations will depend on the depth of the well, length of horizontal sections, and the losses that may occur during the operation. Temporary water flowlines will be permitted via ROW approval letter and proper grants as-needed based on drilling and completion schedules as needed. Well completion is expected to require approximately 300,000 barrels of water per horizontal well. Actual water volumes used during operations will depend on the depth of the well and length of horizontal sections.

New water well? 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:

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Section 6 - Construction Materials

Using any construction materials: NO

Construction Materials description:

Construction Materials source location

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Fluid

Amount of waste: 500 barrels

Waste disposal frequency : One Time Only

Safe containment description: Steel mud pits

Safe containmant attachment:

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

Disposal type description:

Disposal location description: R360 Environmental Solutions 4507 W Carlsbad Hwy, Hobbs, NM 88240

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.

Safe containmant attachment:

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

Disposal type description:

Disposal location description: R360 Environmental Solutions 4507 W Carlsbad Hwy, Hobbs, NM 88240

Waste type: SEWAGE

Waste content description: Human Waste

Amount of waste: 250 gallons

Waste disposal frequency : Weekly

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

Safe containmant attachment:

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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

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

Waste type: GARBAGE

Waste content description: Garbage

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. Debris. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned and removed from the well location. No potential adverse materials or substances will be left on location.

Safe containmant attachment:

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

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

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 cutting will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site. Drilling fluids. These will be contained in steel mud pits and then taken to a NMOCD approved commercial disposal facility. Produced fluids. water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility. oil produced during operations will be stored in tanks until sold.

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Apache_WSL_Pad_A_20220922172031.pdf
618.013002.10_XTO_JRU_APACHE_DI_PAD_K_WELL_SITE_PLAN_1_15_2024_20240117142027.pdf
Apache_112H_Well_20240508134243.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: JRU APACHE

Multiple Well Pad Number: A

Recontouring

Apache_IR_1_20220922172113.pdf
Apache_IR_4_20220922172113.pdf
Apache_IR_2_20220922172115.pdf
Apache_IR_5_20220922172115.pdf
Apache_IR_3_20220922172115.pdf
Apache_IR_6_20220922172115.pdf

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

Drainage/Erosion control reclamation: XTO Permian Operating, LLC. 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 Permian Operating, LLC. will coordinate interim reclamation with the appropriate BLM personnel.

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Well pad proposed disturbance (acres): 69.78	**Well pad interim reclamation (acres):** 0	**Well pad long term disturbance (acres):** 69.78
Road proposed disturbance (acres): 3.37	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 3.37
Powerline proposed disturbance (acres): 12.55	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 12.55
Pipeline proposed disturbance (acres): 45.73	**Pipeline interim reclamation (acres):** 45.73	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 8.26	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 8.26
Total proposed disturbance: 139.69	**Total interim reclamation:** 45.73	**Total long term disturbance:** 93.96000000000001

Disturbance Comments:

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

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

Soil treatment: A self-sustaining, vigorous, diverse, native (or otherwise approved) plan community will be established on the site with a density sufficient to control erosion and invasion by non-native plants and to re-establish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation.
Existing Vegetation at the well pad: Environmental Setting. Soils are classified of Reeves soils. These soils are associated with the loamy ecological site which typically supports black and blue grama and tobosa grasslands with an even distribution of yucca, mesquite, American tarbush, cholla, and cresoste. The current vegetative community: none. The pad is caliche. No additional disturbance is necessary.
Existing Vegetation at the well pad

Existing Vegetation Community at the road: Environmental Setting. Soils are classified of Reeves soils. These soils are associated with the loamy ecological site which typically supports black and blue grama and tobosa grasslands with an even distribution of yucca, mesquite, American tarbush, cholla, and cresoste. The current vegetative community: none. The pad is caliche. No additional disturbance is necessary.
Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: Environmental Setting. Soils are classified of Reeves soils. These soils are associated with the loamy ecological site which typically supports black and blue grama and tobosa grasslands with an even distribution of yucca, mesquite, American tarbush, cholla, and cresoste. The current vegetative community: none. The pad is caliche. No additional disturbance is necessary.
Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: Environmental Setting. Soils are classified of Reeves soils. These soils are associated with the loamy ecological site which typically supports black and blue grama and tobosa grasslands with an even distribution of yucca, mesquite, American tarbush, cholla, and cresoste. The current vegetative community: none. The pad is caliche. No additional disturbance is necessary.
Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Will seedlings be transplanted for this project? N

Seedling transplant description

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation

Operator Contact/Responsible Official

First Name: James **Last Name:** Scott

Phone: (432)488-9955 **Email:** james_scott@xtoenergy.com

Seedbed prep: 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: Seed Application. 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

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

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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 Ownership

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:**

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:

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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:

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: PIPELINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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: JRU APACHE FEDERAL COM **Well Number:** 112H

Disturbance type: OTHER

Describe: Central Tank 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:**

Disturbance type: OTHER

Describe: Drill Island

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: JRU APACHE FEDERAL COM **Well Number:** 112H

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:**

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,FLPMA (Powerline)

ROW

SUPO Additional Information:

Use a previously conducted onsite? Y

Previous Onsite information: 02/19/2020: Onsited with Jeff Robertson (NRS), Jim Rutley (BLM Geo), and WIPP in attendance

Other SUPO

Apache_DI_20211110052511.pdf

Apache_OL_20211110052517.pdf

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

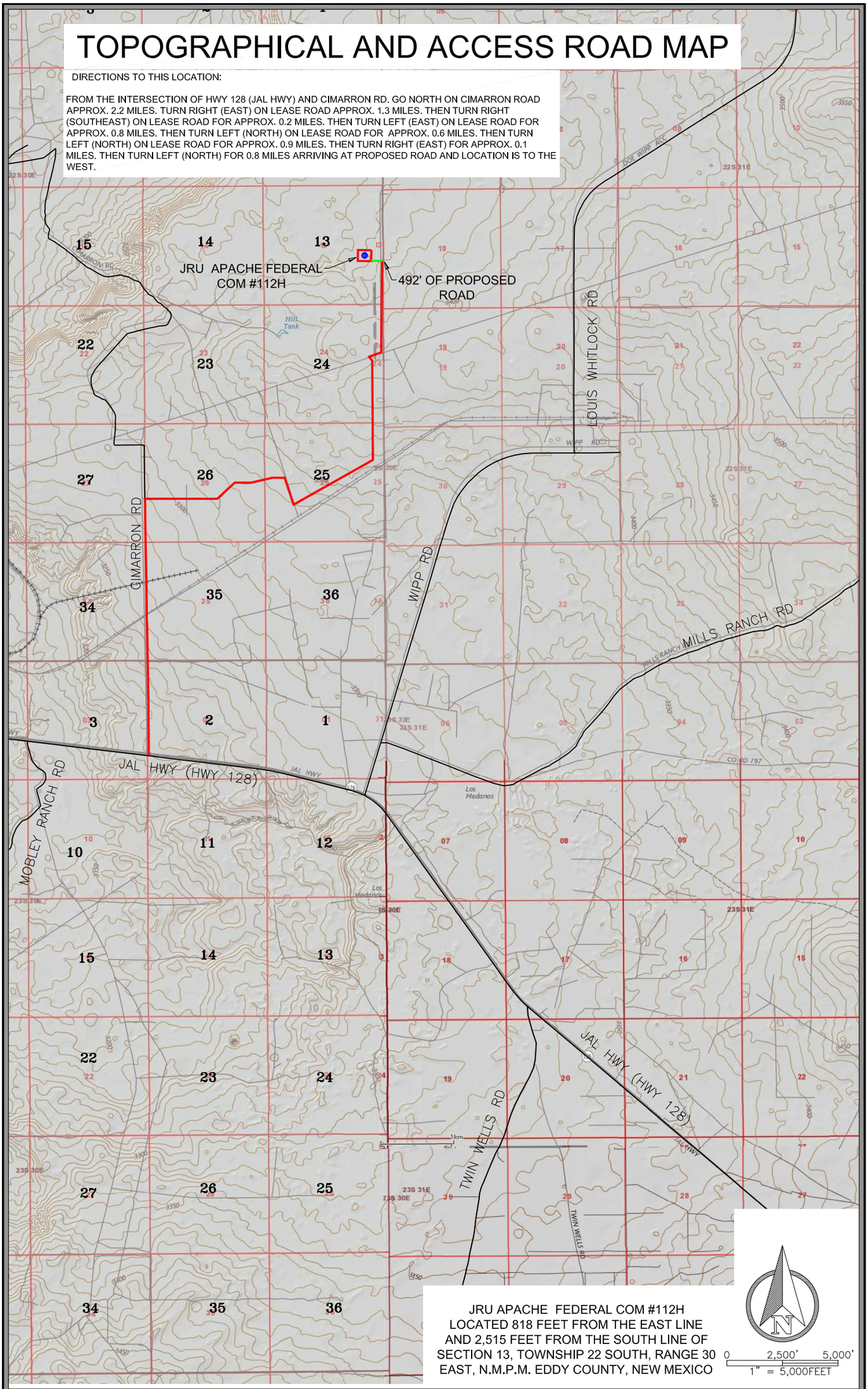
Apache_SUPO_20211110052600.pdf

Apache_Well_List_20211110052524.pdf

TOPOGRAPHICAL AND ACCESS ROAD MAP

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 (JAL HWY) AND CIMARRON RD. GO NORTH ON CIMARRON ROAD APPROX. 2.2 MILES. TURN RIGHT (EAST) ON LEASE ROAD APPROX. 1.3 MILES. THEN TURN RIGHT (SOUTHEAST) ON LEASE ROAD FOR APPROX. 0.2 MILES. THEN TURN LEFT (EAST) ON LEASE ROAD FOR APPROX. 0.8 MILES. THEN TURN LEFT (NORTH) ON LEASE ROAD FOR APPROX. 0.6 MILES. THEN TURN LEFT (NORTH) ON LEASE ROAD FOR APPROX. 0.9 MILES. THEN TURN RIGHT (EAST) FOR APPROX. 0.1 MILES. THEN TURN LEFT (NORTH) FOR 0.8 MILES ARRIVING AT PROPOSED ROAD AND LOCATION IS TO THE WEST.



JRU APACHE FEDERAL COM #112H
LOCATED 818 FEET FROM THE EAST LINE
AND 2,515 FEET FROM THE SOUTH LINE OF
SECTION 13, TOWNSHIP 22 SOUTH, RANGE 30
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

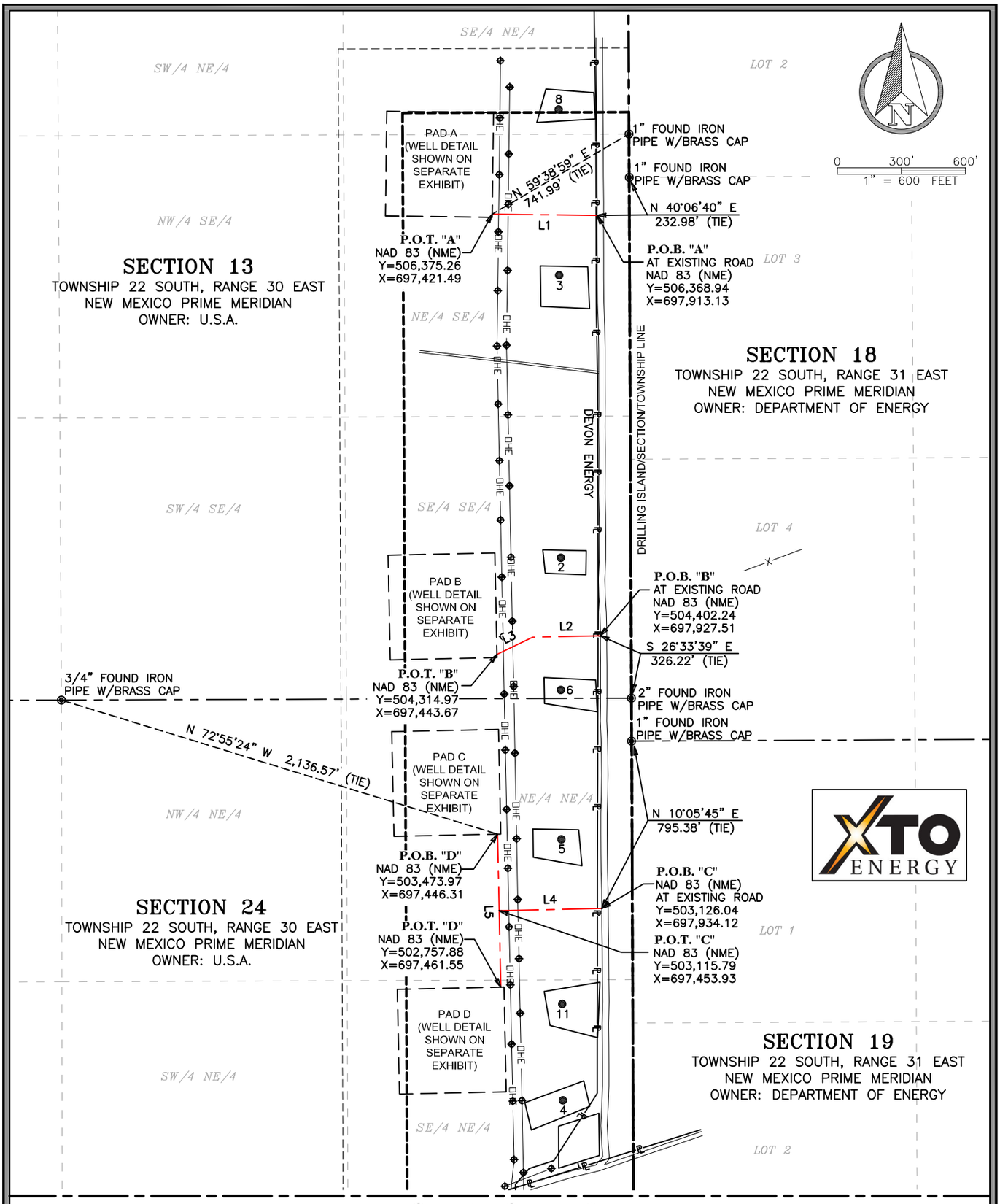
N

0 2,500' 5,000'
1" = 5,000FEET

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	4-4-2022	PROJECT NO:	2021121718
DRAWN BY:	AW	SCALE:	1" = 5,000'
CHECKED BY:	LM	SHEET:	3 OF 3
FIELD CREW:	RE	REVISION:	NO

P:\PROJECTS\2021\2021121718-XTO-JRU_APACHE_FED_COM_112H_TOPO_ACCESS_MAP\DWG\2021121718-XTO-JRU_APACHE_FED_COM_112H_TOPO_ACCESS_MAP.dwg, Adobe PDF



MATCH LINE SHEET 2

GENERAL NOTES

1. ALL BEARINGS, DISTANCES, 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.

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

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- FENCE
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- EXISTING APACHE WELL
- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED 30' WIDE ACCESS ROAD EASEMENT FOR:

XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25, TOWNSHIP 22 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

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550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
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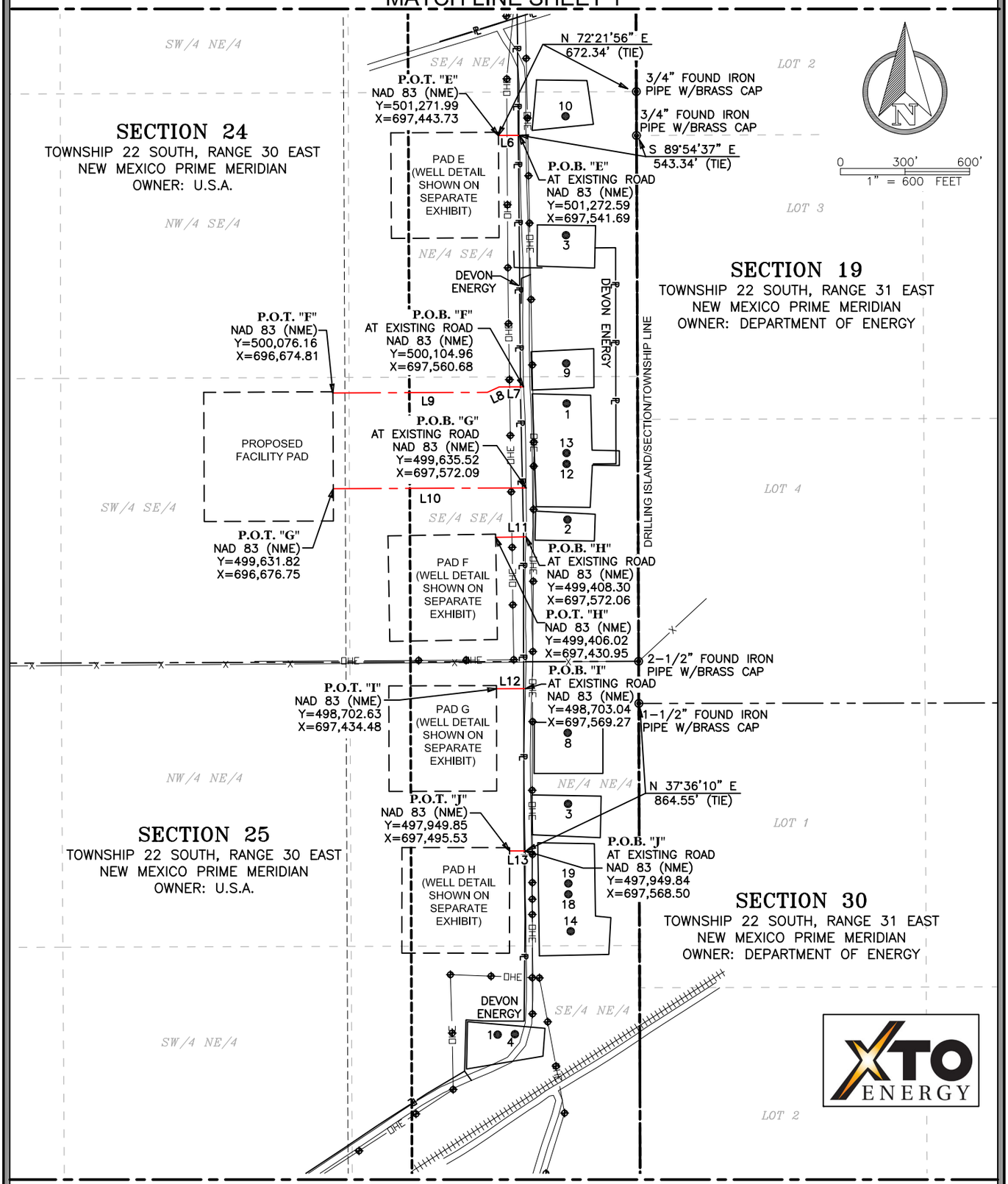
www.fscinc.net

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 600'
SHEET:	1 OF 3
REVISION:	NO



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STATE OF NEW MEICO NO. 23786

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING RAILROAD TRACKS
- FENCE
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- EXISTING APACHE WELL
- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED 30' WIDE ACCESS ROAD EASEMENT FOR:

XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25, TOWNSHIP 22 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 600'
SHEET:	2 OF 3
REVISION:	NO

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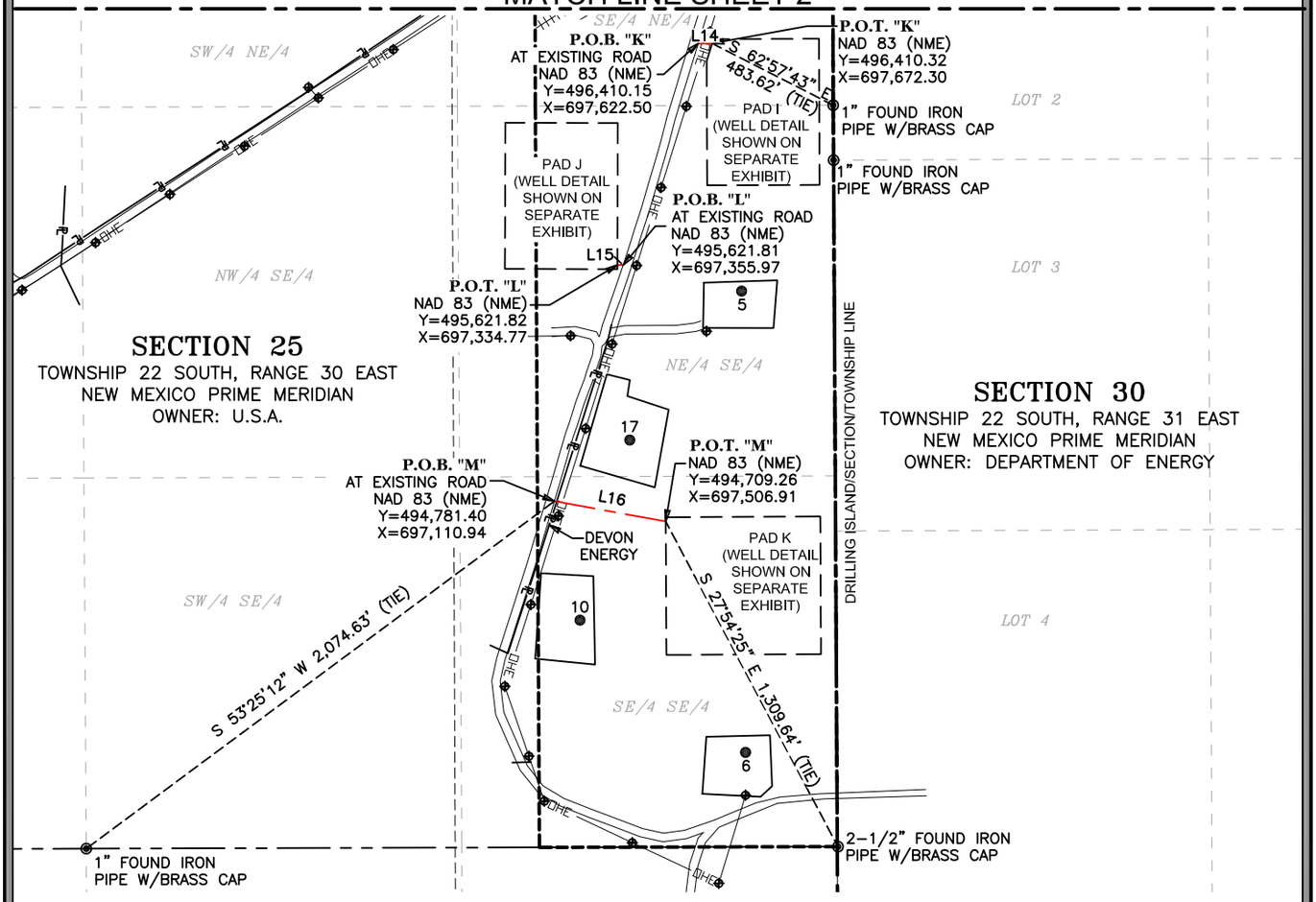
MATCH LINE SHEET 2



LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 89°15'46" W	491.68'

LINE TABLE "B"

L2	S 88°47'37" W	316.13'
L3	S 64°20'16" W	186.14'

LINE TABLE "C"

L4	S 88°46'36" W	480.30'

LINE TABLE "D"

L5	S 01°13'11" E	716.25'

LINE TABLE "E"

L6	S 89°39'03" W	97.96'

LINE TABLE "F"

L7	S 89°47'15" W	113.28'
L8	S 65°13'53" W	60.35'
L9	S 89°45'08" W	717.80'

LINE TABLE "G"

L10	S 89°45'47" W	895.35'

LINE TABLE "H"

L11	S 89°04'24" W	141.13'

LINE TABLE "I"

L12	S 89°49'35" W	134.78'

LINE TABLE "J"

L13	N 89°59'28" W	72.97'

LINE TABLE "K"

L14	N 89°47'41" E	49.81'

LINE TABLE "L"

L15	N 89°57'37" W	21.19'

LINE TABLE "M"

L16	S 79°40'33" E	402.49'

TOTAL LENGTH = 4,897.61 FEET
OR 296.82 RODS

JRU APACHE DI PROPOSED 30' WIDE ACCESS ROAD EASEMENT DESCRIPTION:

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 4,897.61 FEET, 296.82 RODS, OR 0.93 MILES IN LENGTH CROSSING SECTIONS 13, 24, AND 25, TOWNSHIP 22 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 3.36 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

NE/4 SE/4 SECTION 13 = 491.68 FEET = 29.80 RODS = 0.34 OF AN ACRE
SE/4 SE/4 SECTION 13 = 502.27 FEET = 30.44 RODS = 0.35 OF AN ACRE
NE/4 NE/4 SECTION 24 = 1,163.64 FEET = 70.52 RODS = 0.79 OF AN ACRE
SE/4 NE/4 SECTION 24 = 32.90 FEET = 1.99 RODS = 0.02 OF AN ACRE
NE/4 SE/4 SECTION 24 = 97.96 FEET = 5.94 RODS = 0.07 OF AN ACRE
SE/4 SE/4 SECTION 24 = 1,777.88 FEET = 107.75 RODS = 1.23 ACRES
SW/4 SE/4 SECTION 24 = 150.04 FEET = 9.09 RODS = 0.10 OF AN ACRE
NE/4 NE/4 SECTION 25 = 207.75 FEET = 12.59 RODS = 0.14 OF AN ACRE
SE/4 NE/4 SECTION 25 = 49.81 FEET = 3.02 RODS = 0.03 OF AN ACRE
NE/4 SE/4 SECTION 25 = 21.19 FEET = 1.29 RODS = 0.01 OF AN ACRE
SE/4 SE/4 SECTION 25 = 402.49 FEET = 24.39 RODS = 0.28 OF AN ACRE

XTO ENERGY

N

0 300' 600'
1" = 600 FEET

GENERAL NOTES

1. ALL BEARINGS, DISTANCES, 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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MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

LEGEND

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- PROPOSED PAD
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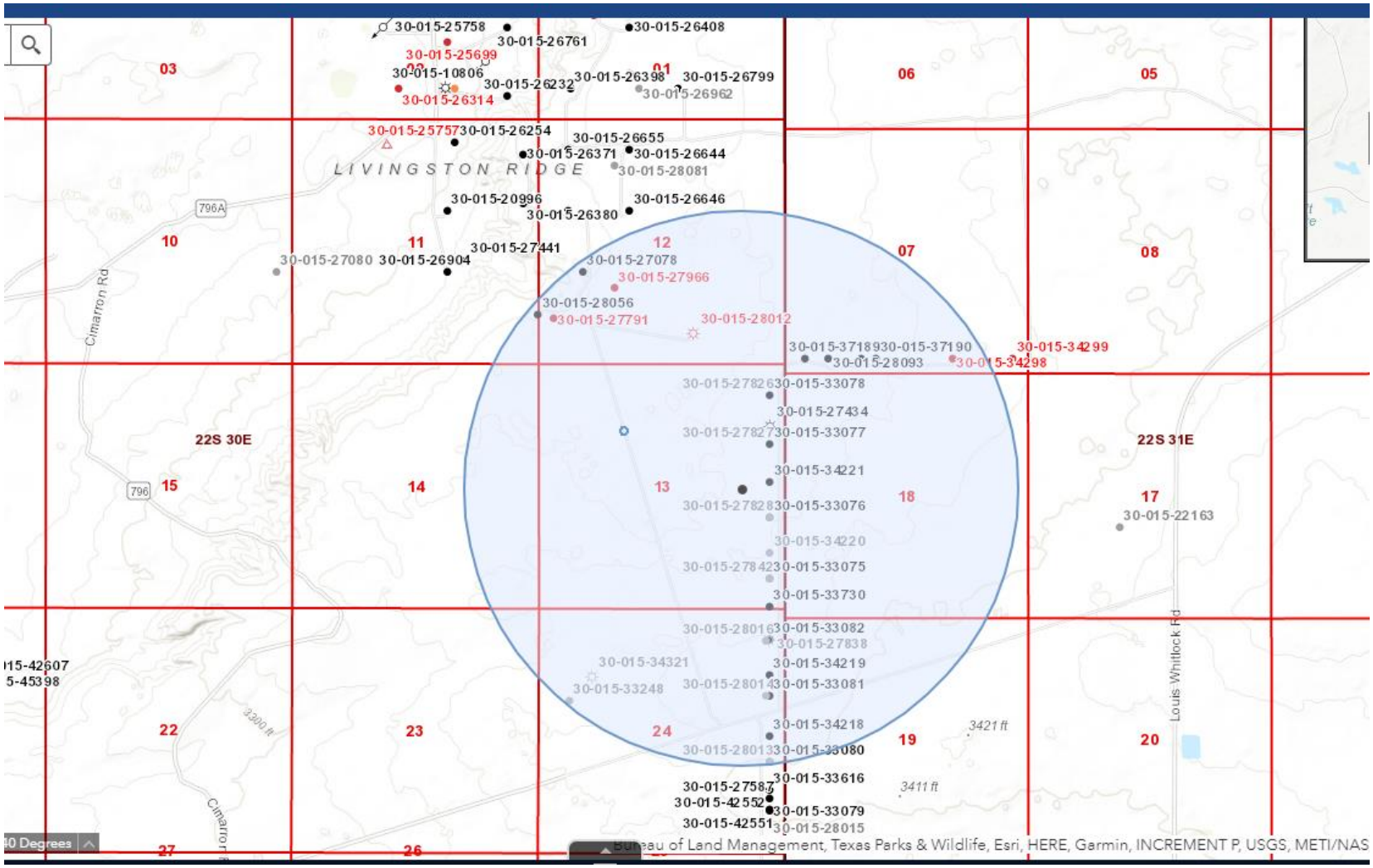
XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25,
TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 600'
SHEET:	3 OF 3
REVISION:	NO



JRU Apache 1 Mile Map

APACHE DRILL ISLAND PROPOSED FACILITY PAD DESCRIPTION:

Description of a proposed facility pad totaling 8.27 acres and being situated in Section 24, Township 22 South, Range 30 East, New Mexico Prime Meridian, Eddy County, New Mexico and being more particularly described as follows:

BEGINNING at the southeast corner of the proposed facility pad from which a 2 1/2" found iron pipe with brass cap, being the southeast corner of said Section 24, bears S 65°19'32" E 1,560.24 feet;

THENCE over and across said Section 24, the following courses and distances:

S 89°44'43" W, a distance of 600.00 feet to a point;

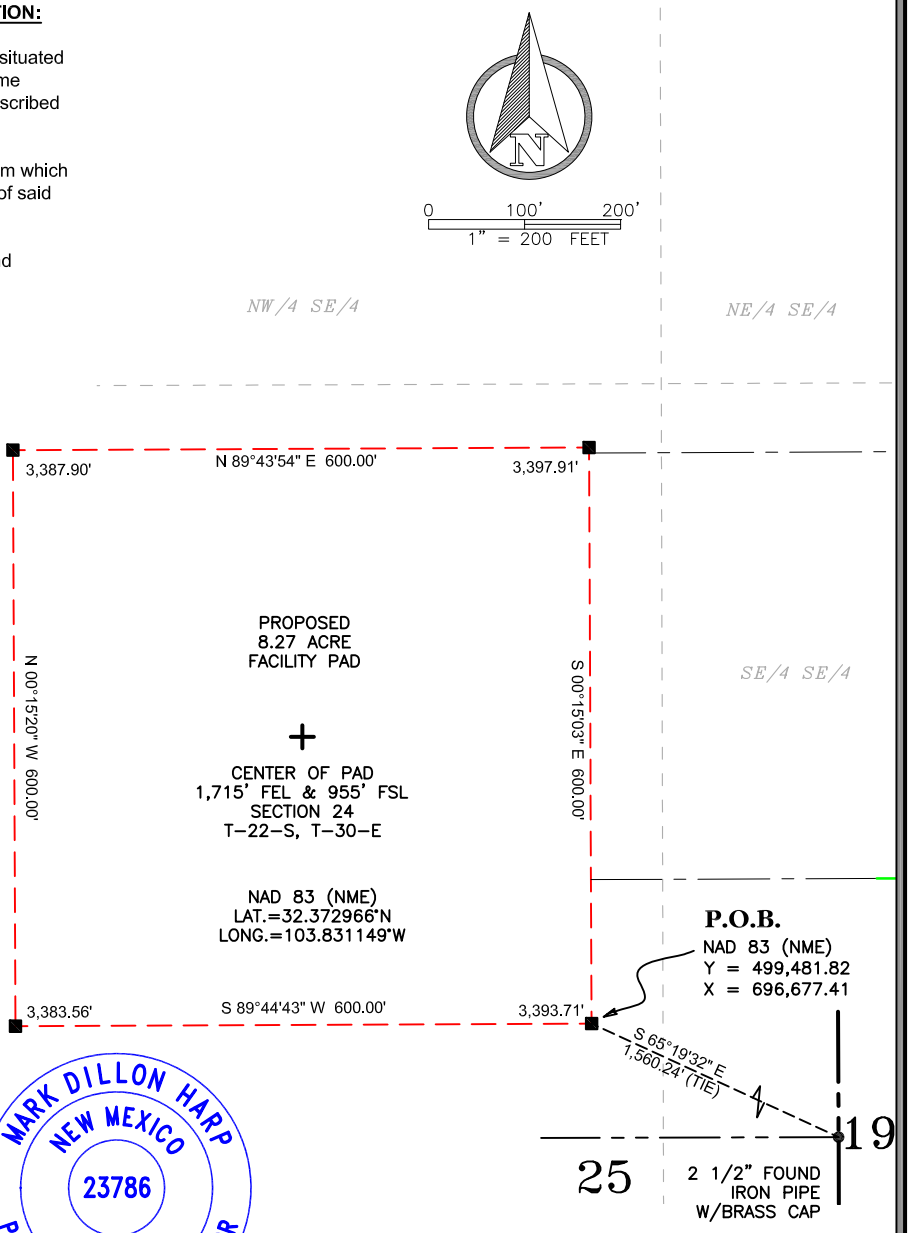
N 00°15'20" W, a distance of 600.00 feet to a point;

N 89°43'54" E, a distance of 600.00 feet to a point;

S 00°15'03" E, a distance of 600.00 feet to the POINT OF BEGINNING containing a total of **8.27 acres**, more or less.

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

SW/4 SE/4 Section 24 = 8.27 ACRES



SECTION 24
TOWNSHIP 22 SOUTH,
RANGE 30 EAST
NEW MEXICO PRIME
MERIDIAN
OWNER: U.S.A.

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- PROPOSED FACILITY PAD
- PROPOSED ACCESS ROAD
- P.O.B. POINT OF BEGINNING
- ● FOUND MONUMENT AS NOTED

GENERAL NOTES

1. ALL BEARINGS, DISTANCES, 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.

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

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

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

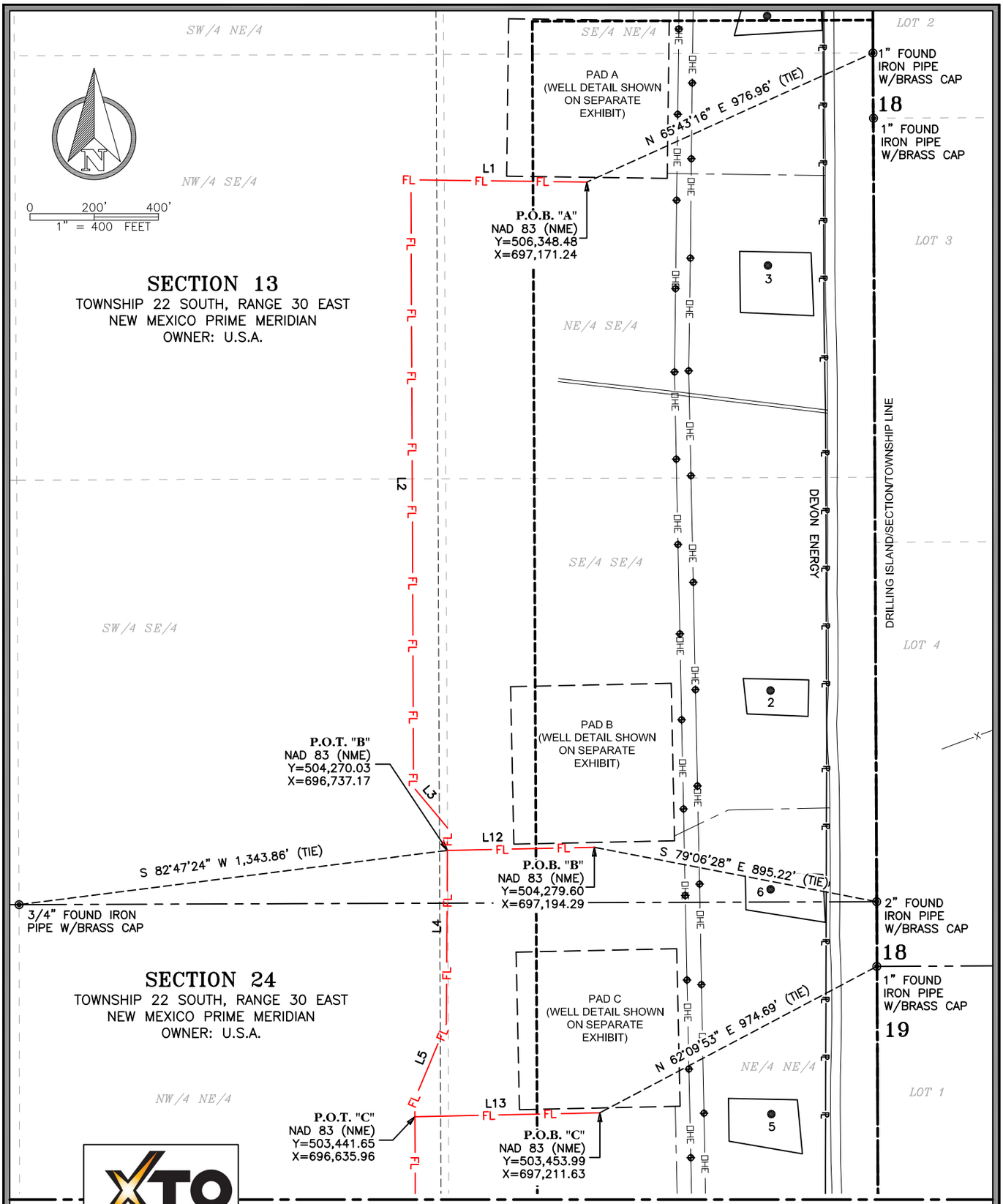
XTO ENERGY

XTO ENERGY, INC.

PROPOSED FACILITY PAD
APACHE DRILL ISLAND

SURVEY FOR A PROPOSED FACILITY PAD SITUATED IN THE SE/4 OF SECTION 24, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021	PROJECT NO:	2019072166
DRAWN BY:	AI/AW	SCALE:	1" = 200'
CHECKED BY:	AW/AI	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	2



XTO ENERGY

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MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

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

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- PROPOSED BURIED AND SURFACE FLOW LINE
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- FENCE
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- EXISTING APACHE WELL
- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED CENTERLINE OF A BURIED AND SURFACE FLOW LINE EASEMENT FOR:

XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25,
TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 400'
SHEET:	1 OF 6
REVISION:	NO

FSC INC
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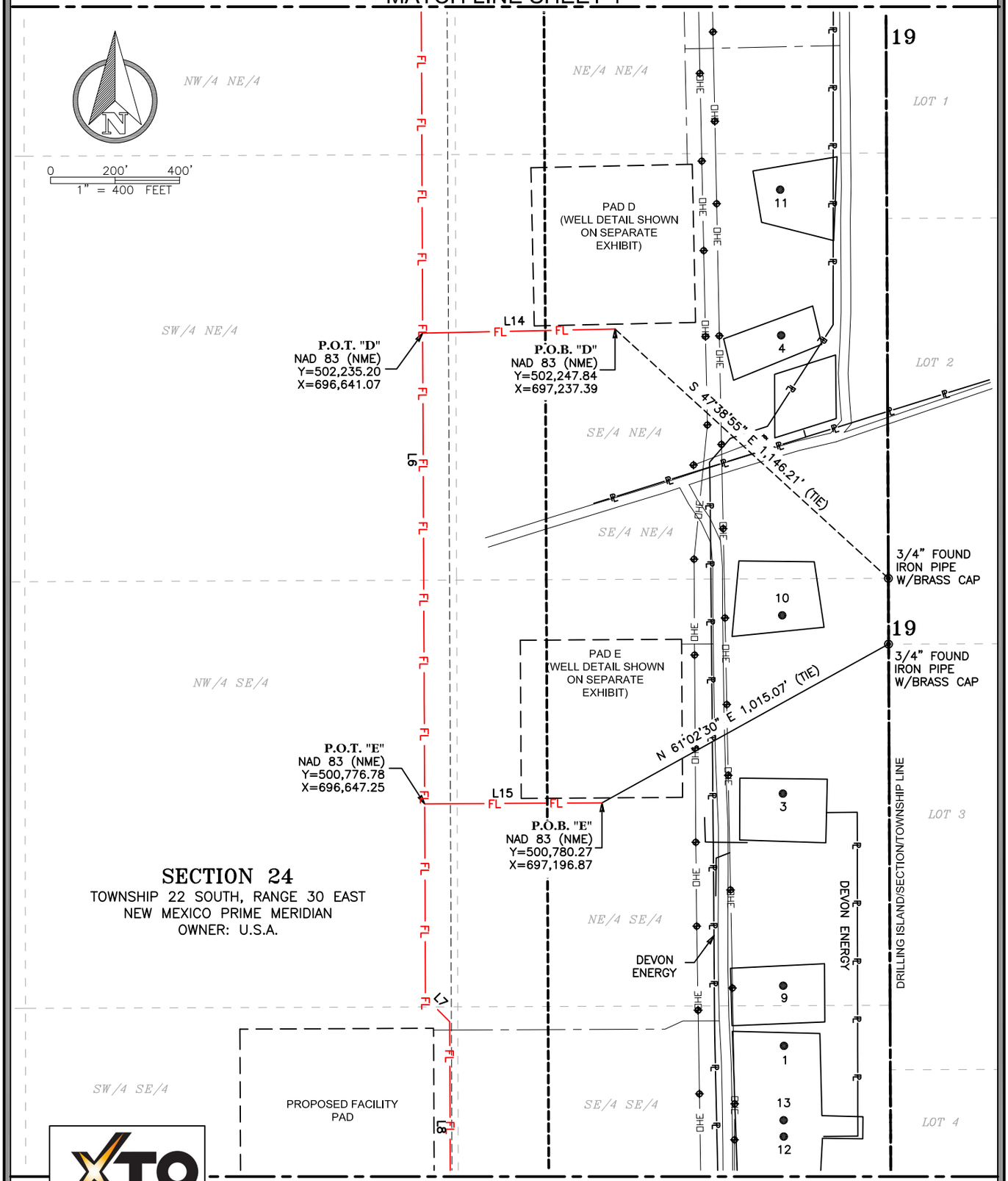
MATCH LINE SHEET 1



SECTION 24

TOWNSHIP 22 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN
OWNER: U.S.A.

MATCH LINE SHEET 3

GENERAL NOTES

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REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEICO NO. 23786

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- FL — FL — PROPOSED BURIED AND SURFACE FLOW LINE
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- OHE — EXISTING OVERHEAD ELECTRIC
- POWER POLE
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- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED CENTERLINE OF A BURIED AND SURFACE FLOW LINE EASEMENT FOR:

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TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
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FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 400'
SHEET:	2 OF 6
REVISION:	NO

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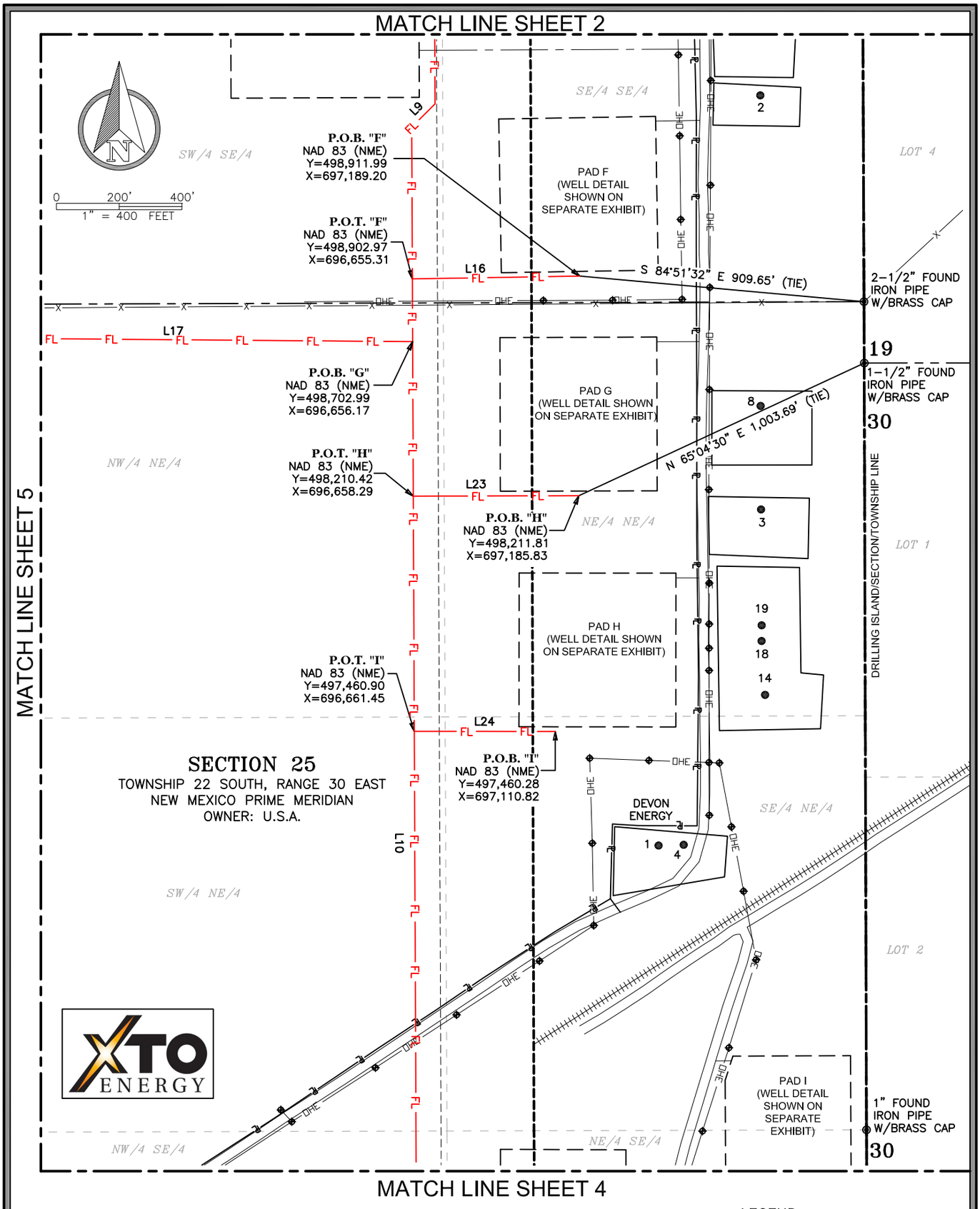

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- PROPOSED BURIED AND SURFACE FLOW LINE
- PROPOSED PAD FALLOFF
- EXISTING ROAD
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- EXISTING RAILROAD TRACKS
- FENCE
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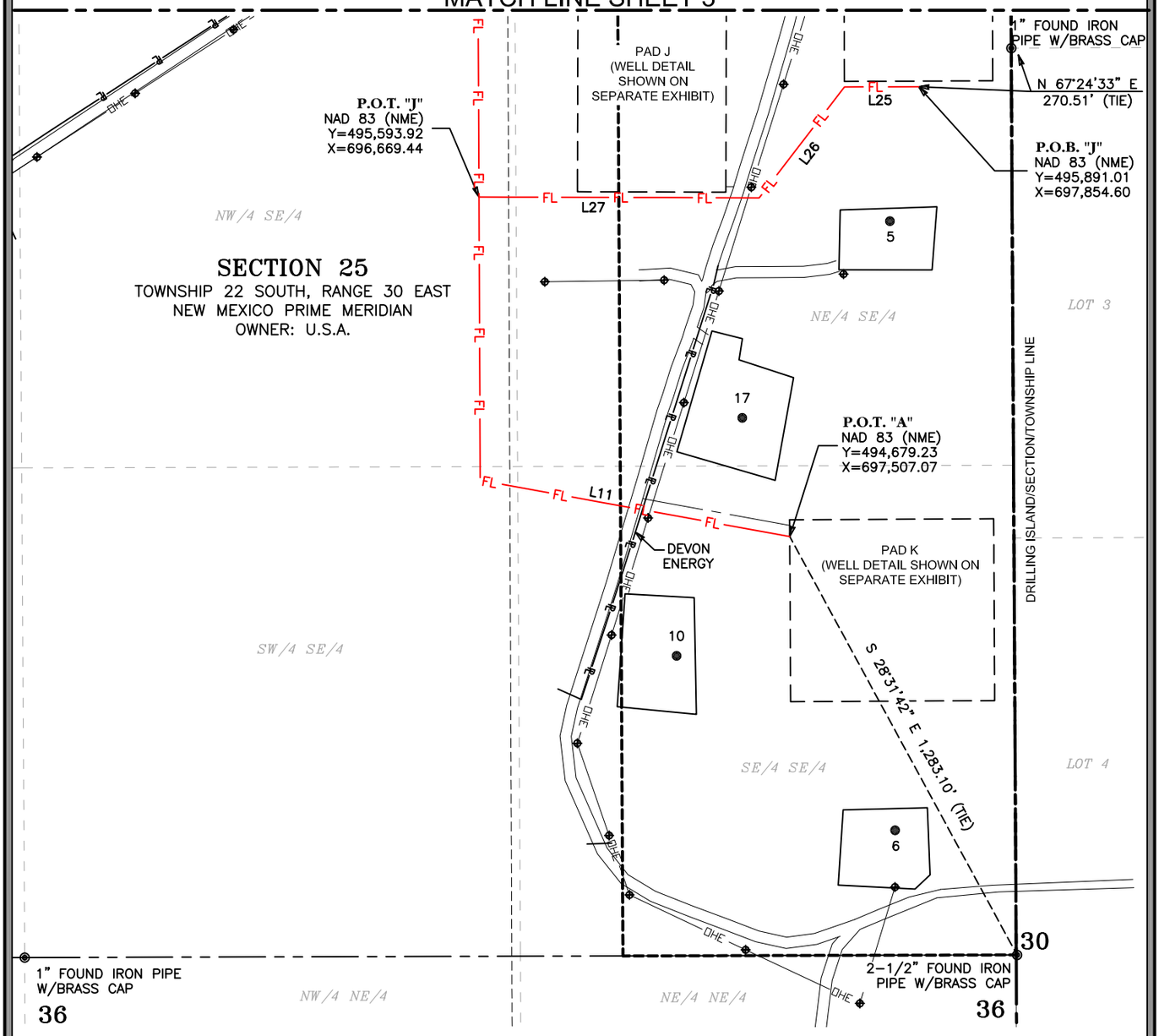
DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 400'
SHEET:	3 OF 6
REVISION:	NO



XTO ENERGY

N

0 200' 400'
1" = 400 FEET

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EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
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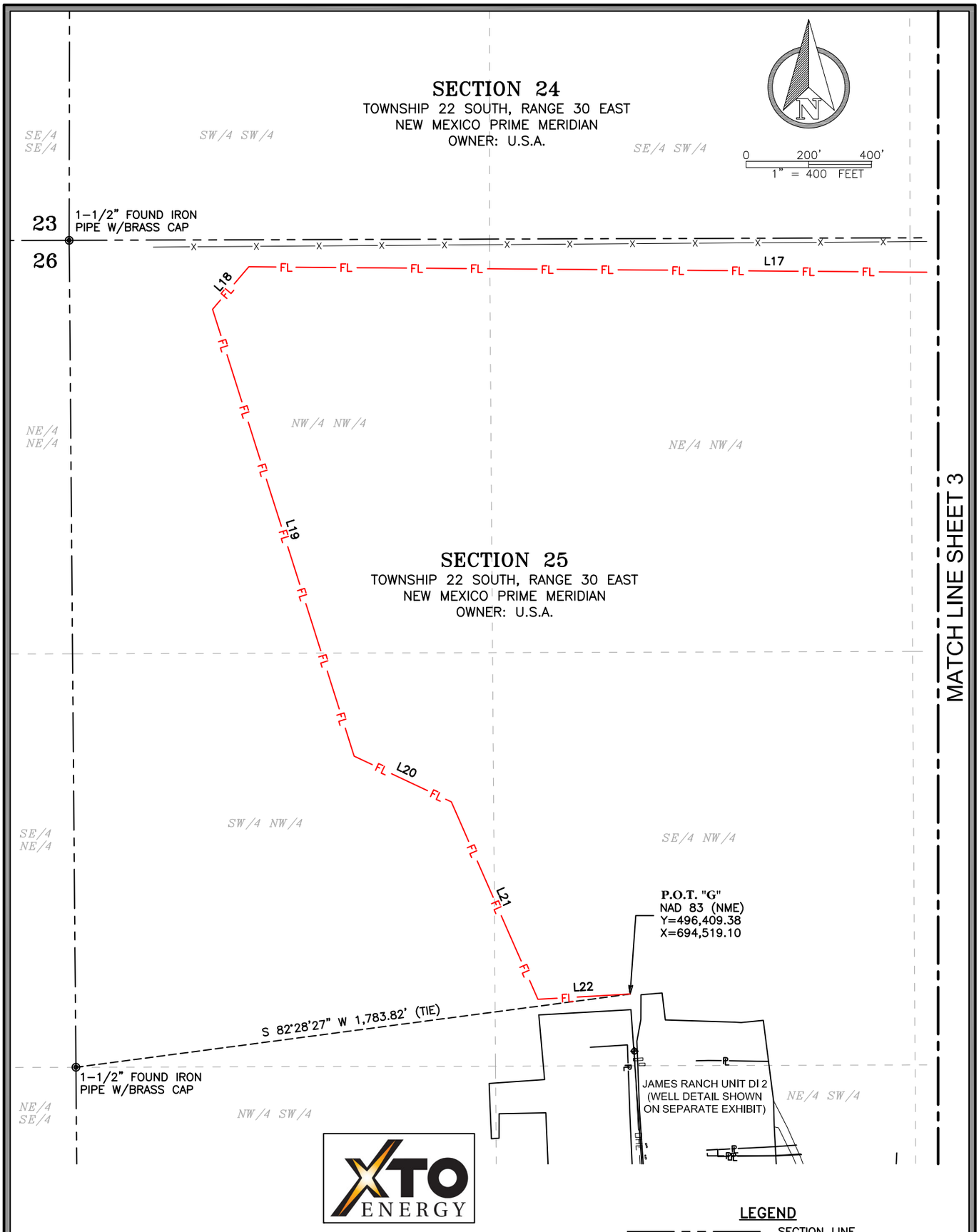
SCALE:	1" = 400'
SHEET:	4 OF 6
REVISION:	NO



XTO ENERGY

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PROFESSIONAL SURVEYOR

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

LEGEND

- SECTION LINE
- PROPOSED BURIED AND SURFACE FLOW LINE
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- FENCE
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED CENTERLINE OF A BURIED AND SURFACE FLOW LINE EASEMENT FOR:

XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25,
TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 400'
SHEET:	5 OF 6
REVISION:	NO

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JRU APACHE DI PROPOSED 30' WIDE BURIED AND SURFACE FLOW LINE EASEMENT DESCRIPTION:

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 6,417.82 FEET, 388.96 RODS, OR 1.22 MILES IN LENGTH CROSSING SECTIONS 13, 24, AND 25, TOWNSHIP 22 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 4.11 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

LINE SEGMENTS L1, L11-L16, AND L23-L27

NE/4 SE/4 SECTION 13 = 443.89 FEET = 26.90 RODS = 0.31 OF AN ACRE
NW/4 SE/4 SECTION 13 = 103.73 FEET = 6.29 RODS = 0.04 OF AN ACRE
SW/4 SE/4 SECTION 13 = 0.66 FEET = 0.04 RODS
(AREA ENCOMPASSED BY 100' WIDE EASEMENT)
SE/4 SE/4 SECTION 13 = 456.56 FEET = 27.67 RODS = 0.28 OF AN ACRE
NW/4 NE/4 SECTION 24 = 104.63 FEET = 6.34 RODS = 0.04 OF AN ACRE
NE/4 NE/4 SECTION 24 = 471.18 FEET = 28.56 RODS = 0.32 OF AN ACRE
SW/4 NE/4 SECTION 24 = 103.00 FEET = 6.24 RODS = 0.04 OF AN ACRE
SE/4 NE/4 SECTION 24 = 493.46 FEET = 29.91 RODS = 0.34 OF AN ACRE
NW/4 SE/4 SECTION 24 = 100.96 FEET = 6.12 RODS = 0.04 OF AN ACRE
NE/4 SE/4 SECTION 24 = 448.68 FEET = 27.19 RODS = 0.31 OF AN ACRE
SW/4 SE/4 SECTION 24 = 98.17 FEET = 5.95 RODS = 0.03 OF AN ACRE
SE/4 SE/4 SECTION 24 = 435.80 FEET = 26.41 RODS = 0.30 OF AN ACRE
NW/4 NE/4 SECTION 25 = 98.22 FEET = 5.95 RODS = 0.03 OF AN ACRE
NE/4 NE/4 SECTION 25 = 429.32 FEET = 26.02 RODS = 0.30 OF AN ACRE
SW/4 NE/4 SECTION 25 = 98.52 FEET = 5.97 RODS = 0.03 OF AN ACRE
SE/4 NE/4 SECTION 25 = 350.86 FEET = 21.27 RODS = 0.24 OF AN ACRE
NW/4 SE/4 SECTION 25 = 99.85 FEET = 6.05 RODS = 0.03 OF AN ACRE
NE/4 SE/4 SECTION 25 = 1,232.31 FEET = 74.69 RODS = 0.85 OF AN ACRE
SW/4 SE/4 SECTION 25 = 102.83 FEET = 6.23 RODS = 0.07 OF AN ACRE
SE/4 SE/4 SECTION 25 = 745.19 FEET = 45.16 RODS = 0.51 OF AN ACRE

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 89°15'35" W	547.62'
L2	S 00°14'40" E	1,888.94'
L3	S 39°50'11" E	165.29'
L4	S 00°21'20" W	608.84'
L5	S 22°44'52" W	253.70'
L6	S 00°14'34" E	3,319.37'
L7	S 44°57'57" E	105.92'
L8	S 00°15'46" E	641.50'
L9	S 45°02'08" W	105.10'
L10	S 00°14'41" E	4,556.28'
L11	S 79°42'55" E	848.02'

LINE TABLE "B"

L12	S 88°48'02" W	457.22'

LINE TABLE "C"

L13	S 88°46'19" W	575.81'

LINE TABLE "D"

L14	S 88°47'09" W	596.46'

LINE TABLE "E"

L15	S 89°38'08" W	549.63'

LINE TABLE "F"

L16	S 89°01'55" W	533.97'

LINE TABLE "G"

L17	N 89°32'19" W	3,353.96'
L18	S 40°25'03" W	178.26'
L19	S 17°34'59" E	1,495.64'
L20	S 64°48'14" E	342.57'
L21	S 23°41'37" E	687.85'
L22	N 86°46'35" E	294.62'

LINE TABLE "H"

L23	S 89°50'57" W	527.54'

LINE TABLE "I"

L24	N 89°55'15" W	449.37'

LINE TABLE "J"

L25	S 89°45'26" W	200.16'
L26	S 37°34'39" W	376.73'
L27	N 89°49'25" W	755.27'

TOTAL LENGTH = 24,415.64 FEET
OR 1,479.74 RODS

JRU APACHE DI PROPOSED 100' WIDE BURIED AND SURFACE FLOW LINE EASEMENT DESCRIPTION:

SURVEY OF A STRIP OF LAND 100.0 FEET WIDE AND 17,997.82 FEET, 1,090.78 RODS, OR 3.41 MILES IN LENGTH CROSSING SECTIONS 13, 24, AND 25, TOWNSHIP 22 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 41.24 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

LINE SEGMENTS L2-L10 AND L17-L22

NW/4 SE/4 SECTION 13 = 930.11 FEET = 56.37 RODS = 2.17 ACRES
SW/4 SE/4 SECTION 13 = 1,347.14 FEET = 81.65 RODS = 2.80 ACRES
SE/4 SE/4 SECTION 13 = 10.79 FEET = 0.65 RODS = 0.32 OF AN ACRE
NW/4 NE/4 SECTION 24 = 1,337.90 FEET = 81.09 RODS = 2.61 ACRES
NE/4 NE/4 SECTION 24 (EASEMENT ONLY) = 0.46 OF AN ACRE
SW/4 NE/4 SECTION 24 = 1,317.82 FEET = 79.87 RODS = 3.03 ACRES
NW/4 SE/4 SECTION 24 = 1,333.93 FEET = 80.84 RODS = 3.06 ACRES
SW/4 SE/4 SECTION 24 = 1,371.63 FEET = 83.13 RODS = 2.74 ACRES
SE/4 SE/4 SECTION 24 (EASEMENT ONLY) = 0.41 OF AN ACRE
NW/4 NE/4 SECTION 25 = 2,563.19 FEET = 155.35 RODS = 5.77 ACRES
NE/4 NW/4 SECTION 25 = 1,341.55 FEET = 81.31 RODS = 3.08 ACRES
NW/4 NW/4 SECTION 25 = 2,097.96 FEET = 127.15 RODS = 4.82 ACRES
NW/4 NW/4 SECTION 25 = 1,029.17 FEET = 62.37 RODS = 2.36 ACRES
SE/4 NW/4 SECTION 25 = 640.88 FEET = 38.84 RODS = 1.47 ACRES
SW/4 NE/4 SECTION 25 = 1,319.85 FEET = 79.99 RODS = 3.03 ACRES
NW/4 SE/4 SECTION 25 = 1,319.09 FEET = 79.94 RODS = 3.03 ACRES
SW/4 SE/4 SECTION 25 = 36.81 FEET = 2.23 RODS = 0.08 OF AN ACRE

GENERAL NOTES

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XTO ENERGY

EXHIBIT OF:

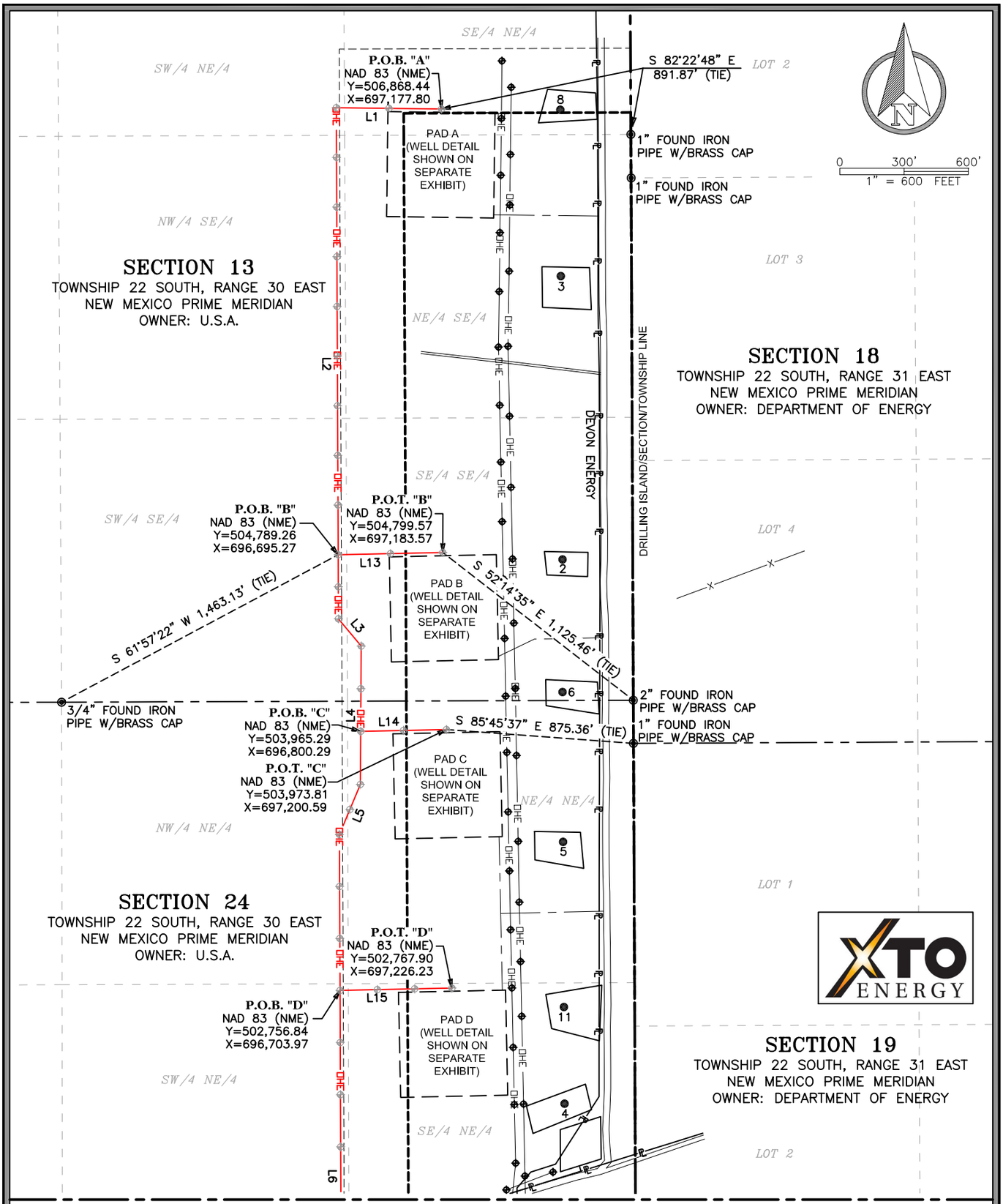
A PROPOSED CENTERLINE OF A BURIED AND SURFACE FLOW LINE EASEMENT FOR:

XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25, TOWNSHIP 22 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	
SHEET:	6 OF 6
REVISION:	NO



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STATE OF NEW MEICO NO. 23786

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- PROPOSED OVERHEAD ELECTRIC
- PROPOSED POWER POLE
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- FENCE
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- EXISTING APACHE WELL
- FOUND MONUMENT AS NOTED

EXHIBIT OF:
A PROPOSED 30' WIDE OVERHEAD ELECTRIC EASEMENT FOR:

XTO ENERGY, INC.

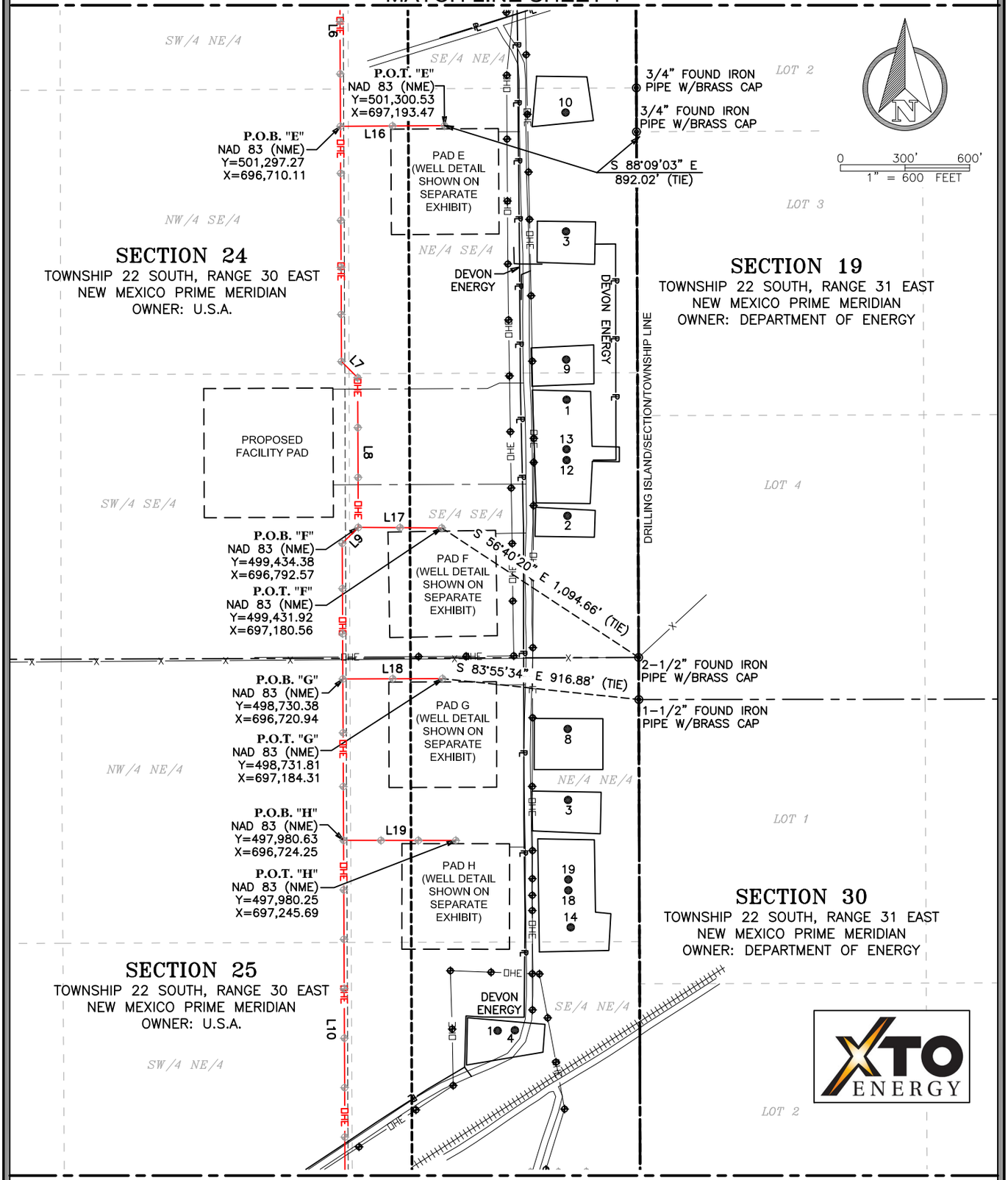
JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25,
TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 600'
SHEET:	1 OF 3
REVISION:	NO

FSC INC SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

MATCH LINE SHEET 1



MATCH LINE SHEET 3

GENERAL NOTES

1. ALL BEARINGS, DISTANCES, 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.

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

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

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

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- PROPOSED OVERHEAD ELECTRIC
- PROPOSED POWER POLE
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING RAILROAD TRACKS
- FENCE
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- EXISTING APACHE WELL
- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED 30' WIDE OVERHEAD ELECTRIC EASEMENT FOR:

XTO ENERGY, INC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25, TOWNSHIP 22 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 600'
SHEET:	2 OF 3
REVISION:	NO

FSC INC
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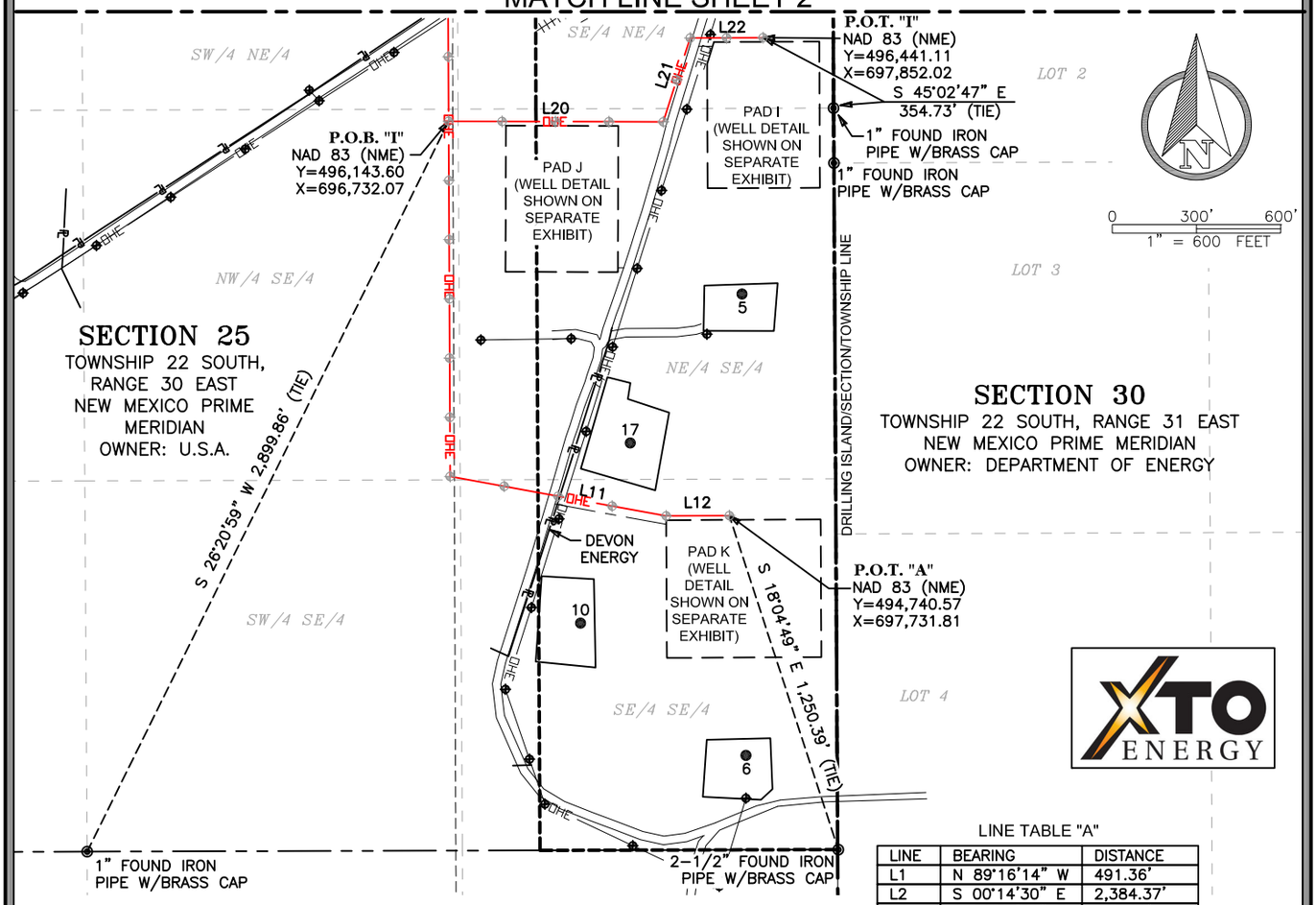

JRU APACHE DI PROPOSED 30' WIDE OVERHEAD ELECTRIC EASEMENT DESCRIPTION:

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 18,218.31 FEET, 1,104.14 RODS, OR 3.45 MILES IN LENGTH CROSSING SECTIONS 13, 24, AND 25, TOWNSHIP 22 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 12.44 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

SE/4 NE/4 SECTION 13 = 453.06 FEET = 27.46 RODS = 0.31 OF AN ACRE
SW/4 NE/4 SECTION 13 = 167.42 FEET = 10.15 RODS = 0.12 OF AN ACRE
NW/4 SE/4 SECTION 13 = 1,319.92 FEET = 80.00 RODS = 0.91 OF AN ACRE
SW/4 SE/4 SECTION 13 = 1,038.38 FEET = 62.93 RODS = 0.70 OF AN ACRE
SE/4 SE/4 SECTION 13 = 808.15 FEET = 48.98 RODS = 0.56 OF AN ACRE
NE/4 NE/4 SECTION 24 = 940.37 FEET = 56.99 RODS = 0.64 OF AN ACRE
NW/4 NE/4 SECTION 24 = 797.81 FEET = 48.35 RODS = 0.55 OF AN ACRE
SW/4 NE/4 SECTION 24 = 1,356.39 FEET = 82.21 RODS = 0.92 OF AN ACRE
SE/4 NE/4 SECTION 24 = 483.79 FEET = 29.32 RODS = 0.33 OF AN ACRE
NW/4 SE/4 SECTION 24 = 1,351.98 FEET = 81.94 RODS = 0.92 OF AN ACRE
NE/4 SE/4 SECTION 24 = 476.39 FEET = 28.87 RODS = 0.33 OF AN ACRE
SE/4 SE/4 SECTION 24 = 1,167.15 FEET = 70.74 RODS = 0.79 OF AN ACRE
SW/4 SE/4 SECTION 24 = 581.47 FEET = 35.24 RODS = 0.40 OF AN ACRE
NW/4 NE/4 SECTION 25 = 1,386.37 FEET = 84.02 RODS = 0.93 OF AN ACRE
NE/4 NE/4 SECTION 25 = 918.30 FEET = 55.65 RODS = 0.64 OF AN ACRE
SW/4 NE/4 SECTION 25 = 1,319.85 FEET = 79.99 RODS = 0.91 OF AN ACRE
SE/4 NE/4 SECTION 25 = 523.65 FEET = 31.74 RODS = 0.36 OF AN ACRE
NW/4 SE/4 SECTION 25 = 1,377.28 FEET = 83.47 RODS = 0.93 OF AN ACRE
NE/4 SE/4 SECTION 25 = 811.17 FEET = 49.16 RODS = 0.54 OF AN ACRE
SE/4 SE/4 SECTION 25 = 939.41 FEET = 56.93 RODS = 0.64 OF AN ACRE
SW/4 SE/4 SECTION 25 (EASEMENT ONLY) = 0.01 OF AN ACRE

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 89°16'14" W	491.36'
L2	S 00°14'30" E	2,384.37'
L3	S 39°51'56" E	165.80'
L4	S 00°21'49" W	645.31'
L5	S 22°42'15" W	253.42'
L6	S 00°14'29" E	3,279.47'
L7	S 45°02'16" E	105.90'
L8	S 00°14'26" E	695.38'
L9	S 44°59'06" W	105.02'
L10	S 00°14'46" E	4,480.18'
L11	S 79°38'28" E	781.93'
L12	N 89°41'23" E	225.06'

LINE TABLE "B"

L13	N 88°47'23" E	488.41'

LINE TABLE "C"

L14	N 88°46'51" E	400.39'

LINE TABLE "D"

L15	N 88°47'11" E	522.38'

LINE TABLE "E"

L16	N 89°36'51" E	483.37'

LINE TABLE "F"

L17	S 89°38'14" E	388.00'

LINE TABLE "G"

L18	N 89°49'24" E	463.37'

LINE TABLE "H"

L19	S 89°57'29" E	521.44'

LINE TABLE "I"

L20	S 89°50'16" E	764.31'
L21	N 17°47'17" E	313.60'
L22	N 89°45'50" E	259.84'

TOTAL LENGTH = 18,218.31 FEET
OR 1,104.14 RODS

GENERAL NOTES

1. ALL BEARINGS, DISTANCES, 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.

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

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

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

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED ACCESS ROAD
- PROPOSED OVERHEAD ELECTRIC
- PROPOSED POWER POLE
- PROPOSED PAD FALLOFF
- EXISTING ROAD
- EXISTING PAD
- EXISTING PIPELINE
- EXISTING RAILROAD TRACKS
- EXISTING OVERHEAD ELECTRIC
- POWER POLE
- EXISTING APACHE WELL
- FOUND MONUMENT AS NOTED

EXHIBIT OF:

A PROPOSED 30' WIDE
OVERHEAD ELECTRIC EASEMENT FOR:

XTO PERMIAN OPERATING, LLC.

JRU APACHE DI

SITUATED IN SECTIONS 13, 24, AND 25,
TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	9-9-2021
DRAWN BY:	AW
CHECKED BY:	AI
FIELD CREW:	RD
PROJECT NO:	2019072166
SCALE:	1" = 600'
SHEET:	3 OF 3
REVISION:	NO

FSC INC
SURVEYORS+ENGINEERS
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TBPE Firm 17957 | TBPLS Firm 10193887
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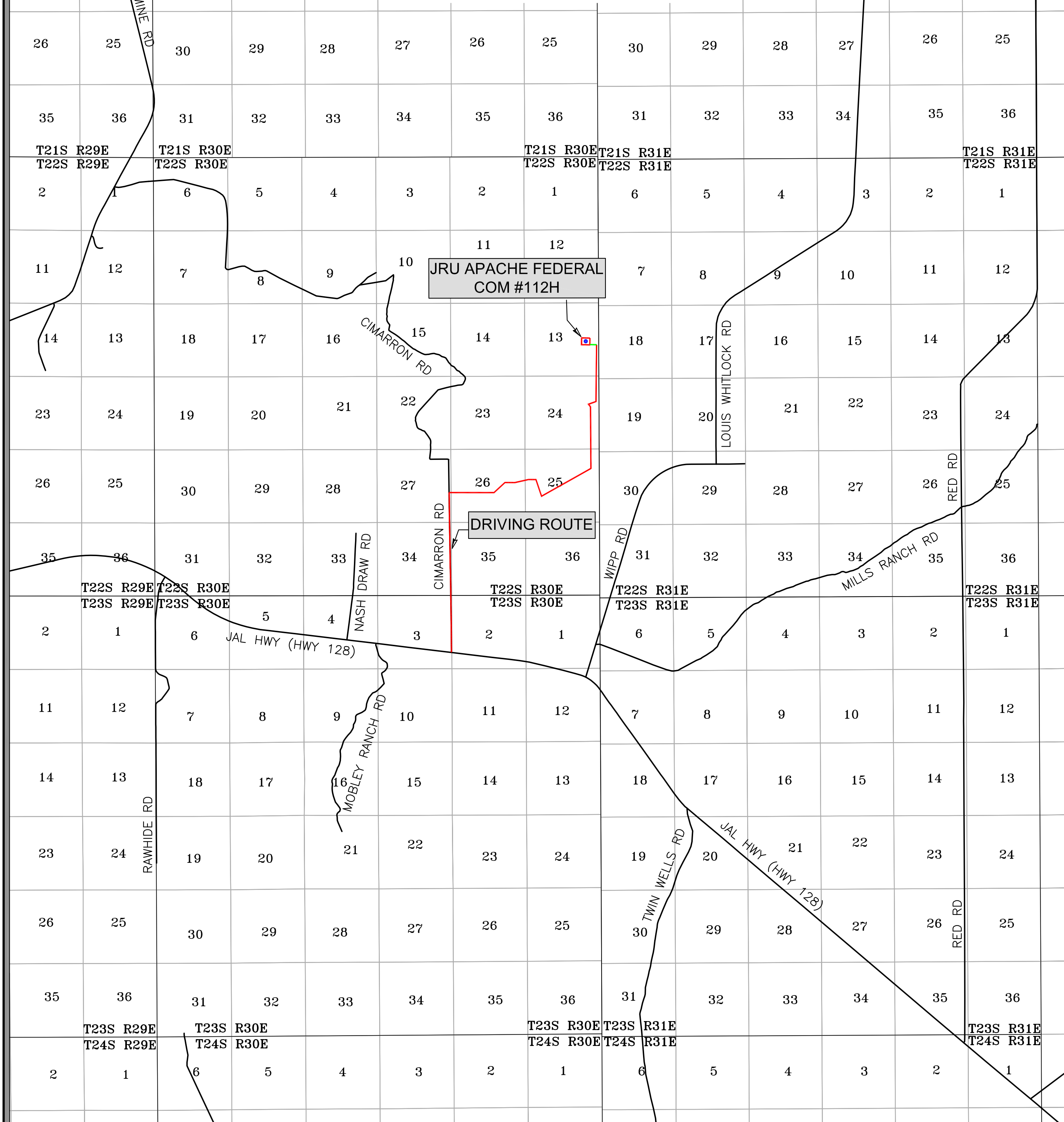
VICINITY MAP



NOTE:

1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR DRIVING DIRECTIONS

JRU APACHE FEDERAL COM #112H
LOCATED 818 FEET FROM THE EAST LINE
AND 2,515 FEET FROM THE SOUTH LINE OF
SECTION 13, TOWNSHIP 22 SOUTH, RANGE 30
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

0 5,000' 10,000'
1" = 10,000 FEET

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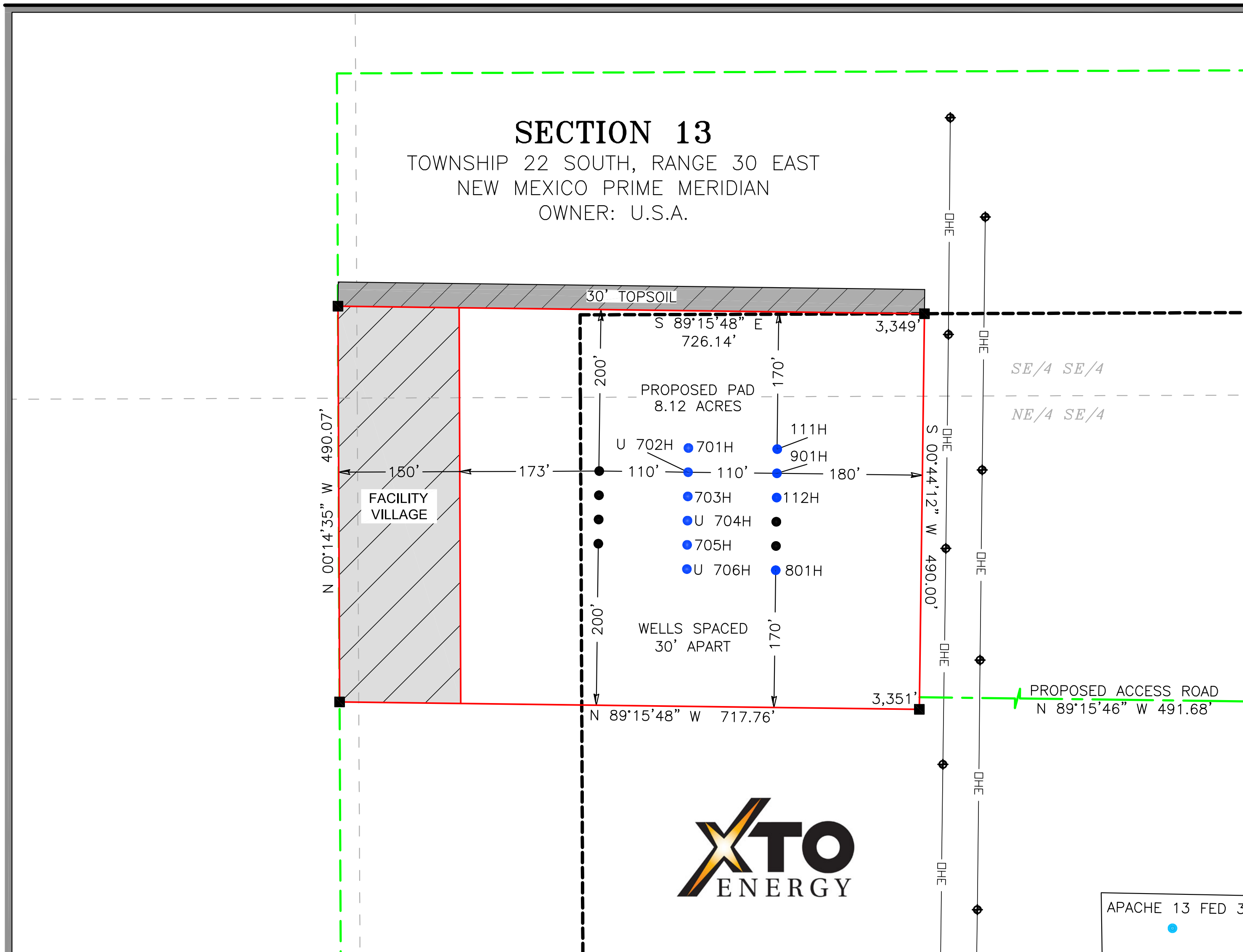
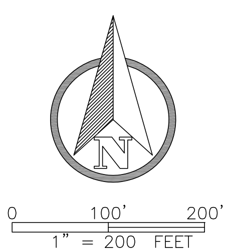
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	4-4-2022
DRAWN BY:	AW
CHECKED BY:	LM
FIELD CREW:	RE
PROJECT NO:	2021121718
SCALE:	1"= 10,000'
SHEET:	2 OF 3
REVISION:	NO



DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 (JAL HWY) AND CIMARRON RD. GO NORTH ON CIMARRON ROAD APPROX. 2.2 MILES. TURN RIGHT (EAST) ON LEASE ROAD APPROX. 1.3 MILES. THEN TURN RIGHT (SOUTHEAST) ON LEASE ROAD FOR APPROX. 0.2 MILES. THEN TURN LEFT (EAST) ON LEASE ROAD FOR APPROX. 0.8 MILES. THEN TURN LEFT (NORTH) ON LEASE ROAD FOR APPROX. 0.6 MILES. THEN TURN LEFT (NORTH) ON LEASE ROAD FOR APPROX. 0.9 MILES. THEN TURN RIGHT (EAST) FOR APPROX. 0.1 MILES. THEN TURN LEFT (NORTH) FOR 0.8 MILES ARRIVING AT PROPOSED ROAD AND LOCATION IS TO THE WEST.



LEGEND

- PROPOSED PAD
- PROPOSED ACCESS RD.
- OHE EXISTING OVERHEAD ELECTRIC
- PROPOSED DRILL ISLAND
- PROPOSED PAD FALL OFF
- TBD WELL
- PERMITTED WELL
- POWER POLE

NOTE:

1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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

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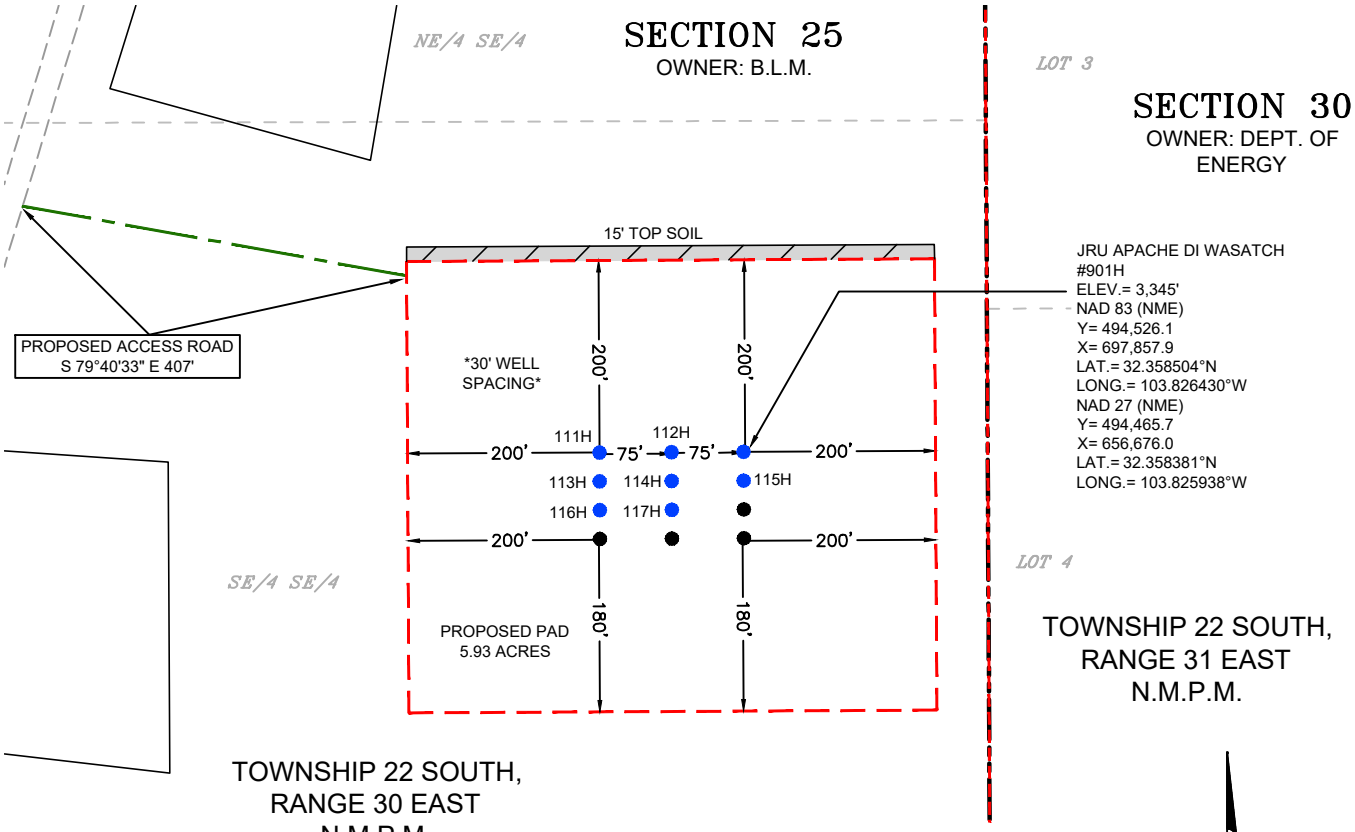
www.fscinc.net

XTO ENERGY, INC.

WELL SITE PLAN PAD A

JRU APACHE PAD A
LOCATED 999 FEET FROM THE EAST LINE AND 2,503 FEET FROM THE SOUTH LINE OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	09-21-2022	PROJECT NO:	2019072166
DRAWN BY:	AW	SCALE:	1" = 200'
CHECKED BY:	AI	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	NO



GRAPHIC SCALE
0 100 200
(IN FEET)
1 inch = 200 ft.

DRIVING DIRECTION TO LOCATION

FROM THE INTERSECTION OF JAL HIGHWAY (STATE HIGHWAY 128) AND WIPP RD. GO NORTHEAST ON WIPP RD. APPROX. 2.2 MILES TO AN INTERSECTION. TURN LEFT (WEST) ON LEASE ROAD AND GO APPROX. 0.6 MILES TO A FORK IN THE ROAD. TURN RIGHT (NORTHEAST) ON LEASE ROAD AND GO APPROX. 0.3 MILES ARRIVING AT THE PROPOSED ROAD TO THE SOUTHEAST.

GENERAL NOTES

1. BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATES SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983.
2. LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATA (NAD83).
3. REFER TO TOPOGRAPHICAL AND ACCESS ROAD MAP FOR PROPOSED ROAD LOCATION.

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

MARK DILLON HARP
NEW MEXICO PROFESSIONAL LAND SURVEYOR
NO. 23786

LEGEND

- SECTION LINE
- DRILLING ISLAND
- PROPOSED PAD
- PROPOSED ACCESS ROAD
- TBD WELL LOCATION
- PERMITTED WELL LOCATION
- EXISTING PAD
- EXISTING ACCESS ROAD

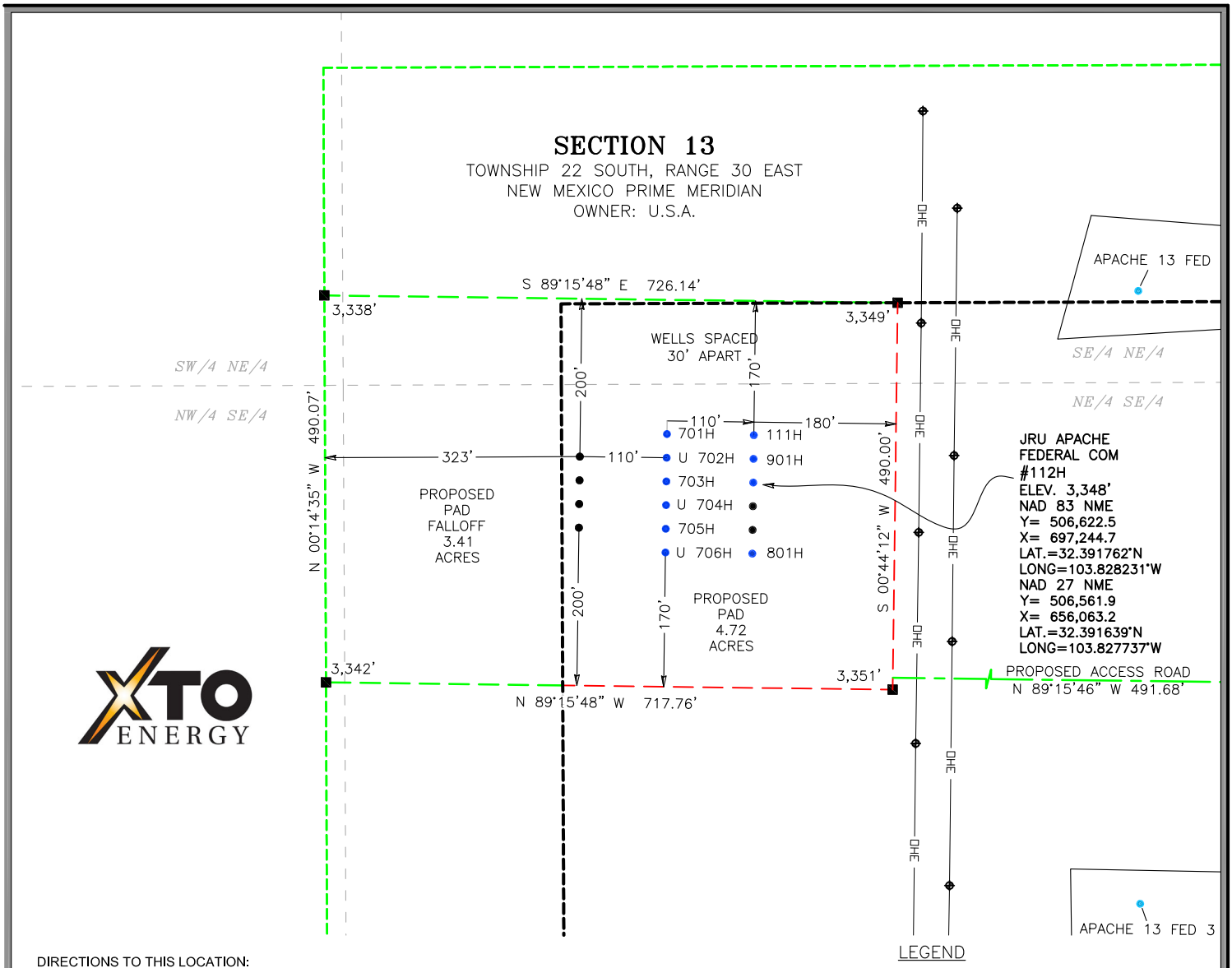
Manhard CONSULTING
505 Pecan Street, Suite 201, Fort Worth, TX 76102
ph: 817.865.5344 manhard.com
Texas Board of Professional Engineers & Land Surveyors Reg. No. F-10194754 (Surv), F-21732 (Eng)

A WELL SITE PLAN FOR XTO PERMIAN OPERATING, LLC.
JRU APACHE DRILLING ISLAND PROPOSED PAD "K"

JRU APACHE DI WASATCH 901H IS LOCATED 254 FEET FROM THE EAST LINE AND 974 FEET FROM THE SOUTH LINE OF SECTION 25, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

CHECKED BY:	DATE:	SCALE:	PROJECT NO.:
AR	01/15/2023	1" = 200'	618.013002.10
DRAWN BY:	FIELD CREW:	REVISION NO.:	SHEET:
AI	RE	2	1 OF 3

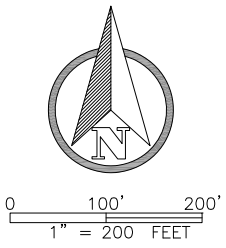
P:\618.013 XTO Energy - NM\002 James Ranch Unit\.10 - APACHE DI - EDDY\DWG\To-Client\FOR CASSIE\PAD K WELL SITE PLAN.dwg



XTO ENERGY

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 (JAL HWY) AND CIMARRON RD. GO NORTH ON CIMARRON ROAD APPROX. 2.2 MILES. TURN RIGHT (EAST) ON LEASE ROAD APPROX. 1.3 MILES. THEN TURN RIGHT (SOUTHEAST) ON LEASE ROAD FOR APPROX. 0.2 MILES. THEN TURN LEFT (EAST) ON LEASE ROAD FOR APPROX. 0.8 MILES. THEN TURN LEFT (NORTH) ON LEASE ROAD FOR APPROX. 0.6 MILES. THEN TURN LEFT (NORTH) ON LEASE ROAD FOR APPROX. 0.9 MILES. THEN TURN RIGHT (EAST) FOR APPROX. 0.1 MILES. THEN TURN LEFT (NORTH) FOR 0.8 MILES ARRIVING AT PROPOSED ROAD AND LOCATION IS TO THE WEST.



LEGEND

- PROPOSED PAD
- PROPOSED ACCESS RD.
- OHE — EXISTING OVERHEAD ELECTRIC
- EXISTING PIPELINE
- PROPOSED PAD FALLOFF
- PROPOSED DRILL ISLAND
- EXISTING PAD
- EXISTING ROAD
- TBD WELL
- STAKED WELL
- POWER POLE

NOTE:

1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION

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MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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XTO ENERGY, INC.

WELL SITE PLAN

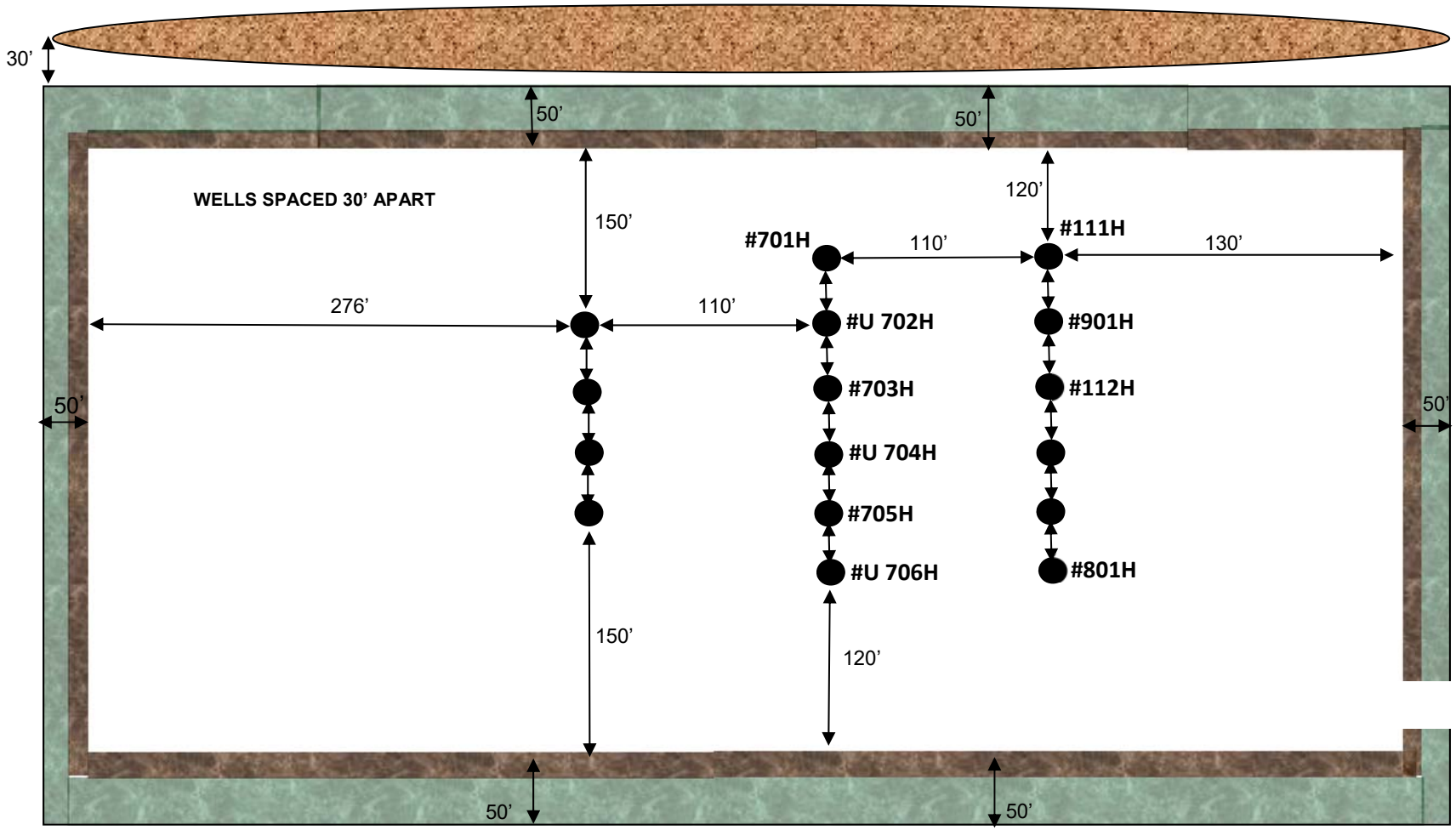
JRU APACHE FEDERAL COM #112H
LOCATED 818 FEET FROM THE EAST LINE AND 2,515 FEET FROM THE SOUTH LINE OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	04-04-2022	PROJECT NO:	2021121718
DRAWN BY:	AW	SCALE:	1" = 200'
CHECKED BY:	LM	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	NO

P:\PROJECTS\2021\2021121718\JRU APACHE FED COM 112H\DWG\PLAT\2021121718-XTO-JRU_APACHE_FED_COM_112H_WELL_SITE.dwg, Adobe PDF

Interim Reclamation Diagram

JRU Apache Fed Com: 111H, 901H, 112H, 801H, 701H, U 702H, 703H, U 704H, 705H, U 706H
All Wells Without Numbers are 'TBD' Allocations for Future Development



LEGEND

N

Wellbore

Interim Reclamation

Ditch & Berm

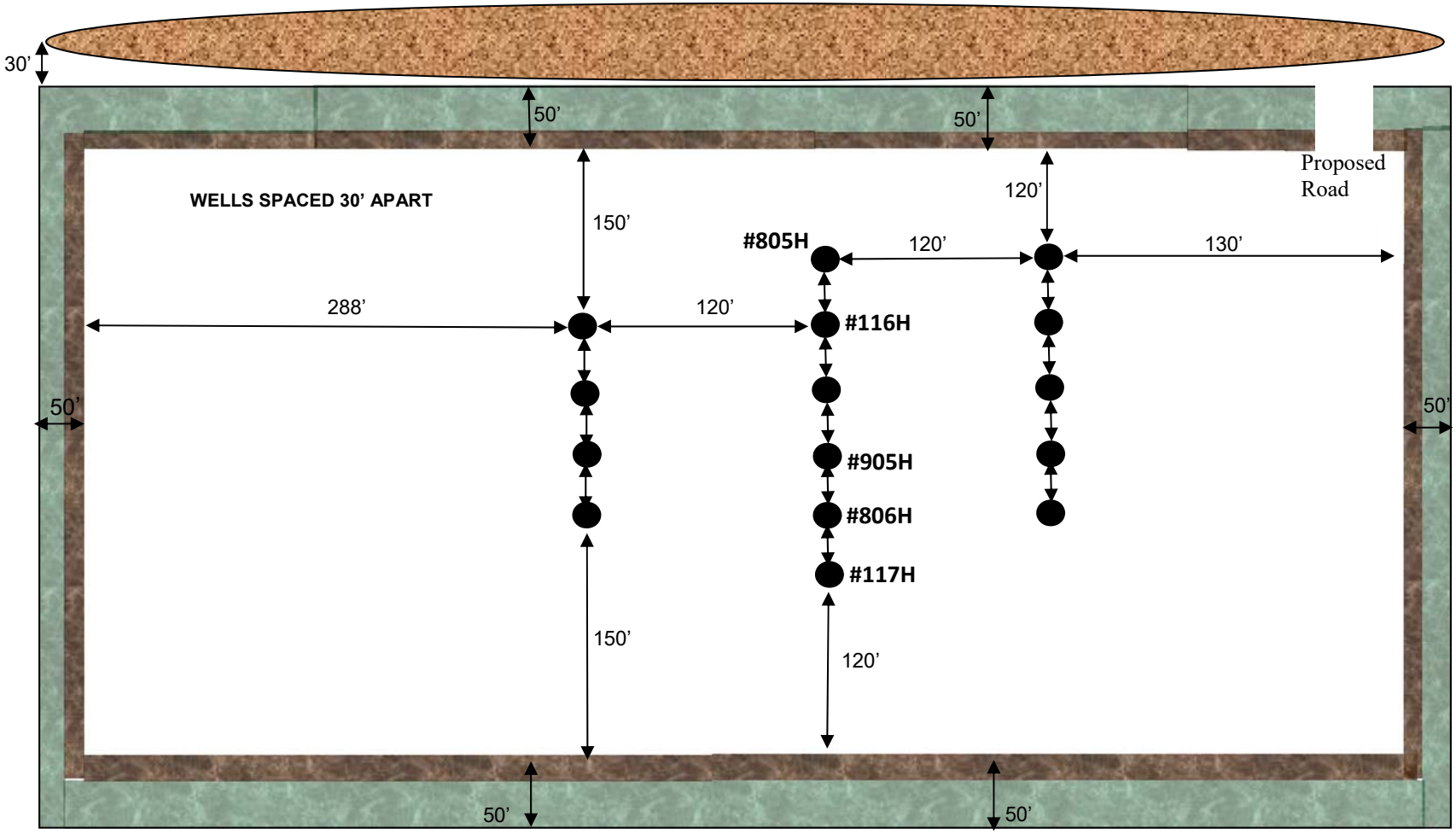
Topsoil

*Diagram Not to Scale

Interim Reclamation Diagram

JRU Apache Fed Com: 805H, 116H, 905H, 806H, 117H

All Wells Without Numbers are 'TBD' Allocations for Future Development



LEGEND

N

Wellbore

Interim Reclamation

Ditch & Berm

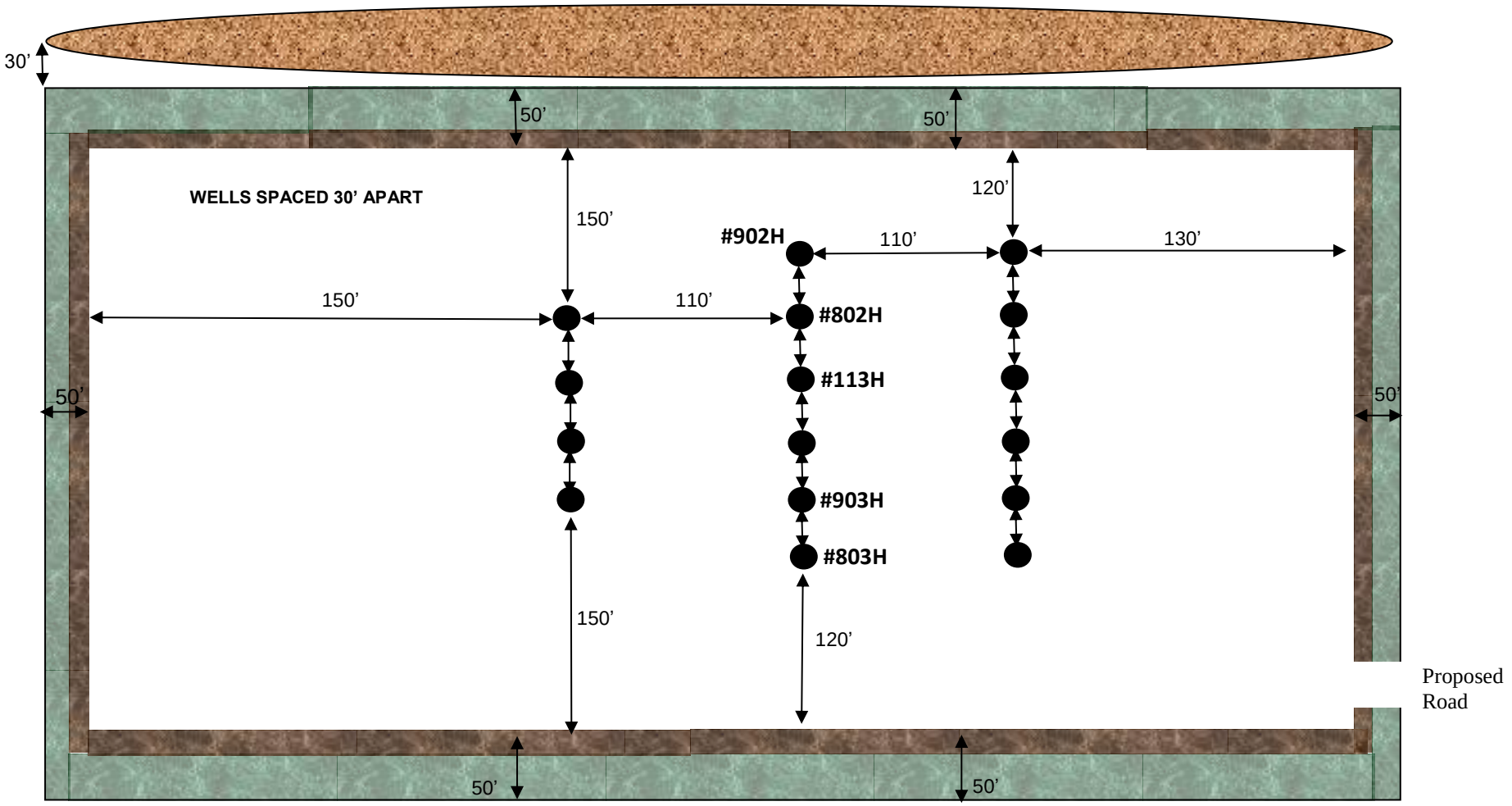
Topsoil

*Diagram Not to Scale

Interim Reclamation Diagram

JRU Apache Fed Com: 902H, 802H, 113H, 903H, 803H

All Wells Without Numbers are 'TBD' Allocations for Future Development



LEGEND

N

Wellbore

Interim Reclamation

Ditch & Berm

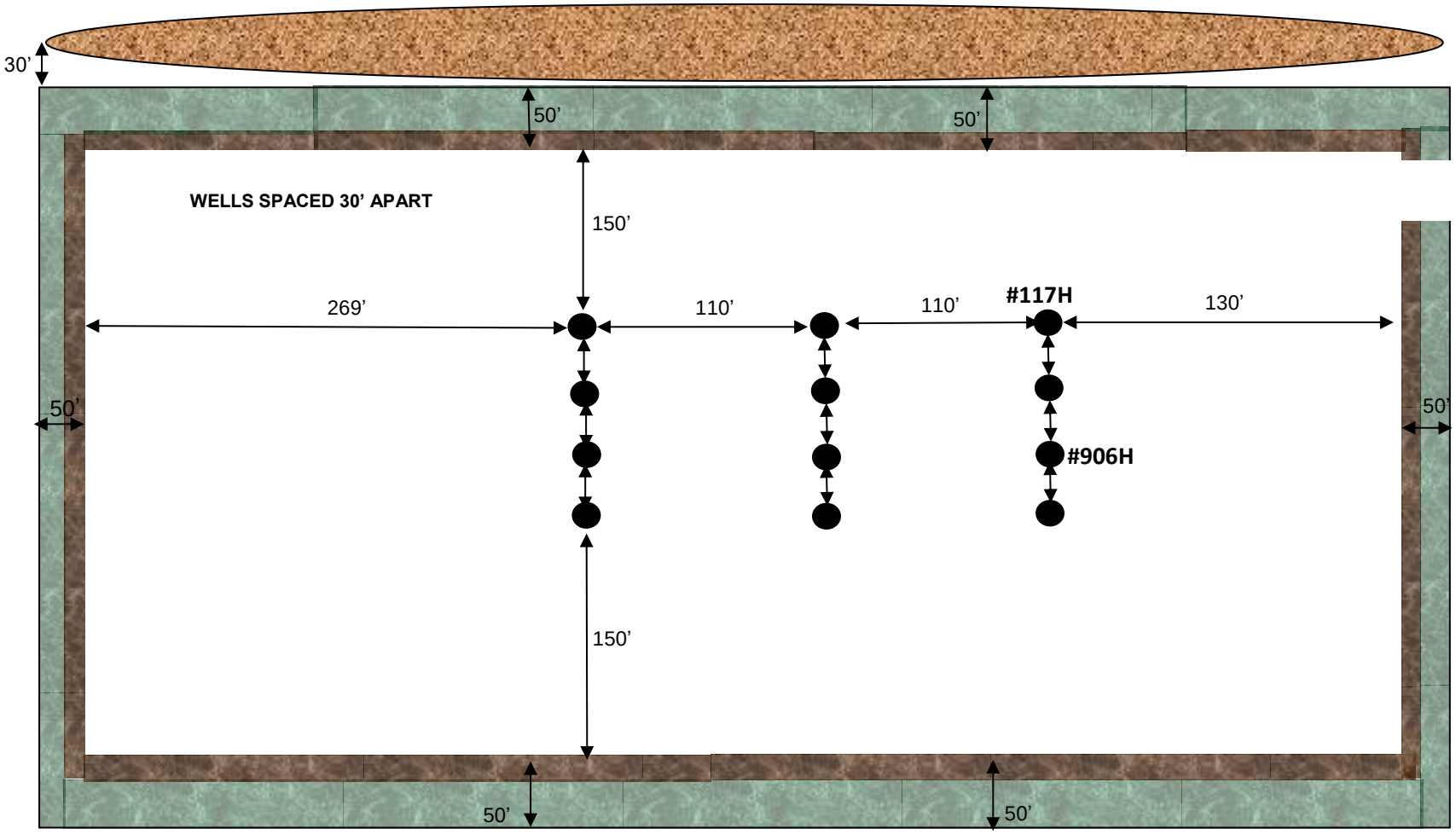
Topsoil

*Diagram Not to Scale

Interim Reclamation Diagram

JRU Apache Fed Com: 117H, 906H

All Wells Without Numbers are 'TBD' Allocations for Future Development



LEGEND

N

Wellbore

Interim Reclamation

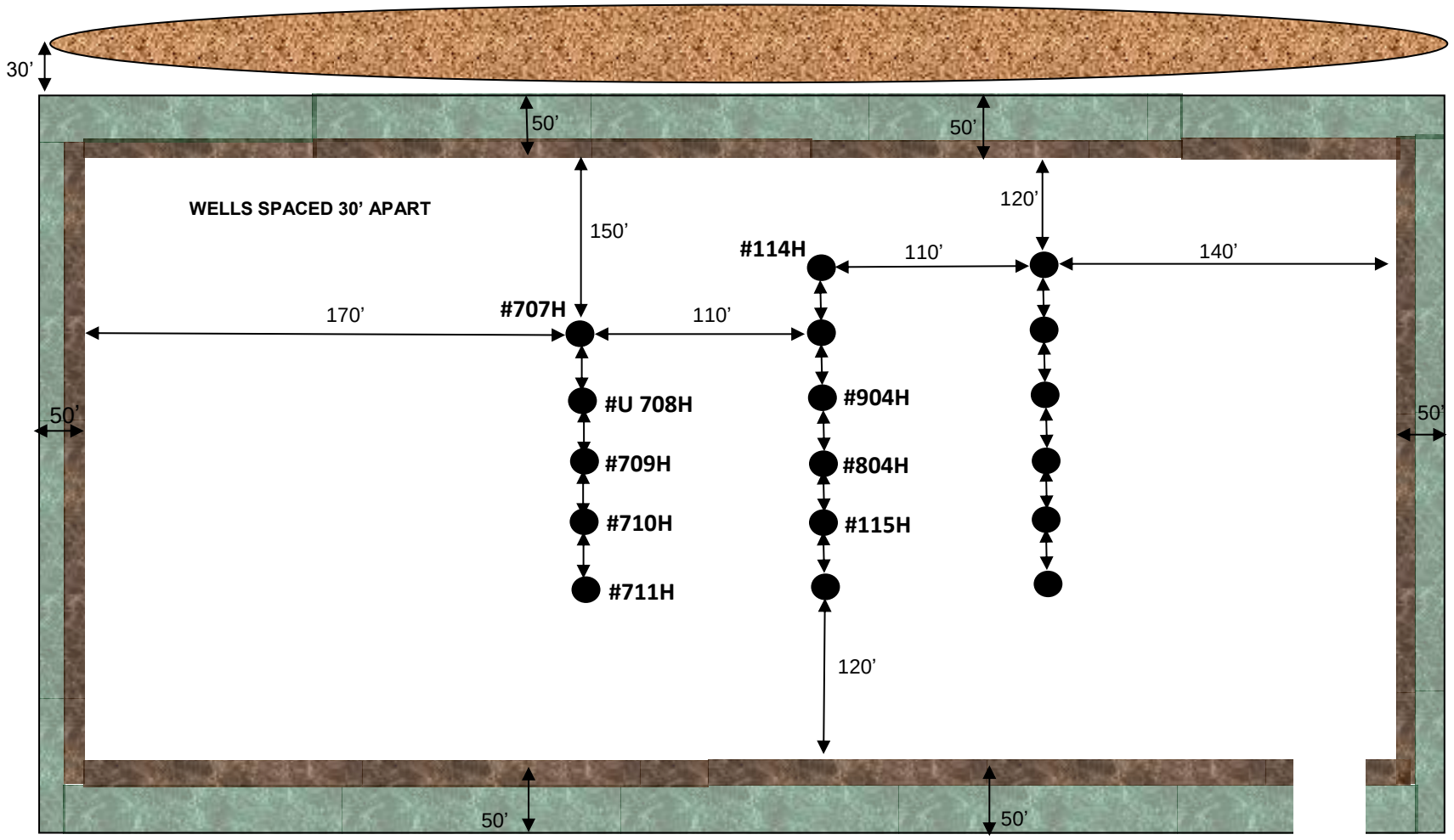
Ditch & Berm

Topsoil

*Diagram Not to Scale

Interim Reclamation Diagram

JRU Apache Fed Com: 114H, 904H, 804H, 115H, 707H, U 708H, 709H, 710H, 711H
All Wells Without Numbers are 'TBD' Allocations for Future Development



LEGEND

N

Wellbore

Interim Reclamation

Ditch & Berm

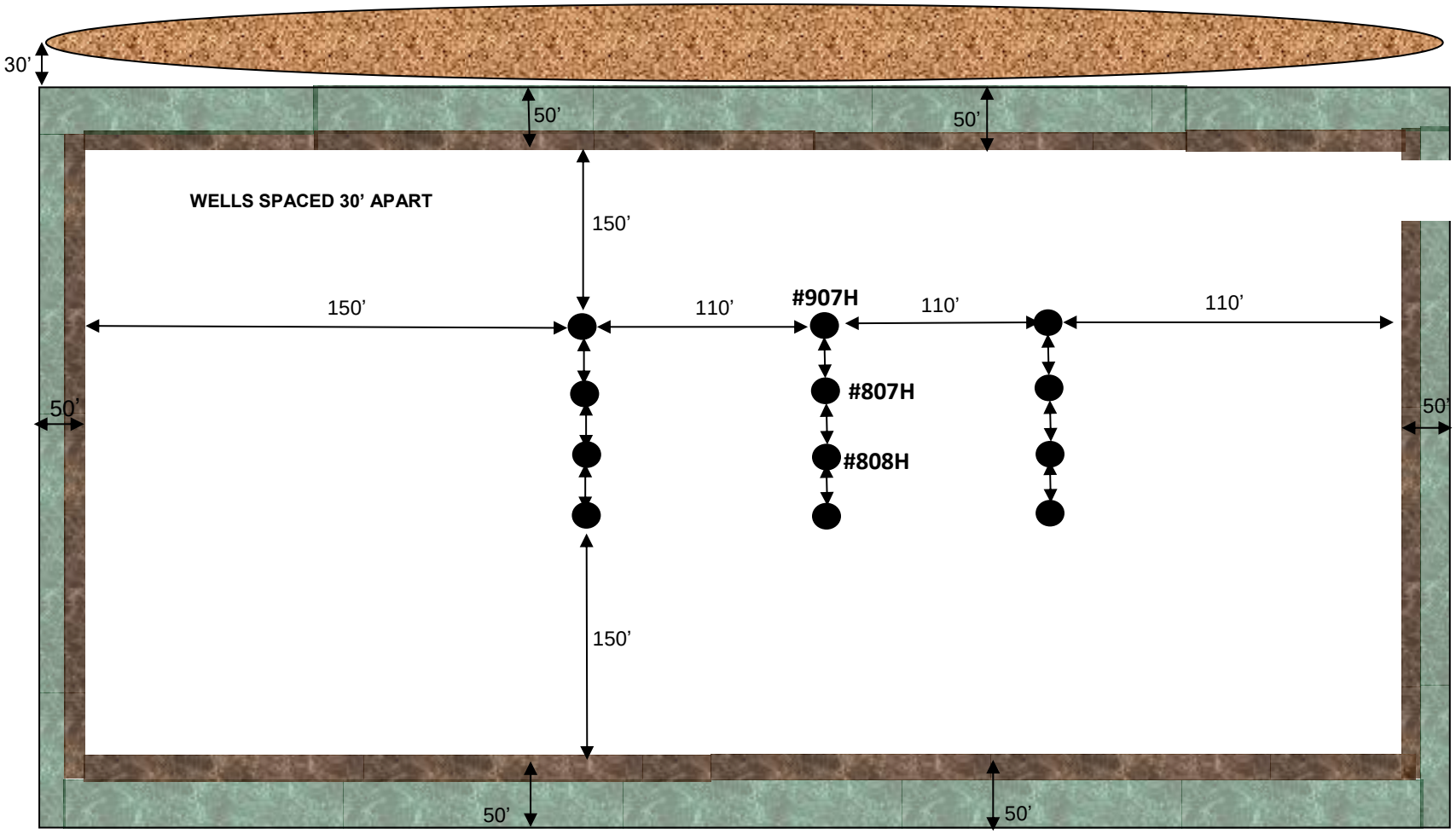
Topsoil

*Diagram Not to Scale

Interim Reclamation Diagram

JRU Apache Fed Com: 907H, 807H, 808H

All Wells Without Numbers are 'TBD' Allocations for Future Development



LEGEND

N

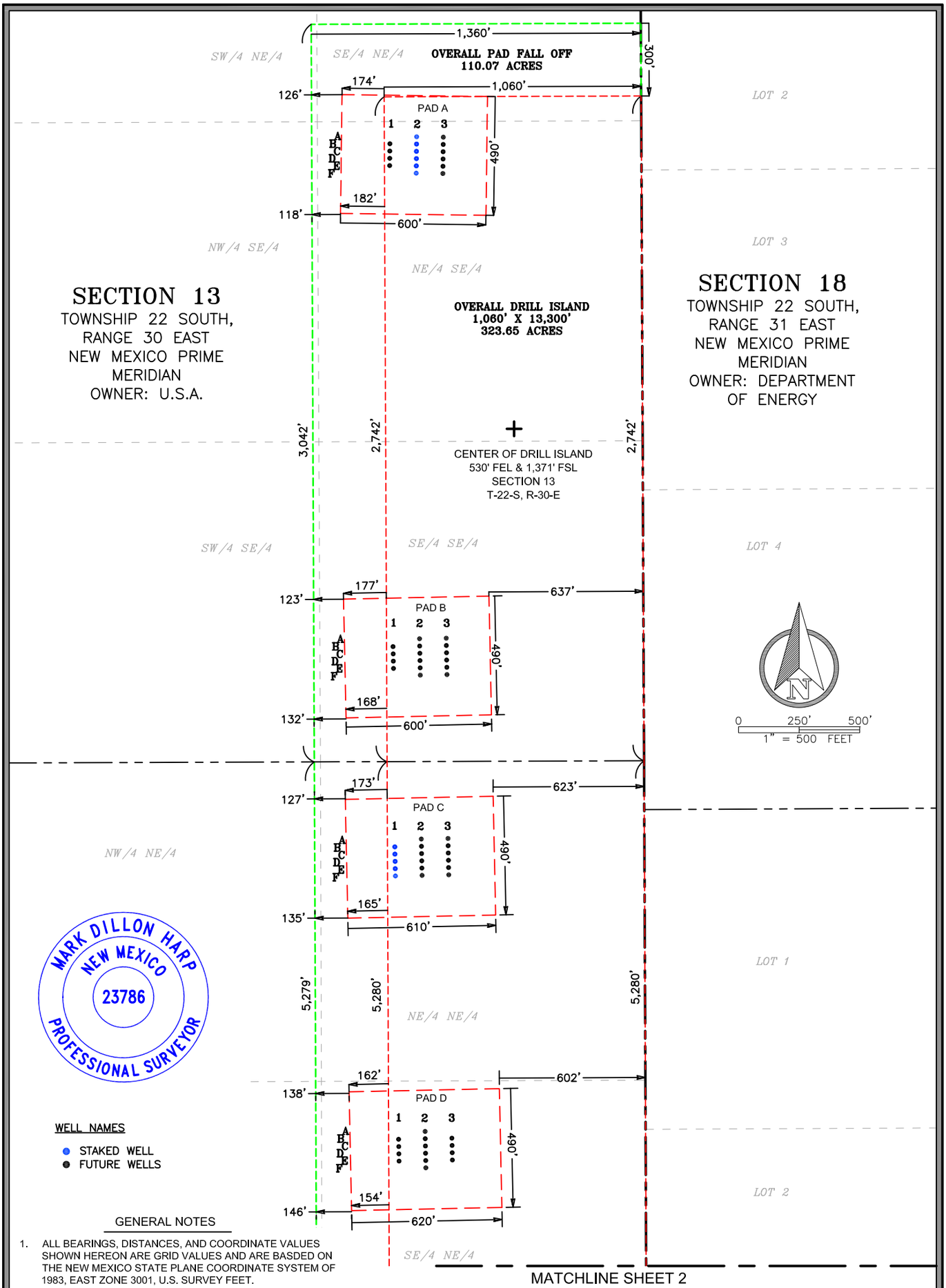
Wellbore

Interim Reclamation

Ditch & Berm

Topsoil

*Diagram Not to Scale



WELL NAMES

- STAKED WELL
- FUTURE WELLS

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REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 23786

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

XTO ENERGY

LEGEND

- SECTION LINE
- PROPOSED DRILLING ISLAND
- PROPOSED PAD
- PROPOSED PAD FALL OFF

EXHIBIT OF:

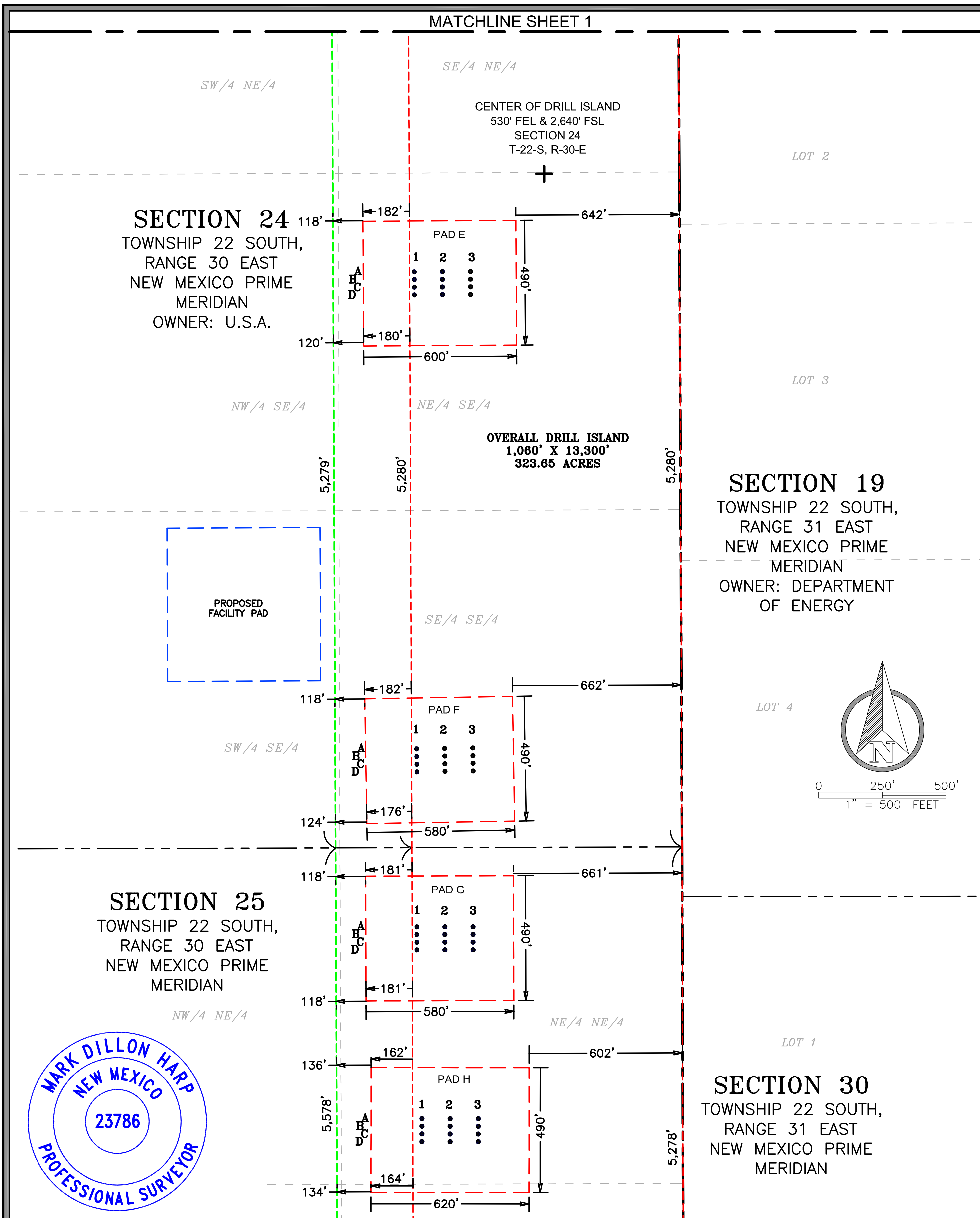
AN OVERALL LAYOUT FOR:

XTO ENERGY, INC.

JAMES RANCH UNIT
APACHE DRILLING ISLAND
"ALL DEPTHS"

SITUATED IN SECTIONS 13, 24, AND 25,
TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	10-28-2021
DRAWN BY:	LM/AI
CHECKED BY:	AR
FIELD CREW:	RE
PROJECT NO:	2019072166
SCALE:	1" = 500'
SHEET:	1 OF 3
REVISION:	1



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MATCHLINE SHEET 3

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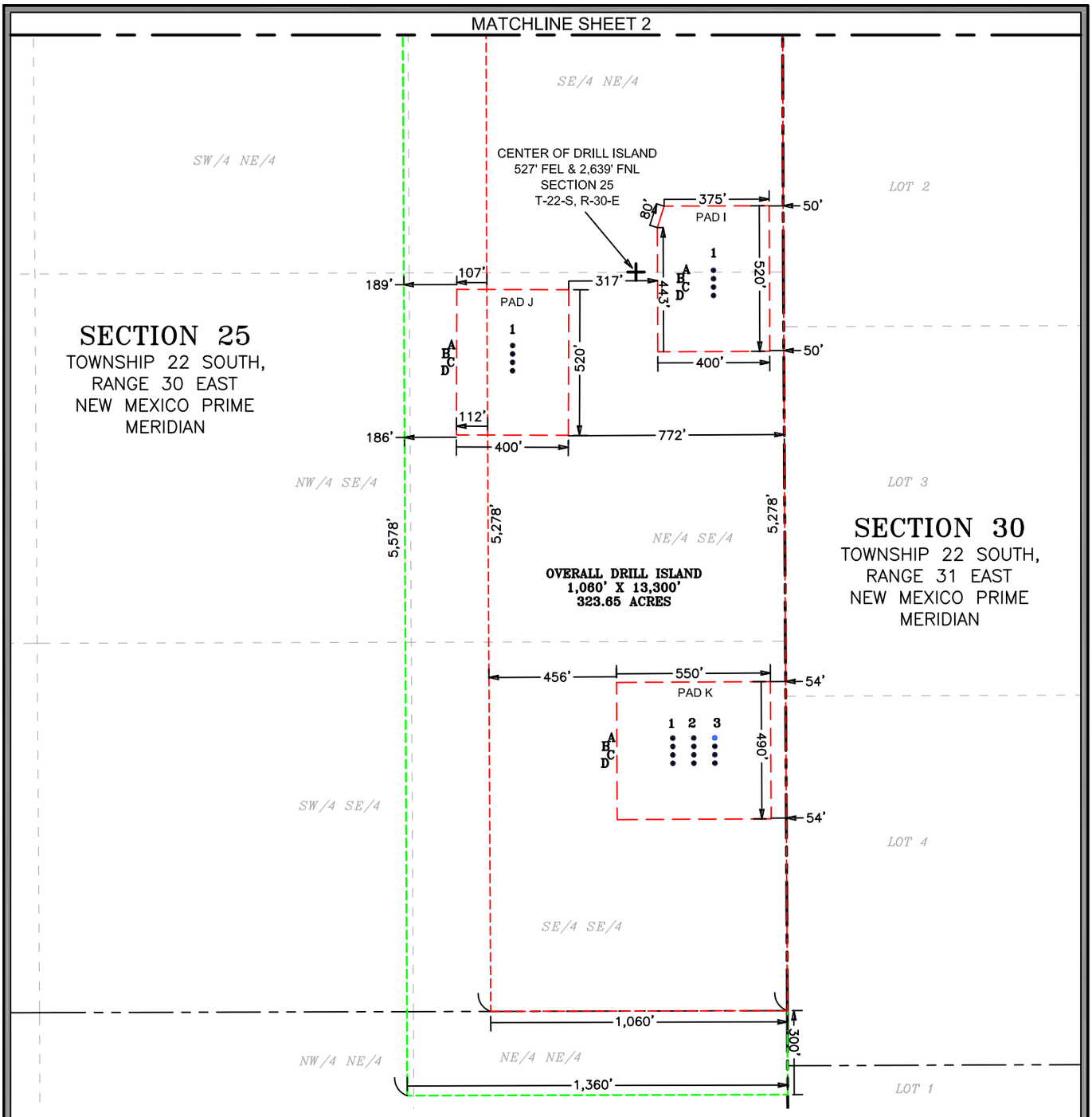

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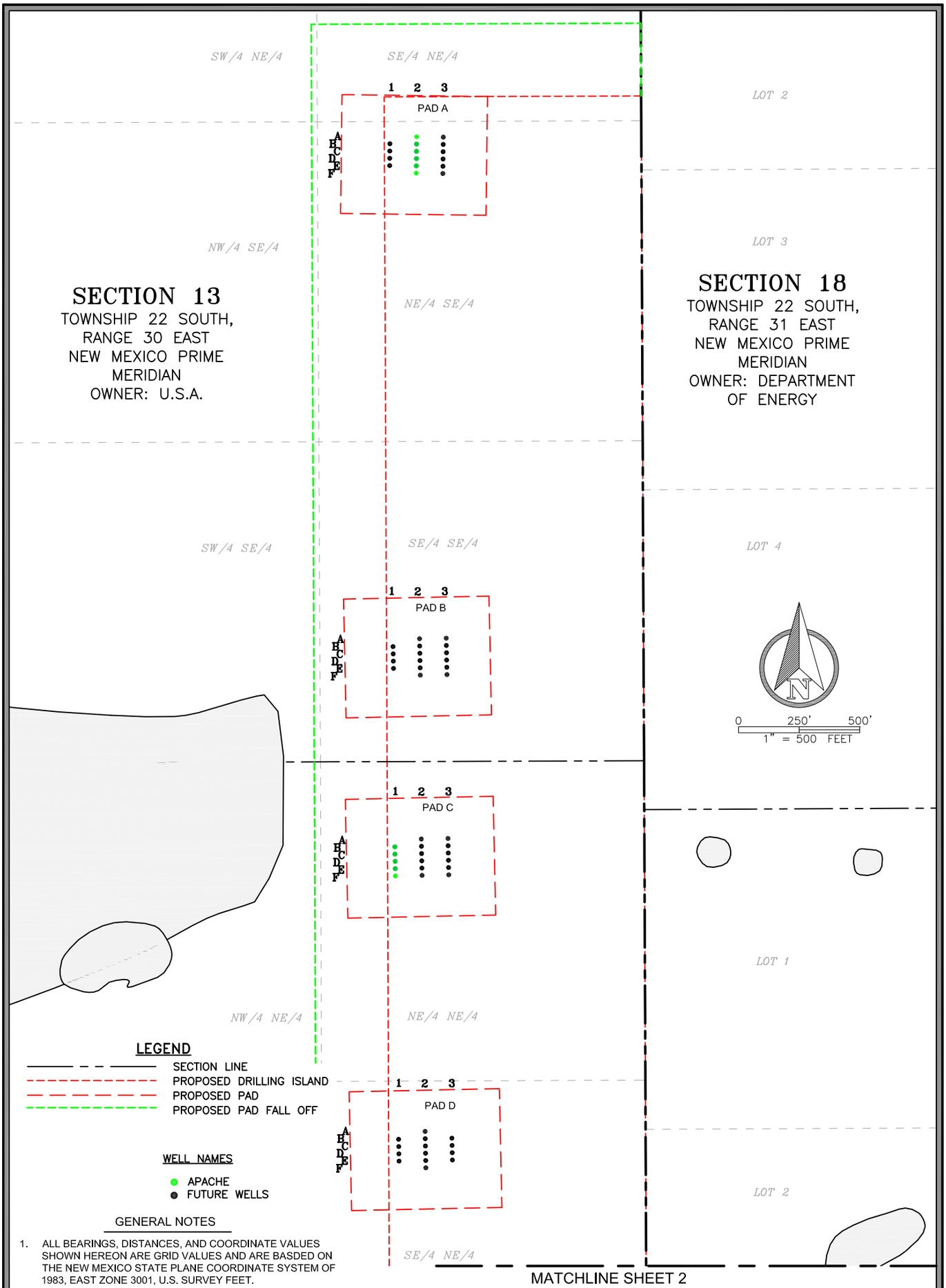

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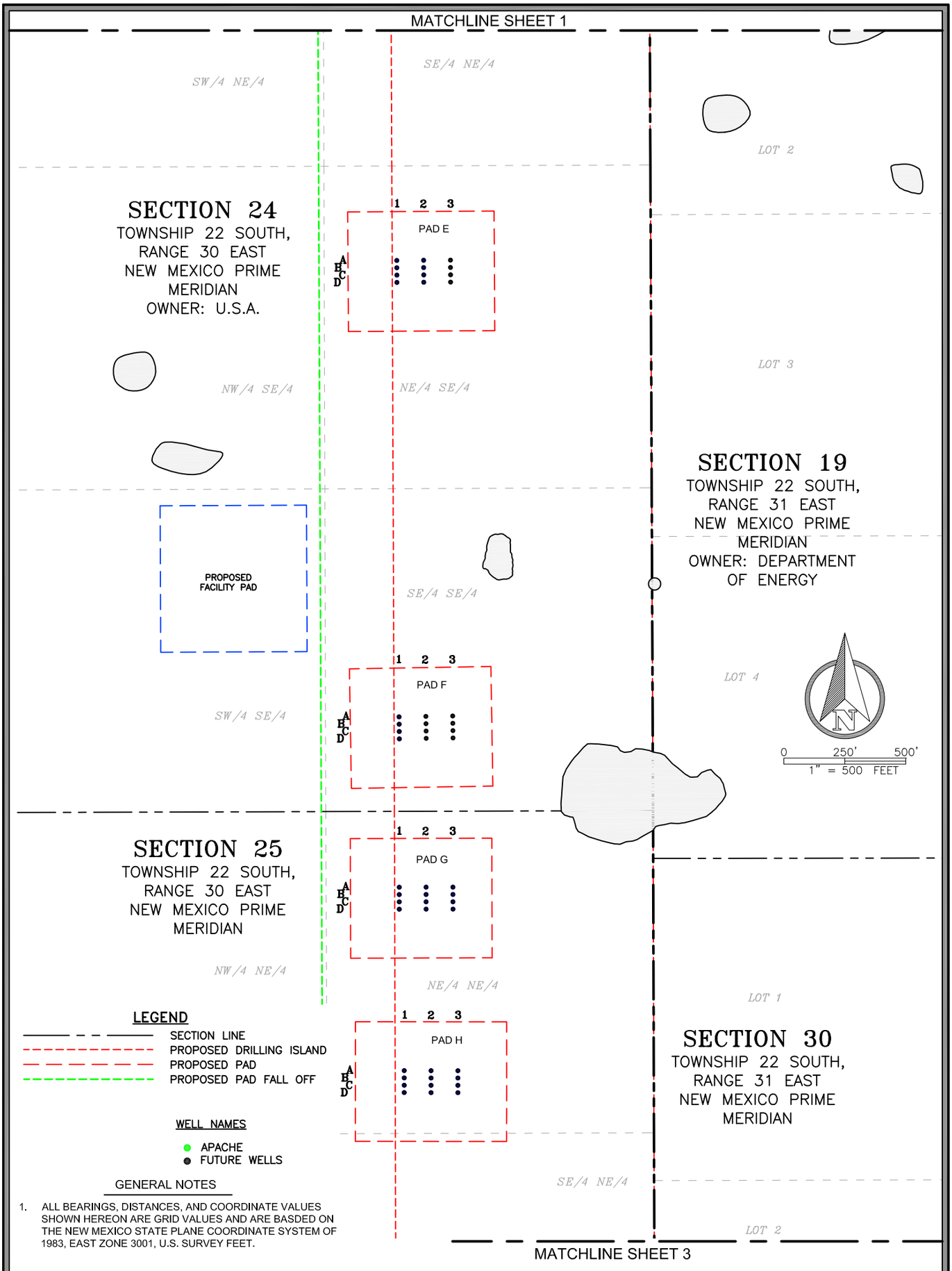

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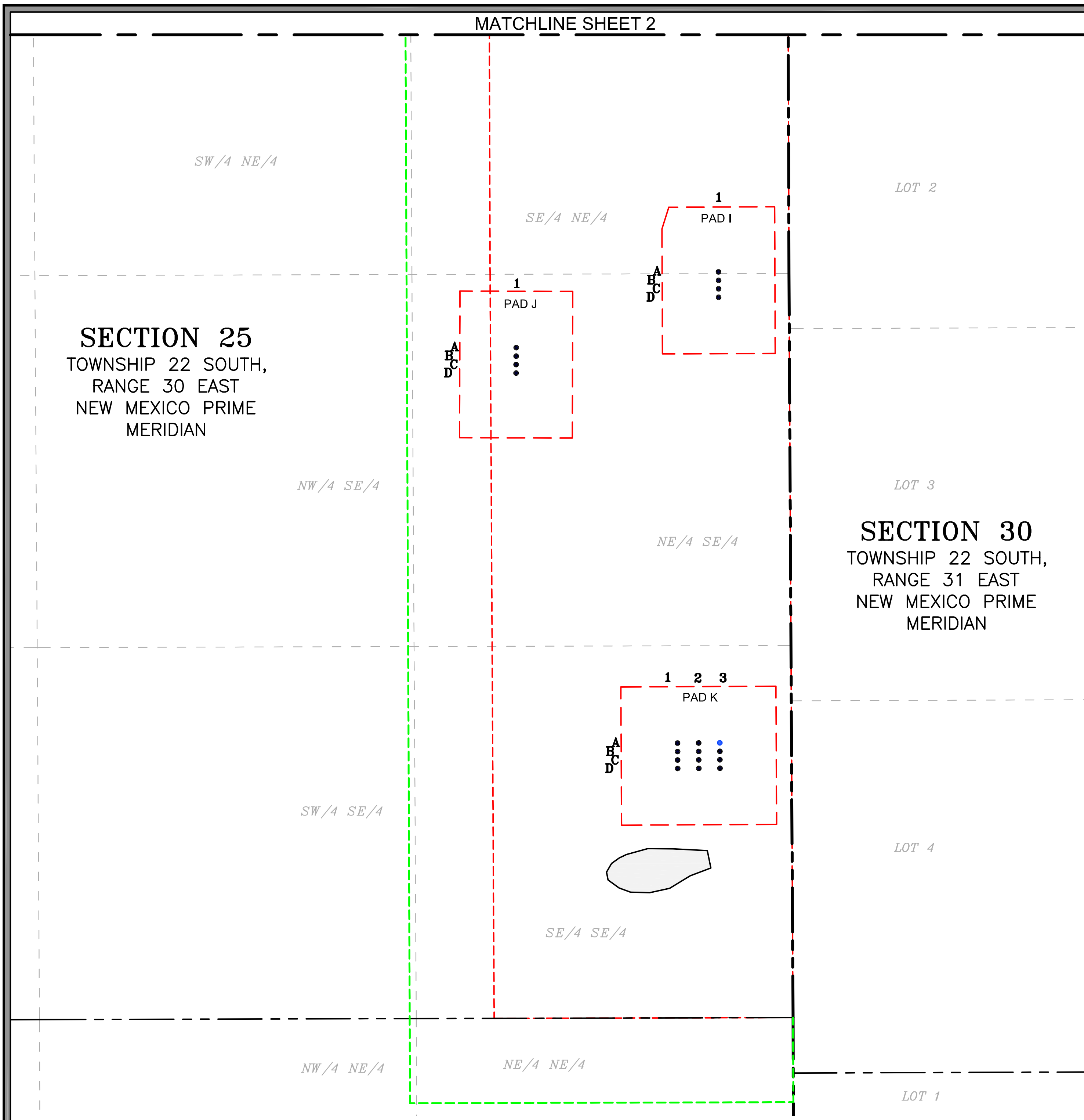

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WELL LOCATION INFORMATION

WELL	FOOTAGE CALLS
A A2	927' FEL & 2,577' FSL SEC. 13
A A3	817' FEL & 2,575' FSL SEC. 13
A B1	1,037' FEL & 2,548' FSL SEC. 13
A B2	927' FEL & 2,547' FSL SEC. 13
A B3	817' FEL & 2,545' FSL SEC. 13
A C1	1,038' FEL & 2,518' FSL SEC. 13
A C2	928' FEL & 2,517' FSL SEC. 13
A C3	817' FEL & 2,515' FSL SEC. 13
A D1	1,038' FEL & 2,488' FSL SEC. 13
A D2	928' FEL & 2,487' FSL SEC. 13
A D3	818' FEL & 2,485' FSL SEC. 13
A E1	1,039' FEL & 2,458' FSL SEC. 13
A E2	929' FEL & 2,457' FSL SEC. 13
A E3	819' FEL & 2,455' FSL SEC. 13
A F1	929' FEL & 2,427' FSL SEC. 13
A F2	819' FEL & 2,425' FSL SEC. 13

WELL	FOOTAGE CALLS
B A2	924' FEL & 506' FSL SEC. 13
B A3	814' FEL & 508' FSL SEC. 13
B B1	1,033' FEL & 475' FSL SEC. 13
B B2	923' FEL & 476' FSL SEC. 13
B B3	813' FEL & 478' FSL SEC. 13
B C1	1,033' FEL & 445' FSL SEC. 13
B C2	923' FEL & 446' FSL SEC. 13
B C3	813' FEL & 448' FSL SEC. 13
B D1	1,032' FEL & 415' FSL SEC. 13
B D2	922' FEL & 416' FSL SEC. 13
B D3	812' FEL & 418' FSL SEC. 13
B E1	1,032' FEL & 385' FSL SEC. 13
B E2	922' FEL & 386' FSL SEC. 13
B E3	812' FEL & 388' FSL SEC. 13
B F2	921' FEL & 356' FSL SEC. 13
B F3	811' FEL & 358' FSL SEC. 13

WELL	FOOTAGE CALLS
C A2	920' FEL & 320' FNL SEC. 24
C A3	810' FEL & 318' FNL SEC. 24
C B1	1,030' FEL & 351' FNL SEC. 24
C B2	920' FEL & 350' FNL SEC. 24
C B3	810' FEL & 348' FNL SEC. 24
C C1	1,029' FEL & 381' FNL SEC. 24
C C2	919' FEL & 380' FNL SEC. 24
C C3	809' FEL & 378' FNL SEC. 24
C D1	1,029' FEL & 411' FNL SEC. 24
C D2	919' FEL & 410' FNL SEC. 24
C D3	809' FEL & 408' FNL SEC. 24
C E1	1,028' FEL & 441' FNL SEC. 24
C E2	918' FEL & 440' FNL SEC. 24
C E3	808' FEL & 438' FNL SEC. 24
C F1	1,028' FEL & 471' FNL SEC. 24
C F2	918' FEL & 470' FNL SEC. 24
C F3	808' FEL & 468' FNL SEC. 24

WELL	FOOTAGE CALLS
D A2	910' FEL & 1,526' FNL SEC. 24
D B1	1,019' FEL & 1,558' FNL SEC. 24
D B2	909' FEL & 1,556' FNL SEC. 24
D B3	799' FEL & 1,554' FNL SEC. 24
D C1	1,019' FEL & 1,588' FNL SEC. 24
D C2	908' FEL & 1,586' FNL SEC. 24
D C3	799' FEL & 1,584' FNL SEC. 24
D D1	1,018' FEL & 1,618' FNL SEC. 24
D D2	908' FEL & 1,618' FNL SEC. 24
D D3	798' FEL & 1,614' FNL SEC. 24
D E1	1,018' FEL & 1,648' FNL SEC. 24
D E2	908' FEL & 1,646' FNL SEC. 24
D E3	798' FEL & 1,646' FNL SEC. 24
D F2	907' FEL & 1,676' FNL SEC. 24

WELL	FOOTAGE CALLS
E A1	1,041' FEL & 2,257' FSL SEC. 24
E A2	931' FEL & 2,257' FSL SEC. 24
E A3	821' FEL & 2,258' FSL SEC. 24
E B1	1,041' FEL & 2,227' FSL SEC. 24
E B2	931' FEL & 2,227' FSL SEC. 24
E B3	821' FEL & 2,228' FSL SEC. 24
E C1	1,041' FEL & 2,197' FSL SEC. 24
E C2	931' FEL & 2,197' FSL SEC. 24
E C3	821' FEL & 2,198' FSL SEC. 24
E D1	1,041' FEL & 2,167' FSL SEC. 24
E D2	931' FEL & 2,167' FSL SEC. 24
E D3	821' FEL & 2,168' FSL SEC. 24

WELL	FOOTAGE CALLS
F A1	1,040' FEL & 387' FSL SEC. 24
F A2	930' FEL & 299' FSL SEC. 24
F A3	820' FEL & 300' FSL SEC. 24
F B1	1,039' FEL & 357' FSL SEC. 24
F B2	929' FEL & 359' FSL SEC. 24
F B3	819' FEL & 360' FSL SEC. 24
F C1	1,039' FEL & 327' FSL SEC. 24
F C2	928' FEL & 300' FSL SEC. 24
F C3	819' FEL & 330' FSL SEC. 24
F D1	1,038' FEL & 297' FSL SEC. 24
F D2	928' FEL & 299' FSL SEC. 24
F D3	818' FEL & 300' FSL SEC. 24

WELL	FOOTAGE CALLS
G A1	1,041' FEL & 311' FNL SEC. 25
G A2	931' FEL & 311' FNL SEC. 25
G A3	821' FEL & 311' FNL SEC. 25
G B1	1,041' FEL & 341' FNL SEC. 25
G B2	931' FEL & 341' FNL SEC. 25
G B3	821' FEL & 341' FNL SEC. 25
G C1	1,041' FEL & 371' FNL SEC. 25
G C2	931' FEL & 371' FNL SEC. 25
G C3	821' FEL & 371' FNL SEC. 25
G D1	1,041' FEL & 401' FNL SEC. 25
G D2	931' FEL & 401' FNL SEC. 25
G D3	821' FEL & 401' FNL SEC. 25

WELL	FOOTAGE CALLS
H A1	1,023' FEL & 1,062' FNL SEC. 25
H A2	913' FEL & 1,063' FNL SEC. 25
H A3	803' FEL & 1,063' FNL SEC. 25
H B1	1,023' FEL & 1,092' FNL SEC. 25
H B2	913' FEL & 1,093' FNL SEC. 25
H B3	803' FEL & 1,093' FNL SEC. 25
H C1	1,023' FEL & 1,122' FNL SEC. 25
H C2	913' FEL & 1,123' FNL SEC. 25
H C3	803' FEL & 1,123' FNL SEC. 25
H D1	1,023' FEL & 1,152' FNL SEC. 25
H D2	913' FEL & 1,153' FNL SEC. 25
H D3	803' FEL & 1,153' FNL SEC. 25

WELL	FOOTAGE CALLS
I A1	250' FEL & 2,634' FNL SEC. 25
I B1	250' FEL & 2,615' FSL SEC. 25
I C1	250' FEL & 2,585' FSL SEC. 25
I D1	250' FEL & 2,555' FSL SEC. 25

WELL	FOOTAGE CALLS
J A1	969' FEL & 2,378' FSL SEC. 25
J B1	969' FEL & 2,348' FSL SEC. 25
J C1	969' FEL & 2,318' FSL SEC. 25
J D1	970' FEL & 2,288' FSL SEC. 25

WELL	FOOTAGE CALLS
K A1	404' FEL & 974' FSL SEC. 25
K A2	329' FEL & 974' FSL SEC. 25
K A3	254' FEL & 975' FSL SEC. 25
K B1	404' FEL & 944' FSL SEC. 25
K B2	329' FEL & 944' FSL SEC. 25
K B3	254' FEL & 945' FSL SEC. 25
K C1	404' FEL & 914' FSL SEC. 25
K C2	329' FEL & 914' FSL SEC. 25
K C3	254' FEL & 915' FSL SEC. 25
K D1	404' FEL & 884' FSL SEC. 25
K D2	329' FEL & 884' FSL SEC. 25
K D3	254' FEL & 885' FSL SEC. 25

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Well Site Locations

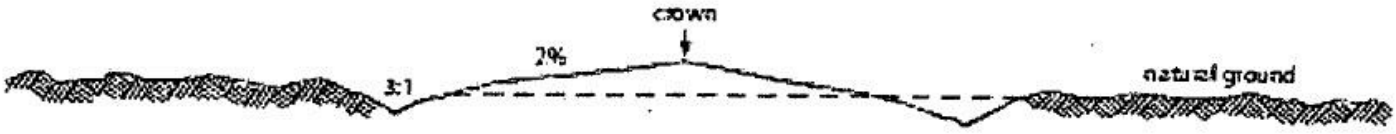
The results of the JRU Apache Development Program will develop economic quantities of oil and gas in the 'JRU Apache' development area with multiple primary formations targeted. Well locations are determined based on cross-section variations and details. Locations will be selected to minimize the likelihood of encountering faults and/or drilling hazards while still targeting suitably productive zones.

If drilling results in an unproductive well, the well will be plugged and abandoned as soon as practical after the conclusion of production testing. Productive wells may be shut-in temporarily for BLM authorization for production activities and facilities.

Surface Use Plan

1. **Existing Roads**
   A. The JRU Apache development area is accessed from the intersection of Hwy 128 (Jal Hwy) and Cimarron Ro go North on Cimarron Road approximately 2.2 miles. Turn right (east) on leas road approximately 1.3 miles then turn right (southeast) on lease road for approximately .2miles. Then turn left (east) on lease road for approximately .8 miles, then turn left (north) on lease road for approximately .6 miles then turn left (North) on lease road for approximately .9 miles. Then turn right (East) for approximately .1 miles. Then turn left (north0 for .8 miles arriving at proposed road. Location is to the West. Transportation Plan identifying existing roads that will be used to access the project area is included from FSC, Inc. marked as, 'Vicinity Map.'
   B. There are existing access roads to the proposed JRU Apache well locations. All equipment and vehicles will be confined to the routes shown on the Vicinity Map as provided by FSC, Inc. Maintenance of the access roads will continue until abandonment and reclamation of the well pads is completed.

2. **New or Upgraded Access Roads**
   A. **New Roads**. There is a total of 4897.61ft or .93 miles of proposed and staked access roads in the JRU Apache lease area.
   B. **Well Pads**. The well pads selected for development will determine which existing roads will be upgraded and which new roads will be built. The lease flow diagram shows the location of proposed roads that will need to be constructed to access the well pads.
   C. **Anticipated Traffic**. After well completion, travel to each well site will included one lease operator truck and two oil trucks per day until the Central Tank Battery is completed. Upon completion of the Central Tank Battery, one lease operator truck will continue to travel to each well site to monitor the working order of the wells and to check well equipment for proper operation. Two oil trucks will continue to travel to the Central Tank Battery only for oil hauling. Additional traffic will include one maintenance truck periodically throughout the year for pad upkeep and weed removal. Well service trips will include only the traffic necessary to work on the wells or provide chemical treatments periodically and as needed throughout the year.
   D. **Routing**. All equipment and vehicles will be confined to the travel routes laid out in the vicinity map provided by FSC, Inc. unless otherwise approved by the BLM and applied for by XTO Energy, Inc.
   E. **Road Dimensions**. The maximum width of the driving surface of new roads will be 20 feet. The roads will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1 foot deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.



Level Ground Section

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

3. Location of Existing Wells

A. See attached 1-mile radius well map.

4. Ancillary Facilities

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

5. Location of Proposed Production Facilities

A. **Production Facilities**. One (1) 600'x600' pad was staked with the BLM for construction and use as a Central Tank Battery (JRU Apache CTB). The proposed pad is located in the SWSW, Section 24-T22S-R30E (Centerpoint: 1715'FEL & 955'FSL). Only the area necessary to maintain facilities will be disturbed. A 3160-5 sundry notification will be submitted after construction possessing a site-security diagram and layout of the facility with associated equipment.
B. **Buried & Surface Flowlines**. In the event the JRU Apache wells are found productive, two-hundred and sixty-two (262) 10in. or less buried composite flexpipe or steel flowlines with a maximum safety pressure rating of 1400psi (operating pressure: 750 psi) for transport of oil, gas, frac water, gas lift, fuel gas, and produced water are requested to the JRU Apache CTB. If XTO decides to run surface lines, one-hundred and thirty-one (131) 4in. or less composite flexpipe or steel flowlines with a max. safety psi rating of 750 (op. psi: 125psi) for transport of oil, gas and produced water will be required to the JRU Apache facility. The proposed corridor for flowlines: 17997.82ft long, 100ft. wide and 6417.82ft long, 30ft wide. Total Length of Flowlines: 24415.64ft. Total Acreage Associated with Flowlines: 45.73 Acres.
C. **Gas & Oil Pipeline**. No additional oil or gas pipeline will be required for this project.

D. **Disposal Facilities**. Produced water will be hauled from location to a commercial disposal facility as needed. Once wells are drilled and completed, a 3160-5 sundry notification will be submitted to BLM in compliance with Onshore Order 7.
E. **Flare**. A flare independent of the proposed CTB location is not necessary for this project.
F. **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 colors such as 'shale green' that reduce the visual impacts of the built environment.
G. **Containment Berms**. Containment berms will be constructed completely around any production facilities designed to hold fluids. The containment berms will be constructed of compacted subsoil, be sufficiently impervious, hold 1 ½ times the capacity of the largest tank and away from cut or fill areas.
H. **Electrical**. All lines will be primary 25kv to properly run expected production equipment. 18,218.31ft of electrical will be run from the anticipated tie-in point with a request for 30' ROW construction and maintenance buffer. This distance is a max. approximation and may vary based on lease road corridors, varying elevations and terrain in the area. A plat of the proposed electrical is attached.

6. Location and Types of Water Supply

The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from a 3rd party vendor and hauled to the anticipated pit in Section 7 by transport truck using the existing and proposed roads depicted in the attached exhibits. No water well will be drilled on the location.

Water for drilling, completion and dust control will be purchased from the following company:
Texas Pacific Water Resources

Water for drilling, completion and dust control will be supplied by Texas Pacific Water Resources for sale to XTO Permian Operating, LLC. from Section 27, T25S-R30E, Eddy County, New Mexico. In the event that Texas Pacific Water Resources does not have the appropriate water for XTO Permian Operating, LLC. at time of drilling and completion, then XTO Permian Operating, LLC. water will come from Intrepid Potash Company with the location of the water being in Section 6, T25S-R29E, Eddy County, New Mexico.

Anticipated water usage for drilling includes an estimated 35,000 barrels of water to drill a horizontal well in a combination of fresh water and brine as detailed in the mud program in the drilling plans. These volumes are calculated for ~1.5bbls per foot of hole drilled with excess to accommodate any lost circulation or wash out that may occur. Actual water volumes used during operations will depend on the depth of the well, length of horizontal sections, and the losses that may occur during the operation.

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

7. Construction Activities

A. Construction, reclamation, and/or routine maintenance will not be conducted during periods when the soil conditions for construction could lead to impacts to the surrounding environment, or when watershed damage is likely to occur as a result of these activities.
B. Any construction material that may be required for surfacing of the drill pad and access road will be from a contractor having a permitted source of materials within the general area. No construction materials will be removed from federal lands without prior approval from the appropriate surface management agency. All roads and well pads will be constructed of 6" rolled and compacted caliche.
C. Anticipated Caliche Locations:
    a. Pit 1: State Caliche Pit, Section 32-T21S-R31E

b. Pit 2: Private Caliche Pit, Section 16-T23S-R30E

8. Methods for Handling Waste

- **Cuttings**. The well will be drilled utilizing a closed-loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site.
- **Drilling Fluids**. These will be contained in steel mud pits and then taken to a NMOCD approved commercial disposal facility.
- **Produced Fluids**. Water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility. Oil produced during operations will be stored in tanks until sold.
- **Sewage**. Portable, self-contained toilets will be provided for human waste disposal. Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- **Garbage and Other Waste Materials.** All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approve sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.
- **Debris**. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned and removed from the well location. No potential adverse materials or substances will be left on location.
- **Hazardous Materials.**
  - i. All drilling wastes identified as hazardous substances by the Comprehensive Environmental Response Compensation Liability Act (CERCLA) removed from the location and not reused at another drilling location will be disposed of at a hazardous waste facility approved by the U.S. Environmental Protection Agency (EPA).
  - ii. XTO Permian Operating, LLC. and its contractors will comply with all applicable Federal, State and local laws and regulations, existing or hereafter enacted promulgated, with regard to any hazardous material, as defined in this paragraph, that will be used, produced, transported or stored on the oil and gas lease. “Hazardous material” means any substance, pollutant or contaminant that is listed as hazardous under the CERCLA of 1980, as amended, 42 U.S.C 9601 et seq., and its regulation. The definition of hazardous substances under CERLCA includes any ‘hazardous waste” as defined in the RCRA of 1976, as amended, 42 U.S.C. 6901 et seq., and its regulations. The term hazardous material also includes any nuclear or nuclear by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.C.S. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101 (14) U.S.C. 9601 (14) nor does the term include natural gas.
  - iii. No hazardous substances or wastes will be stored on the location after completion of the well.
  - iv. Chemicals brought to location will be on the Toxic Substance Control Act (TSCA) approved inventory list.
  - v. All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in 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.

9. Well Site Layout

A. **Rig Plat Diagrams**: There are eleven (11) multi-well pads in the JRU Apache development area anticipated. This will allow enough space for cuts and fills, topsoil storage, and storm water control.

A well list is attached to this application. Interim reclamation of these pads is anticipated after the drilling and completion of all wells on the pad.

B. **Closed-Loop System**: 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.

C. **V-Door Orientation**: These wells were staked with multiple v-door orientations. The following list is from North to South in accordance to the staked section and as agreed upon with Jeffery Robertson, BLM Natural Resource Specialist, present at on-site inspection.
   1. Pad A is 600'x490' (6.74 Acres) with a V-Door Orientation of West.
   2. Pad B is 600'x490' (6.74 Acres) with a V-Door Orientation of West.
   3. Pad C is 610'x490' (6.86 Acres) with a V-Door Orientation of West.
   4. Pad D is 620'x490' (6.97 Acres) with a V-Door Orientation of West.
   5. Pad E is 600'x490' (6.74 Acres) with a V-Door Orientation of West.
   6. Pad F is 580'x490' (6.52 Acres) with a V-Door Orientation of East.
   7. Pad G is 580'490' (6.52 Acres) with a V-Door Orientation of East.
   8. Pad H is 620'x 490' (6.97 Acres) with a V-Door Orientation of West.
   9. Pad I is 400'x520' (4.77 Acres) with a V-Door Orientation of East.
   10. Pad J is 400'x520' (4.77 Acres) with a V-Door Orientation of East
   11. Pad K is 550'x490' (6.18 Acres) with a V-Door Orientation of East

D. A 600' x 600' area has been staked and flagged around each well pad. A plat for the well has been attached.

E. All equipment and vehicles will be confined to the approved disturbed areas of this APD (i.e., access road, well pad and topsoil storage areas).

10. Plans for Surface Reclamation:

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

A self-sustaining, vigorous, diverse, native (or otherwise approved) plan community will be established on the site with a density sufficient to control erosion and invasion by non-native plants and to re-establish wildlife habitat or forage production. At a minimum, the established plant

community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation.

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

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

Seeding:

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

11. Surface Ownership

A. Within the JRU Apache project area: 100% of the surface is under the administrative jurisdiction of the New Mexico State Land Office [NMSLO].
B. The surface is multiple-use with the primary uses of the region for grazing and for the production of oil and gas.

12. Other Information

Drill Island

- **Drill Island.** The proposed drill island is requested as use for oil and gas operations inside of the Secretary's Order of Potash Area (SOPA). The island requested will be used for surface hole locations for wells productive of oil and gas with no surface hole planned outside of the boundary of the onsited and approved drill island. The total penetrable space of the drill island is: 1060'x 13,300' or 323.63acres (based on maximum footages of the two longest 2-sides)

  Section 13: 66.72acres [Centerpoint: 1371'FSL & 530'FEL, 13-T22S-R30E]
  Section 24: 128.48acres [Centerpoint: 2640'FSL & 530'FEL 24-T22S-R30E]
  Section 25: 128.43acres [Centerpoint: 2639'FNL & 527'FEL, 25-T22S-R30E]

The total size of the drill island with pad fall off is anticipated to be to: 1360'x13,899' (based on maximum footages of the two longest 2-sides) or a total of 433.72 acres.

130 wells are currently planned on the Apache DI.

A current detailed plat of the drill island is attached depicting shallow and deep designation areas and proposed well pads. Shallow and deep designation areas were determined post-onsite based on ¼ mile or ½ mile from the edge of the drill island to existing mine workings as depicted in BLM shape files.

It was determined during onsite that surface disturbance can be associated with the drill island to all four compass directions based on state regulations.

- **Well Sites**. Eleven (11) well pad locations have been staked on the drill island, known as Apache DI. Surveys of the drill island location have been completed by FSC, Inc., a registered professional land surveyor and are attached to this application. Center stake surveys with access roads have been completed on State and Federal lands with Jeffery Robertson, Bureau of Land Management Natural Resource Specialist; Jim Rutley, Bureau of Land Management Geologist; and WIPP in attendance. Well pads are allowed to fall off of the proposed edge of the drill island while surface holes must remain on the drill island. Approval of the drill island does not constitute approval to drill. An APD must be submitted and approved for each well located on the drill island prior to any surface disturbance or drilling activity.
    - The wellbore paths will not leave the 1060'x13300' (based on maximum footages of the two longest 2-sides) drill island until the salt zone is cased and protected pursuant to NMOCD Order R-111-P.
    - A full list of XTO Permian Operating, LLC wells anticipated to be located on the Apache DI is attached.
    - Approval of the drill island does not constitute approval to drill.

- **Cultural Resources – Archaeology**: The proposed drill island is within the PA. A MOA payment for the drill island and central tank battery has been submitted to the Bureau of Land Management coinciding with the first well application.

- **Facility.** The proposed Central Tank Battery is located off of the proposed drill island to the West as depicted on the detailed drill island plat (included).

- **Dwellings and Structures**. There are no dwellings or structures within 2 miles of this location.

Surveying

- **Well Sites**. Well pad locations have been staked. Surveys of the proposed access roads and well pad locations have been completed by Frank Surveying, a registered professional land surveyor. Center stake surveys with access roads have been completed on State and Federal lands with Jeffery Robertson, Bureau of Land Management Natural Resource Specialist, and Jim Rutley, Bureau of Land Management Geologist, in attendance.

Soils and Vegetation

- **Environmental Setting**. Soils are classified of Reeves soils. These soils are associated with the loamy ecological site which typically supports black and blue grama and tobosa grasslands with an even distribution of yucca, mesquite, American tarbush, cholla, and cresoste.

- **Traffic**. No truck traffic will be operated during periods or in areas of saturated ground when surface rutting could occur. 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 the access road route.

- **Water**. There is no permanent or live water in the immediate or within the project area.

13. Bond Coverage

Bond Coverage is Nationwide. Bond Number: COB000050

Operator's Representatives:

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

Surface:

Jimie Scott
Construction Lead
XTO Energy, Incorporated
6401 Holiday Hill Road, Bldg 5
Midland, Texas 79707
432-488-9955
james_scott@xtoenergy.com

XTO Energy, Inc.
JRU Apache DI Associated Well List
09/30/2021

Slot Locations Correspond to Apache_OL.pdf
Exhibit Attached to APD

JRU Apache #701H: PAD A – A2
Surface Hole Location: 927' FEL & 2,577' FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 330' FNL, Section 14, T. 22 S. R. 30 E.

JRU Apache U #702H: PAD A – B2
Surface Hole Location: 927' FEL & 2,547' FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 990' FNL, Section 14, T. 22 S. R. 30 E.

JRU Apache #703H: PAD A – C2
Surface Hole Location: 928' FEL & 2,517' FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 1,650' FNL, Section 14, T. 22 S. R. 30 E.

JRU Apache U #704H: PAD A – D2
Surface Hole Location: 928' FEL & 2,487' FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 2,310' FNL, Section 14, T. 22 S. R. 30 E.

JRU Apache #705H: PAD A – E2
Surface Hole Location: 929' FEL & 2,457' FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 2,310' FSL, Section 14, T. 22 S. R. 30 E.

JRU Apache U #706H: PAD A – F2
Surface Hole Location: 929' FEL & 2,427' FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 1,650' FSL, Section 14, T. 22 S. R. 30 E.

JRU Apache #707H: PAD C – B1
Surface Hole Location: 1,030' FEL & 351' FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: 50' FWL & 990' FSL, Section 14, T. 22 S. R. 30 E.

JRU Apache U #708H: PAD C – C1
Surface Hole Location: 1,029' FEL & 381' FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: 2,590' FEL & 330' FSL, Section 14, T. 22 S. R. 30 E.

JRU Apache #709H: PAD C – D1
Surface Hole Location: 1,029' FEL & 411' FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: 2,590' FEL & 330' FNL, Section 23, T. 22 S. R. 30 E.

JRU Apache #710H: PAD C – E1
Surface Hole Location: 1,028' FEL & 441' FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: 2,590' FEL & 1,580' FNL, Section 23, T. 22 S. R. 30 E.

JRU Apache #711H: PAD C – F1
Surface Hole Location: 1,028’ FEL & 471’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: 2,590’ FEL & 2,450’ FSL, Section 23, T. 22 S. R. 30 E.

JRU Apache Wasatch #901H: PAD K – A3
Surface Hole Location: 254’ FEL & 975’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: 50’ FWL & 1,985’ FSL, Section 25, T. 22 S. R. 30 E.

Future Well 1: PAD A – A3
Surface Hole Location: 817’ FEL & 2,575’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 2: PAD A – B1
Surface Hole Location: 1,037’ FEL & 2,548’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 3: PAD A – B3
Surface Hole Location: 817’ FEL & 2,545’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 4: PAD A – C1
Surface Hole Location: 1,038’ FEL & 2,518’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 5: PAD A – C3
Surface Hole Location: 818’ FEL & 2,515’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 6: PAD A – D1
Surface Hole Location: 1,038’ FEL & 2,488’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 7: PAD A – D3
Surface Hole Location: 818’ FEL & 2,485’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 8: PAD A – E1
Surface Hole Location: 1,039’ FEL & 2,458’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 9: PAD A – E3
Surface Hole Location: 819’ FEL & 2,455’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 10: PAD A – F3
Surface Hole Location: 819’ FEL & 2,425’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 11: PAD B – A2
Surface Hole Location: 924’ FEL & 506’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 12: PAD B – A3
Surface Hole Location: 814’ FEL & 508’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 13: PAD B – B1
Surface Hole Location: 1,033’ FEL & 475’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 14: PAD B – B2
Surface Hole Location: 923’ FEL & 476’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50’ FWL & 2,310’ FNL, Section 14, T. 22 S. R. 30 E.

Future Well 15: PAD B – B3
Surface Hole Location: 813’ FEL & 478’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50’ FWL & 330’ FNL, Section 14, T. 22 S. R. 30 E.

Future Well 16: PAD B – C1
Surface Hole Location: 1,033’ FEL & 445’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 17: PAD B – C2
Surface Hole Location: 923’ FEL & 446’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50’ FWL & 2,310’ FSL, Section 14, T. 22 S. R. 30 E.

Future Well 18: PAD B – C3
Surface Hole Location: 813’ FEL & 448’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: 50’ FWL & 2,310’ FNL, Section 14, T. 22 S. R. 30 E.

Future Well 19: PAD B – D1
Surface Hole Location: 1,032’ FEL & 415’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 20: PAD B – D2
Surface Hole Location: 922’ FEL & 416’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 21: PAD B – D3
Surface Hole Location: 812’ FEL & 418’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 22: PAD B – E1
Surface Hole Location: 1,032’ FEL & 385’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 23: PAD B – E2
Surface Hole Location: 922’ FEL & 386’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location To Be Determined

Future Well 24: PAD B – E3
Surface Hole Location: 812’ FEL & 388’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 25: PAD B – F2
Surface Hole Location: 921’ FEL & 356’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 26: PAD B – F3
Surface Hole Location: 811’ FEL & 358’ FSL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 27: PAD C – A2
Surface Hole Location: 920’ FEL & 320’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 28: PAD C – A3
Surface Hole Location: 810’ FEL & 318’ FNL, Section 13, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 29: PAD C – B2
Surface Hole Location: 920’ FEL & 350’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 30: PAD C – B3
Surface Hole Location: 810’ FEL & 348’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 31: PAD C – C2
Surface Hole Location: 919’ FEL & 380’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 32: PAD C – C3
Surface Hole Location: 809’ FEL & 378’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 33: PAD C – D2
Surface Hole Location: 919’ FEL & 410’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 34: PAD C – D3
Surface Hole Location: 809’ FEL & 408’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 35: PAD C – E2
Surface Hole Location: 918’ FEL & 440’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 36: PAD C – E3
Surface Hole Location: 808’ FEL & 438’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 37: PAD C – F2
Surface Hole Location: 918’ FEL & 470’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 38: PAD C – F3
Surface Hole Location: 808’ FEL & 468’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 39: PAD D – A2
Surface Hole Location: 910’ FEL & 1,526’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 40: PAD D – B1
Surface Hole Location: 1,019’ FEL & 1,558’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 41: PAD D – B2
Surface Hole Location: 909’ FEL & 1,556’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 42: PAD D – B3
Surface Hole Location: 799’ FEL & 1,554’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 43: PAD D – C1
Surface Hole Location: 1,019’ FEL & 1,588’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 44: PAD D – C2
Surface Hole Location: 909’ FEL & 1,586’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 45: PAD D – C3
Surface Hole Location: 799’ FEL & 1,618’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 46: PAD D – D1
Surface Hole Location: 1,018’ FEL & 1,618’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 47: PAD D – D2
Surface Hole Location: 908’ FEL & 1,616’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 48: PAD D – D3
Surface Hole Location: 798’ FEL & 1,614’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 49: PAD D – E1
Surface Hole Location: 1,018’ FEL & 1,648’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 50: PAD D – E2
Surface Hole Location: 908’ FEL & 1,646’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 51: PAD D – E3
Surface Hole Location: 798’ FEL & 1,646’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 52: PAD D – F2
Surface Hole Location: 907’ FEL & 1,676’ FNL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 53: PAD E – A1
Surface Hole Location: 1,041’ FEL & 2,257’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 54: PAD E – A2
Surface Hole Location: 931’ FEL & 2,257’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 55: PAD E – A3
Surface Hole Location: 821’ FEL & 2,258’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 56: PAD E – B1
Surface Hole Location: 1,041’ FEL & 2,227’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 56: PAD E – B2
Surface Hole Location: 931’ FEL & 2,227’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 57: PAD E – B3
Surface Hole Location: 821’ FEL & 2,228’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 58: PAD E – C1
Surface Hole Location: 1,041’ FEL & 2,197’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 59: PAD E – C2
Surface Hole Location: 931’ FEL & 2,197’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 60: PAD E – C3
Surface Hole Location: 821’ FEL & 2,198’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 61: PAD E – D1
Surface Hole Location: 1,041’ FEL & 2,167’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 62: PAD E – D2
Surface Hole Location: 931’ FEL & 2,167’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 63: PAD E – D3
Surface Hole Location: 821’ FEL & 2,168’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 64: PAD F – A1
Surface Hole Location: 1,040’ FEL & 387’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 65: PAD F – A2
Surface Hole Location: 930’ FEL & 389’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 66: PAD F – A3
Surface Hole Location: 820’ FEL & 390’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 67: PAD F – B1
Surface Hole Location: 1,039’ FEL & 387’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 68: PAD F – B2
Surface Hole Location: 929’ FEL & 357’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 69: PAD F – B3
Surface Hole Location: 819’ FEL & 360’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 70: PAD F – C1
Surface Hole Location: 1,039’ FEL & 387’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 71: PAD F – C2
Surface Hole Location: 929’ FEL & 329’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 72: PAD F – C3
Surface Hole Location: 819’ FEL & 330’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 73: PAD F – D1
Surface Hole Location: 1,038’ FEL & 297’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 74: PAD F – D2
Surface Hole Location: 928’ FEL & 299’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 75: PAD F – D3
Surface Hole Location: 818’ FEL & 300’ FSL, Section 24, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 76: PAD G – A1
Surface Hole Location: 1,041’ FEL & 311’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 77: PAD G – A2
Surface Hole Location: 931’ FEL & 311’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 78: PAD G – A3
Surface Hole Location: 821’ FEL & 311’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 79: PAD G – B1
Surface Hole Location: 1,041’ FEL & 341’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 80: PAD G – B2
Surface Hole Location: 931’ FEL & 341’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 81: PAD G – B3
Surface Hole Location: 821’ FEL & 341’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 82: PAD G – C1
Surface Hole Location: 1,041’ FEL & 371’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 83: PAD G – C2
Surface Hole Location: 931’ FEL & 371’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 84: PAD G – C3
Surface Hole Location: 821’ FEL & 371’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 85: PAD G – D1
Surface Hole Location: 1,041’ FEL & 401’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 86: PAD G – D2
Surface Hole Location: 931’ FEL & 401’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 87: PAD G – D3
Surface Hole Location: 821’ FEL & 401’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 88: PAD H – A1
Surface Hole Location: 1,023’ FEL & 1,062’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 89: PAD H – A2
Surface Hole Location: 913’ FEL & 1,063’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 90: PAD H – A3
Surface Hole Location: 803’ FEL & 1,063’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 91: PAD H – B1
Surface Hole Location: 1,023’ FEL & 1,092’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 92: PAD H – B2
Surface Hole Location: 913’ FEL & 1,093’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 93: PAD H – B3
Surface Hole Location: 803’ FEL & 1,093’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 94: PAD H – C1
Surface Hole Location: 1,023’ FEL & 1,122’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 95: PAD H – C2
Surface Hole Location: 913’ FEL & 1,123’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 96: PAD H – C3
Surface Hole Location: 803’ FEL & 1,123’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 97: PAD H – D1
Surface Hole Location: 1,023’ FEL & 1,152’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 98: PAD H – D2
Surface Hole Location: 913’ FEL & 1,153’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 99: PAD H – D3
Surface Hole Location: 803’ FEL & 1,153’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 100: PAD I – A1
Surface Hole Location: 250’ FEL & 2,634’ FNL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 101: PAD I – B1
Surface Hole Location: 250’ FEL & 2,615’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 102: PAD I – C1
Surface Hole Location: 250’ FEL & 2,585’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 103: PAD I – D1
Surface Hole Location: 250’ FEL & 2,555’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 104: PAD J – A1
Surface Hole Location: 969’ FEL & 2,378’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 105: PAD J – B1
Surface Hole Location: 969’ FEL & 2,348’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 106: PAD J – C1
Surface Hole Location: 969’ FEL & 2,318’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 107: PAD J – D1
Surface Hole Location: 970’ FEL & 2,288’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 108: PAD K – A1
Surface Hole Location: 404’ FEL & 974’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 109: PAD K – A2
Surface Hole Location: 329’ FEL & 974’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 110: PAD K – B1
Surface Hole Location: 404’ FEL & 944’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 111: PAD K – B2
Surface Hole Location: 329’ FEL & 944’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 112: PAD K – B3
Surface Hole Location: 254’ FEL & 945’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 113: PAD K – C1
Surface Hole Location: 404’ FEL & 914’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 114: PAD K – C2
Surface Hole Location: 329’ FEL & 914’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 115: PAD K – C3
Surface Hole Location: 254’ FEL & 915’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 116: PAD K – D1
Surface Hole Location: 404’ FEL & 884’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 117: PAD K – D2
Surface Hole Location: 329’ FEL & 884’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

Future Well 118: PAD K – D3
Surface Hole Location: 254’ FEL & 885’ FSL, Section 25, T. 22 S. R. 30 E.
Bottom Hole Location: To Be Determined

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

PWD Data Report
06/14/2024

APD ID: 10400085313 **Submission Date:** 05/24/2022

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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):**

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: JRU APACHE FEDERAL COM **Well Number:** 112H

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:**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe 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):

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

State

Unlined Produced Water Pit Estimated

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

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

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):**

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):**

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:

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Operator Name: XTO ENERGY INCORPORATED

Well Name: JRU APACHE FEDERAL COM **Well Number:** 112H

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

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

Bond Info Data
06/14/2024

APD ID: 10400085313
Submission Date: 05/24/2022
Operator Name: XTO ENERGY INCORPORATED
Well Name: JRU APACHE FEDERAL COM
Well Number: 112H
Well Type: CONVENTIONAL GAS WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Bond

Federal/Indian APD: FED

BLM Bond number: COB000050

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 391900

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 391900
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	10/21/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/21/2024
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	10/21/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	10/21/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	10/21/2024
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	10/21/2024
ward.rikala	Operator must comply with all R-111-Q requirements.	10/21/2024