NM OIL CONSERVATION
ARTESIA DISTRICT
OCT 11 2019
RECEIVED

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.
NMNM130866

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.
JAMES RANCH / NMNM070965X

8. Lease Name and Well No.
JAMES RANCH UNIT DI 12 BS2-1E
267H
326208

2. Name of Operator
XTO PERMIAN OPERATING LLC

9. API Well No.
30-015-46378

3a. Address
6401 Holiday Hill Road, Bldg 5 Midland TX 79707

3b. Phone No. *(include area code)*
(432)682-8873

10. Field and Pool, or Exploratory
Wildcat 9833/WC015G07 Bone Spring

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWSW / 920 FSL / 550 FWL / LAT 32.431042 / LONG -103.892249
At proposed prod. zone NENE / 660 FNL / 200 FEL / LAT 32.441172 / LONG -103.860458

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 33 / T21S / R30E / NMP 2130533M

12. County or Parish
EDDY

13. State
NM

14. Distance in miles and direction from nearest town or post office*

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
920 feet

16. No of acres in lease
1440

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
0 feet

19. Proposed Depth
9190 feet / 20469 feet

20. BLM/BIA Bond No. in file
FED: COB000050

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3115 feet

22. Approximate date work will start*
09/01/2019

23. Estimated duration
90 days

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
(Electronic Submission)	Stephanie Rabadue / Ph: (432)620-6714	09/15/2018

Title
Regulatory Coordinator

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Christopher Walls / Ph: (575)234-2234	10/08/2019

Title	Office
Petroleum Engineer	CARLSBAD

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

RWP 10-15-19

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 10/08/2019

Needs operator signed C102.

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.

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: SWSW / 920 FSL / 550 FWL / TWSP: 21S / RANGE: 30E / SECTION: 33 / LAT: 32.431042 / LONG: -103.892249 (TVD: 0 feet, MD: 0 feet)
   PPP: NWNW / 660 FNL / 330 FWL / TWSP: 21S / RANGE: 30E / SECTION: 33 / LAT: 32.441215 / LONG: -103.892957 (TVD: 9051 feet, MD: 10600 feet)
   BHL: NENE / 660 FNL / 200 FEL / TWSP: 21S / RANGE: 30E / SECTION: 34 / LAT: 32.441172 / LONG: -103.860458 (TVD: 9190 feet, MD: 20469 feet)

BLM Point of Contact

Name: Tenille Ortiz
Title: Legal Instruments Examiner
Phone: 5752342224
Email: tortiz@blm.gov

Approval Date: 10/08/2019

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, LLC.**
LEASE NO.:	**NMNM-130866**
WELL NAME & NO.:	**James Ranch Unit DI 12 BS2-1E 267H**
SURFACE HOLE FOOTAGE:	**0920' FSL & 0550' FWL**
BOTTOM HOLE FOOTAGE	**0660' FNL & 0200' FEL Sec. 34, T. 21 S., R 30 E.**
LOCATION:	**Section 33, T. 21 S., R 30 E., NMPM**
COUNTY:	**County, New Mexico**

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

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

A. DRILLING OPERATIONS REQUIREMENTS

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

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

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

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

2. 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. 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 is located, this does not include the dog house or stairway area.

4. **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.**

B. **CASING**

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.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

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.

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

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

R-111-P-Potash
High Cave/Karst
Possibility of water flows in the Salado and Castile.
Possibility of lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressure may be encountered within the 3rd Bone Spring Sand and all subsequent formations.

A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH. IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.

1. The **13-3/8** inch surface casing shall be set at approximately **310** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

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

    b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing, which shall be set at approximately **3375** feet, 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 and potash.**

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

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

☐ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

4. 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.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose**

in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. **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 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. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
    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.**

4. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.

    a. 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.

b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

c. 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.

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

e. 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.**

f. 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.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. 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.

JAM 081919

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

Environmental Assessment DOI-BLM-NM-P020-2019-0000-EA

XTO Permian Operating LLC
James Ranch Unit DI 12 Drill Island MW
Lease Number NMNM130866

James Ranch Unit DI 12 Sec. 17-22S-30E, NMPM, Eddy County, New Mexico
West Half: 19.74acres [Centerpoint: 501'FWL & 565'FSL, 33-21S-30E]
East Half: 14.26acres [Centerpoint: 1502'FWL & 695'FSL, 33-21S-30E]

Legal Description:
James Ranch Unit DI 12 Elkhorn #702: Slot E35
Surface Hole Location: 429' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 330' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #703: Slot E34
Surface Hole Location: 429' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 990' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #900H: Slot B30
Surface Hole Location: 803' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 2,310' FNL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #901: Slot E33
Surface Hole Location: 429' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 990' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #110H: Slot B29
Surface Hole Location: 803' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 2,310' FNL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #111H: Slot B31
Surface Hole Location: 803' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 1,650' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #112: Slot E32
Surface Hole Location: 429' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 330' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

Approval Date: 10/08/2019

James Ranch Unit DI 12 Future Well #1: Slot A1
Surface Hole Location: 875' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #2: Slot A2
Surface Hole Location: 875' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #3: Slot A3
Surface Hole Location: 875' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #4: Slot A4
Surface Hole Location: 875' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #5: Slot A5
Surface Hole Location: 875' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #6: Slot A6
Surface Hole Location: 875' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #7: Slot A7
Surface Hole Location: 876' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #8: Slot A8
Surface Hole Location: 876' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #9: Slot A9
Surface Hole Location: 876' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #10: Slot A10
Surface Hole Location: 876' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #11: Slot A11
Surface Hole Location: 876' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #12: Slot A12
Surface Hole Location: 876' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #13: Slot A13
Surface Hole Location: 876' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #14: Slot A14
Surface Hole Location: 876' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #15: Slot A15
Surface Hole Location: 877' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #16: Slot A16
Surface Hole Location: 877' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #17: Slot A17
Surface Hole Location: 877' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #18: Slot A18
Surface Hole Location: 877' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #19: Slot A19
Surface Hole Location: 877' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #20: Slot A20
Surface Hole Location: 877' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #21: Slot A21
Surface Hole Location: 877' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #22: Slot A22
Surface Hole Location: 877' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #23: Slot A23
Surface Hole Location: 877' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #24: Slot A24
Surface Hole Location: 878' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #25: Slot A25
Surface Hole Location: 878' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #26: Slot A26
Surface Hole Location: 878' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #27: Slot A27
Surface Hole Location: 878' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #28: Slot A28
Surface Hole Location: 878' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #29: Slot A29
Surface Hole Location: 878' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #30: Slot A30
Surface Hole Location: 878' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #31: Slot A31
Surface Hole Location: 878' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #32: Slot A32
Surface Hole Location: 879' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #33: Slot A33
Surface Hole Location: 879' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #34: Slot A34
Surface Hole Location: 879' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #35: Slot A35
Surface Hole Location: 879' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #36: Slot B1
Surface Hole Location: 800' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

JR James Ranch Unit DI 12 Future Well #37: Slot B2
Surface Hole Location: 800' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #38: Slot B3
Surface Hole Location: 800' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #39: Slot B4
Surface Hole Location: 800' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #40: Slot B5
Surface Hole Location: 800' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #41: Slot B6
Surface Hole Location: 800' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #42: Slot B7
Surface Hole Location: 801' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #43: Slot B8
Surface Hole Location: 801' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #44: Slot B9
Surface Hole Location: 801' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #45: Slot B10
Surface Hole Location: 801' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #46: Slot B11
Surface Hole Location: 801' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #47: Slot B12
Surface Hole Location: 801' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #48: Slot B13
Surface Hole Location: 801' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #49: Slot B14
Surface Hole Location: 801' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #50: Slot B15
Surface Hole Location: 802' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #51: Slot B16
Surface Hole Location: 802' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #52: Slot B17
Surface Hole Location: 802' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #53: Slot B18
Surface Hole Location: 802' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #54: Slot B19
Surface Hole Location: 802' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #55: Slot B20
Surface Hole Location: 802' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #56: Slot B21
Surface Hole Location: 802' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #57: Slot B22
Surface Hole Location: 802' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #58: Slot B23
Surface Hole Location: 802' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #59: Slot B24
Surface Hole Location: 803' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #60: Slot B25
Surface Hole Location: 803' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #61: Slot B26
Surface Hole Location: 803' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #62: Slot B27
Surface Hole Location: 803' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #63: Slot B28
Surface Hole Location: 803' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #64: Slot B32
Surface Hole Location: 804' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #65: Slot B33
Surface Hole Location: 804' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #66: Slot B34
Surface Hole Location: 804' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #67: Slot B35
Surface Hole Location: 804' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #68: Slot C1
Surface Hole Location: 650' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #69: Slot C2
Surface Hole Location: 650' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #70: Slot C3
Surface Hole Location: 650' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #71: Slot C4
Surface Hole Location: 650' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #72: Slot C5
Surface Hole Location: 650' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #73: Slot C6
Surface Hole Location: 650' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #74: Slot C7
Surface Hole Location: 651' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #75: Slot C8
Surface Hole Location: 651' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #76: Slot C9
Surface Hole Location: 651' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #77: Slot C10
Surface Hole Location: 651' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #78: Slot C11
Surface Hole Location: 651' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #79: Slot C12
Surface Hole Location: 651' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #80: Slot C13
Surface Hole Location: 651' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #81: Slot C14
Surface Hole Location: 651' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #82: Slot C15
Surface Hole Location: 652' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #83: Slot C16
Surface Hole Location: 652' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #84: Slot C17
Surface Hole Location: 652' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #85: Slot C18
Surface Hole Location: 652' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #86: Slot C19
Surface Hole Location: 652' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #87: Slot C20
Surface Hole Location: 652' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #88: Slot C21
Surface Hole Location: 652' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #89: Slot C22
Surface Hole Location: 652' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #90: Slot C23
Surface Hole Location: 652' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #91: Slot C24
Surface Hole Location: 653' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #92: Slot C25
Surface Hole Location: 653' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #93: Slot C26
Surface Hole Location: 653' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #94: Slot C27
Surface Hole Location: 653' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #95: Slot C28
Surface Hole Location: 653' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #96: Slot C29
Surface Hole Location: 653' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #97: Slot C30
Surface Hole Location: 653' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #98: Slot C31
Surface Hole Location: 653' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #99: Slot C32
Surface Hole Location: 654' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #100: Slot C33
Surface Hole Location: 654' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #101: Slot C34
Surface Hole Location: 654' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #102: Slot C35
Surface Hole Location: 654' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #103: Slot D1
Surface Hole Location: 575' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #104: Slot D2
Surface Hole Location: 575' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #105: Slot D3
Surface Hole Location: 575' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #106: Slot D4
Surface Hole Location: 575' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #107: Slot D5
Surface Hole Location: 575' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #108: Slot D6
Surface Hole Location: 575' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #109: Slot D7
Surface Hole Location: 575' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #110: Slot D8
Surface Hole Location: 575' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #111: Slot D9
Surface Hole Location: 576' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #112: Slot D10
Surface Hole Location: 576' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #113: Slot D11
Surface Hole Location: 576' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #114: Slot D12
Surface Hole Location: 576' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #115: Slot D13
Surface Hole Location: 576' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #116: Slot D14
Surface Hole Location: 576' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #117: Slot D15
Surface Hole Location: 577' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #118: Slot D16
Surface Hole Location: 577' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #119: Slot D17
Surface Hole Location: 577' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #120: Slot D18
Surface Hole Location: 577' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #121: Slot D19
Surface Hole Location: 577' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #122: Slot D20
Surface Hole Location: 577' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #123: Slot D21
Surface Hole Location: 577' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #124: Slot D22
Surface Hole Location: 577' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #125: Slot D23
Surface Hole Location: 577' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #126: Slot D24
Surface Hole Location: 578' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #127: Slot D25
Surface Hole Location: 578' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #128: Slot D26
Surface Hole Location: 578' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #129: Slot D27
Surface Hole Location: 578' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #130: Slot D28
Surface Hole Location: 578' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #131: Slot D29
Surface Hole Location: 578' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #132: Slot D30
Surface Hole Location: 578' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #133: Slot D31
Surface Hole Location: 578' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #134: Slot D32
Surface Hole Location: 579' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #135: Slot D33
Surface Hole Location: 579' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #136: Slot D34
Surface Hole Location: 579' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #137: Slot D35
Surface Hole Location: 579' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #138: Slot E1
Surface Hole Location: 425' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #139: Slot E2
Surface Hole Location: 425' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #140: Slot E3
Surface Hole Location: 425' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #141: Slot E4
Surface Hole Location: 425' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #142: Slot E5
Surface Hole Location: 425' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #143: Slot E6
Surface Hole Location: 425' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #144: Slot E7
Surface Hole Location: 426' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #145: Slot E8
Surface Hole Location: 426' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #146: Slot E9
Surface Hole Location: 426' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #147: Slot E10
Surface Hole Location: 426' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #148: Slot E11
Surface Hole Location: 426' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #149: Slot E12
Surface Hole Location: 426' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #150: Slot E13
Surface Hole Location: 426' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #151: Slot E14
Surface Hole Location: 426' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #152: Slot E15
Surface Hole Location: 427' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #153: Slot E16
Surface Hole Location: 427' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #154: Slot E17
Surface Hole Location: 427' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #155: Slot E18
Surface Hole Location: 427' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #156: Slot E19
Surface Hole Location: 427' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #157: Slot E20
Surface Hole Location: 427' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #158: Slot E21
Surface Hole Location: 427' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #159: Slot E22
Surface Hole Location: 427' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #160: Slot E23
Surface Hole Location: 427' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #161: Slot E24
Surface Hole Location: 428' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #162: Slot E25
Surface Hole Location: 428' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #163: Slot E26
Surface Hole Location: 428' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #164: Slot E27
Surface Hole Location: 428' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #165: Slot E28
Surface Hole Location: 428' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #166: Slot E29
Surface Hole Location: 428' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #167: Slot E30
Surface Hole Location: 428' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #168: Slot E31
Surface Hole Location: 428' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #169: Slot F1
Surface Hole Location: 350' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #170: Slot F2
Surface Hole Location: 350' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #171: Slot F3
Surface Hole Location: 350' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #172: Slot F4
Surface Hole Location: 350' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #173: Slot F5
Surface Hole Location: 350' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #174: Slot F6
Surface Hole Location: 350' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #175: Slot F7
Surface Hole Location: 351' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #176: Slot F8
Surface Hole Location: 351' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #177: Slot F9
Surface Hole Location: 351' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #178: Slot F10
Surface Hole Location: 351' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #179: Slot F11
Surface Hole Location: 351' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #180: Slot F12
Surface Hole Location: 351' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #181: Slot F13
Surface Hole Location: 351' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #182: Slot F14
Surface Hole Location: 351' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #183: Slot F15
Surface Hole Location: 352' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #184: Slot F16
Surface Hole Location: 352' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #185: Slot F17
Surface Hole Location: 352' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #186: Slot F18
Surface Hole Location: 352' FSL & ,1040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #187: Slot F19
Surface Hole Location: 352' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #188: Slot F20
Surface Hole Location: 352' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #189: Slot F21
Surface Hole Location: 352' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #190: Slot F22
Surface Hole Location: 352' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #191: Slot F23
Surface Hole Location: 352' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #192: Slot F24
Surface Hole Location: 353' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #193: Slot F25
Surface Hole Location: 353' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #194: Slot F26
Surface Hole Location: 353' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #195: Slot F27
Surface Hole Location: 353' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #196: Slot F28
Surface Hole Location: 353' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #197: Slot F29
Surface Hole Location: 353' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #198: Slot F30
Surface Hole Location: 353' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #199: Slot F31
Surface Hole Location: 353' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #200: Slot F32
Surface Hole Location: 354' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #201: Slot F33
Surface Hole Location: 354' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #202: Slot F34
Surface Hole Location: 354' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #203: Slot F35
Surface Hole Location: 354' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads

☐ **Road Section Diagram**

☐ **Production (Post Drilling)**

Well Structures & Facilities
Pipelines
Electric Lines

☐ **Interim Reclamation**

☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult

with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

- No development will occur beyond the north of the drill island well pad
- The proposed facilities pad and associated infrastructure that occurs north of the drill island well pad will be relocated to another location away from the known features in the form of a Sundry request.

Cave/Karst:

The following stipulations will be applied to minimize impacts during construction, drilling and production:

Construction:

General Construction:

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

Pad Construction:

- The pad will be constructed and leveled by adding the necessary fill and caliche – no blasting.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.

- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

Tank Battery Construction:

- The pad will be constructed and leveled by adding the necessary fill and caliche – no blasting.
- All tank battery locations and facilities will be lined and bermed.
- The liner should be at least 20 mil in thickness and installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures.
- Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Road Construction:

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

Buried Pipeline/Cable Construction:

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

Powerline Construction:

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

Surface Flowlines Installation:

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

Leak Detection System:

- A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present.
- A leak detection plan will be submitted to BLM that incorporates an automatic shut off system (see below) to minimize the effects of an undesirable event that could negatively sensitive cave/karst resources.
- Well heads, pipelines (surface and buried), storage tanks, and all supporting equipment should be monitored regularly after installation to promptly identify and fix leaks.

Automatic Shut-off Systems:

- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and groundwater concerns:

Closed Loop System:

- A closed loop system using steel tanks will be utilized during drilling – no pits
- All fluids and cuttings will be hauled off-site and disposed of properly at an authorized site

Rotary Drilling with Fresh Water:

- Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:

- The kick off point for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:

- ALL lost circulation zones between surface and the base of the cave occurrence zone will be logged and reported in the drilling report.
- If a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, regardless of the type of

drilling machinery used, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:

- Additional plugging conditions of approval may be required upon well abandonment in high and medium karst potential occurrence zones.
- The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:

- The operator will perform annual pressure monitoring on all casing annuli and reported in a sundry notice.
- If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Hydrology:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

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

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within

the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the at least 3 working days prior to commencing construction of the access road and/or well pad.

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

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the .

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which

creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

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

G. ON LEASE ACCESS ROADS

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

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

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

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

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

Ditching
Ditching shall be required on both sides of the road.

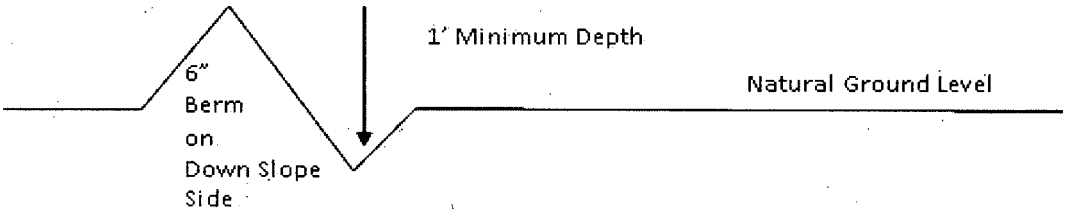
Turnouts

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

Drainage

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

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



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

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

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

Construction Steps

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

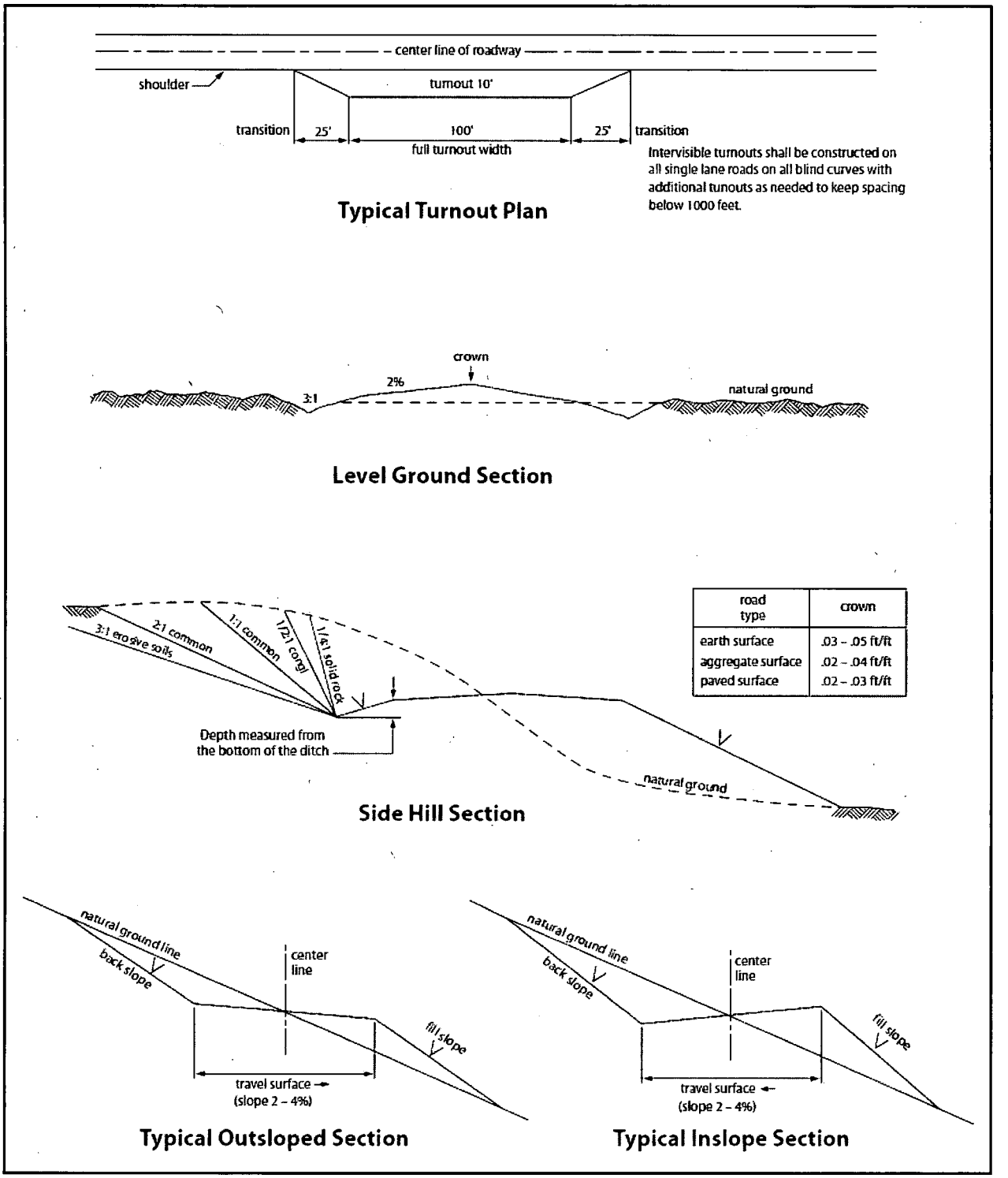


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

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

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

Containment Structures

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

Painting Requirement

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

B. PIPELINES

BURIED PIPELINE STIPULATIONS

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

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

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way.

This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be **30** feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed **30** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)

- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

(X) seed mixture 1	( ) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
( ) seed mixture 2/LPC	( ) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

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

18. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

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

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 1 for Loamy Sites

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

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

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

Species	lb/acre
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

AFMSS

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

Operator Certification Data Report

10/09/2019

Operator Certification

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: Stephanie Rabadue **Signed on:** 09/15/2018

Title: Regulatory Coordinator

Street Address:

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

Phone: (432)620-6714

Email address: stephanie_rabadue@xtoenergy.com

Field Representative

Representative Name:

Street Address:

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

Phone:

Email address:

AFMSS

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

Application Data Report

10/09/2019

APD ID: 10400034155
Submission Date: 09/15/2018
Operator Name: XTO PERMIAN OPERATING LLC
Well Name: JAMES RANCH UNIT DI 12 BS2-1E
Well Number: 267H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400034155
Tie to previous NOS?
Submission Date: 09/15/2018
BLM Office: CARLSBAD
User: Stephanie Rabadue
Title: Regulatory Coordinator
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM130866
Lease Acres: 1440
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? YES
Federal or Indian agreement: FEDERAL
Agreement number: NMNM070965X
Agreement name:
Keep application confidential? NO
Permitting Agent? NO
APD Operator: XTO PERMIAN OPERATING LLC
Operator letter of designation:

Operator Info

Operator Organization Name: XTO PERMIAN OPERATING LLC
Operator Address: 6401 Holiday Hill Road, Bldg 5
Zip: 79707
Operator PO Box:
Operator City: Midland
State: TX
Operator Phone: (432)682-8873
Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO
Master Development Plan name:
Well in Master SUPO? NO
Master SUPO name:
Well in Master Drilling Plan? NO
Master Drilling Plan name:
Well Name: JAMES RANCH UNIT DI 12 BS2-1E
Well Number: 267H
Well API Number:
Field/Pool or Exploratory? Exploratory
Field Name: WILDCAT
Pool Name:
Is the proposed well in an area containing other mineral resources? POTASH

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Is the proposed well in an area containing other mineral resources? POTASH

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** JAMES RANCH UNIT DI **Number:** 12

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

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: DELINEATION

Describe sub-type:

Distance to town: **Distance to nearest well:** 0 FT **Distance to lease line:** 920 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: JRU_DI_12_267H_C102_20180915143425.pdf

Well work start Date: 09/01/2019 **Duration:** 90 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: **Reference Datum:**

	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
SHL Leg #1	920	FSL	550	FWL	21S	30E	33	Aliquot SWSW	32.431042	-103.892249	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 130866	3115	0	0
KOP Leg #1	920	FSL	550	FWL	21S	30E	33	Aliquot SWSW	32.431042	-103.892249	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 130866	615	2500	2500
PPP Leg #1	660	FNL	330	FWL	21S	30E	33	Aliquot NWNW	32.441215	-103.892957	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 130866	-5936	10600	9051

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

	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
EXIT Leg #1	660	FNL	330	FEL	21S	30E	34	Aliquot NENE	32.441173	-103.86088	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 130866	-6073	20365	9188
BHL Leg #1	660	FNL	200	FEL	21S	30E	34	Aliquot NENE	32.441172	-103.860458	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 130866	-6075	20469	9190

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-		Wildcat; Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
	JAMES RANCH UNIT DI 12 BS2-1E	267H

[7] OGRID No.	[8] Operator Name	[9] Elevation
260737	XTO PERMIAN OPERATING, LLC.	3,165'

[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
M	33	21 S	30 E		920	SOUTH	550	WEST	EDDY

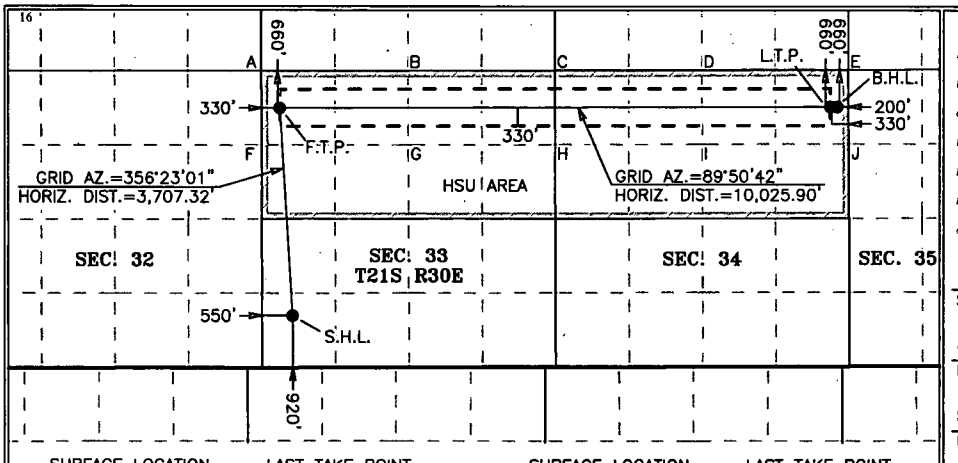
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	34	21 S	30 E		660	NORTH	200	EAST	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]



SURFACE LOCATION NAD 27 NME	LAST TAKE POINT NAD 27 NME	SURFACE LOCATION NAD 83 NME	LAST TAKE POINT NAD 83 NME
Y= 520,764.6	Y= 524,491.2	Y= 520,825.3	Y= 524,552.0
X= 636,244.5	X= 645,906.5	X= 677,425.6	X= 687,087.6
LAT.= 32.430921°N	LAT.= 32.441051°N	LAT.= 32.431042°N	LAT.= 32.441173°N
LONG.= 103.891752°W	LONG.= 103.860383°W	LONG.= 103.892249°W	LONG.= 103.860880°W
FIRST TAKE POINT NAD 27 NME	**BOTTOM HOLE LOCATION NAD 27 NME**	**FIRST TAKE POINT NAD 83 NME**	**BOTTOM HOLE LOCATION NAD 83 NME**
Y= 524,464.4	Y= 524,491.5	Y= 524,525.2	Y= 524,552.3
X= 636,010.7	X= 646,036.5	X= 677,191.7	X= 687,217.6
LAT.= 32.441094°N	LAT.= 32.441050°N	LAT.= 32.441215°N	LAT.= 32.441172°N
LONG.= 103.892460°W	LONG.= 103.859962°W	LONG.= 103.892957°W	LONG.= 103.860458°W

CORNER COORDINATES TABLE NAD 27 NME	CORNER COORDINATES TABLE NAD 83 NME
A – Y= 525,123.8 N, X= 635,678.2 E	A – Y= 525,184.6 N, X= 676,859.2 E
B – Y= 525,128.8 N, X= 638,316.8 E	B – Y= 525,189.6 N, X= 679,497.8 E
C – Y= 525,133.8 N, X= 640,955.4 E	C – Y= 525,194.6 N, X= 682,136.4 E
D – Y= 525,144.5 N, X= 643,596.2 E	D – Y= 525,205.3 N, X= 684,777.2 E
E – Y= 525,152.1 N, X= 646,233.7 E	E – Y= 525,212.9 N, X= 687,414.7 E
F – Y= 523,803.7 N, X= 635,683.3 E	F – Y= 523,864.5 N, X= 676,864.3 E
G – Y= 523,808.9 N, X= 638,322.4 E	G – Y= 523,869.7 N, X= 679,503.4 E
H – Y= 523,814.1 N, X= 640,961.1 E	H – Y= 523,874.9 N, X= 682,142.2 E
I – Y= 523,823.0 N, X= 643,601.5 E	I – Y= 523,883.8 N, X= 684,782.6 E
J – Y= 523,830.4 N, X= 646,239.4 E	J – Y= 523,891.2 N, X= 687,420.5 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.

Stephanie Rabadue 09/14/2018
Signature Date

Stephanie Rabadue
Printed Name

stephanie_rabadue@xtoenergy.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.

7-20-2018
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

AW 2018071749

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
XTO PERMIAN OPERATING, LLC	James Ranch Unit Di 12 BS2-1E	267H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	33	21S	30E		920	South	550	West	Eddy

Latitude	Longitude	NAD
32.431042	-103.892249	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	33	21S	30E		660	North	330	West	Eddy

Latitude	Longitude	NAD
32.441215	-103.892957	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	34	21S	30E		660	North	200	East	Eddy

Latitude	Longitude	NAD
32.441173	-103.860880	83

Is this well the defining well for the Horizontal Spacing Unit? [Y]

Is this well an infill well? [N]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Drilling Plan Data Report
10/09/2019

APD ID: 10400034155
Submission Date: 09/15/2018
Operator Name: XTO PERMIAN OPERATING LLC
Well Name: JAMES RANCH UNIT DI 12 BS2-1E
Well Number: 267H
Well Type: OIL 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 Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3165	0	0	OTHER,ALLUVIUM : Alluvium	NONE	N
2	RUSTLER	2781	384	384	SANDSTONE	USEABLE WATER	N
3	TOP SALT	2780	385	385	SALT	POTASH	N
4	BASE OF SALT	-60	3225	3225	SALT	POTASH	N
5	DELAWARE	-305	3470	3470	MARL,SANDSTONE	OTHER,NATURAL GAS,OIL : Produced Water	N
6	BONE SPRING 1ST	-5105	8220	8220	SANDSTONE	OTHER,NATURAL GAS,POTASH : Produced Water	N
7	BONE SPRING 2ND	-5400	8515	8515	SANDSTONE	OTHER,NATURAL GAS,OIL : Produced Water	N

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M
Rating Depth: 9190

Equipment: The blow out preventer equipment (BOP) for the permanent wellhead consists of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP.
Requesting Variance? YES

Variance request: A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.
Testing Procedure: All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 3000psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day. Because the 9-5/8" casing will be run with a mandrel hanger through the 13-3/8" BOP without breaking any connections, no additional pressure test would be required.

Choke Diagram Attachment:

JRU_DI_12_3MCM_20180915142624.pdf

BOP Diagram Attachment:

JRU_DI_12_3MBOP_20180915142636.pdf

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

JRU_DI_12_3MCM_20180915142624.pdf

JRU_DI_12_3MBOP_20180915142636.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	310	0	310			310	H-40	48	ST&C	2.63	1.44	DRY	10.48	DRY	10.48
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3325	0	3325			3325	J-55	36	LT&C	1.65	1.06	DRY	3.24	DRY	3.24
3	PRODUCTION	8.75	5.5	NEW	API	N	0	20496	0	9190			20496	P-110	17	BUTT	1.12	1.3	DRY	1.85	DRY	1.85

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

JRU_DI_12_267H_Csg_20180915142807.pdf

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Casing Attachments

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

JRU_DI_12_267H_Csg_20180915142800.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

JRU_DI_12_267H_Csg_20180915142751.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	310	250	1.87	12.9	467.5	100	EconoCem-HLTRRC	None
SURFACE	Tail				300	1.35	14.8	405	100	HalCem-C	2% CaCl
INTERMEDIATE	Lead		0	3325	1120	1.88	12.9	2105.6	100	Halcem-C	2% CaCl
INTERMEDIATE	Tail				230	1.33	14.8	305.9	100	Halcem-C	2% CaCl
PRODUCTION	Lead		0	20496	670	2.69	10.5	1802.3	20	NeoCem	None

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail				3150	1.61	13.2	5071.5	20	VersaCem	None

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: A Pason or Totco will be used to detect changes in loss or gain of mud volume.

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
3305	20496	OIL-BASED MUD	9.8	10.1							A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system
0	310	OTHER : FW/Native	8.5	8.8							A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

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
395	3325	OTHER : Brine/Gel Sweeps	9.8	10.2							A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system

Section 6 - Test, Logging, Coring

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

Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from kick-off point to intermediate casing shoe.

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

CBL,CNL,DS,GR,MUDLOG

Coring operation description for the well:

No coring will take place on this well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4683 **Anticipated Surface Pressure:** 2686.72

Anticipated Bottom Hole Temperature(F): 160

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

Describe:

Potential loss of circulation through the Capitan Reef.

Contingency Plans geoharzards description:

The necessary mud products for weight addition and fluid loss control will be on location at all times.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. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Hydrogen sulfide drilling operations plan:

JRU_DI_12_H2S_Plan_20180915143004.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

JRU_DI_12_267H_DD_20180915143024.pdf

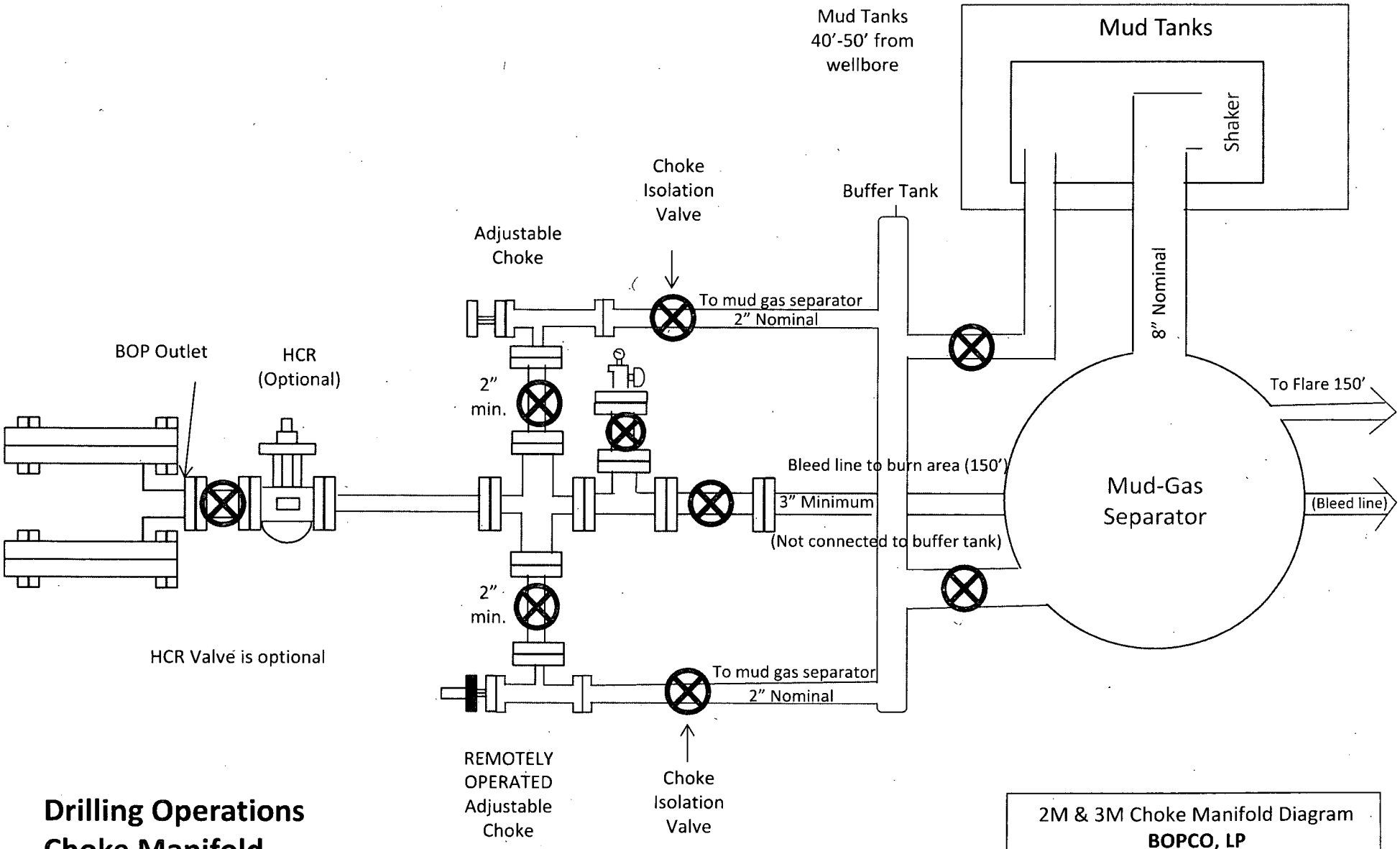
Other proposed operations facets description:

Other proposed operations facets attachment:

James_Ranch_DI_12_GCP_Elkhorn_7.23.2019_20190805073006.pdf

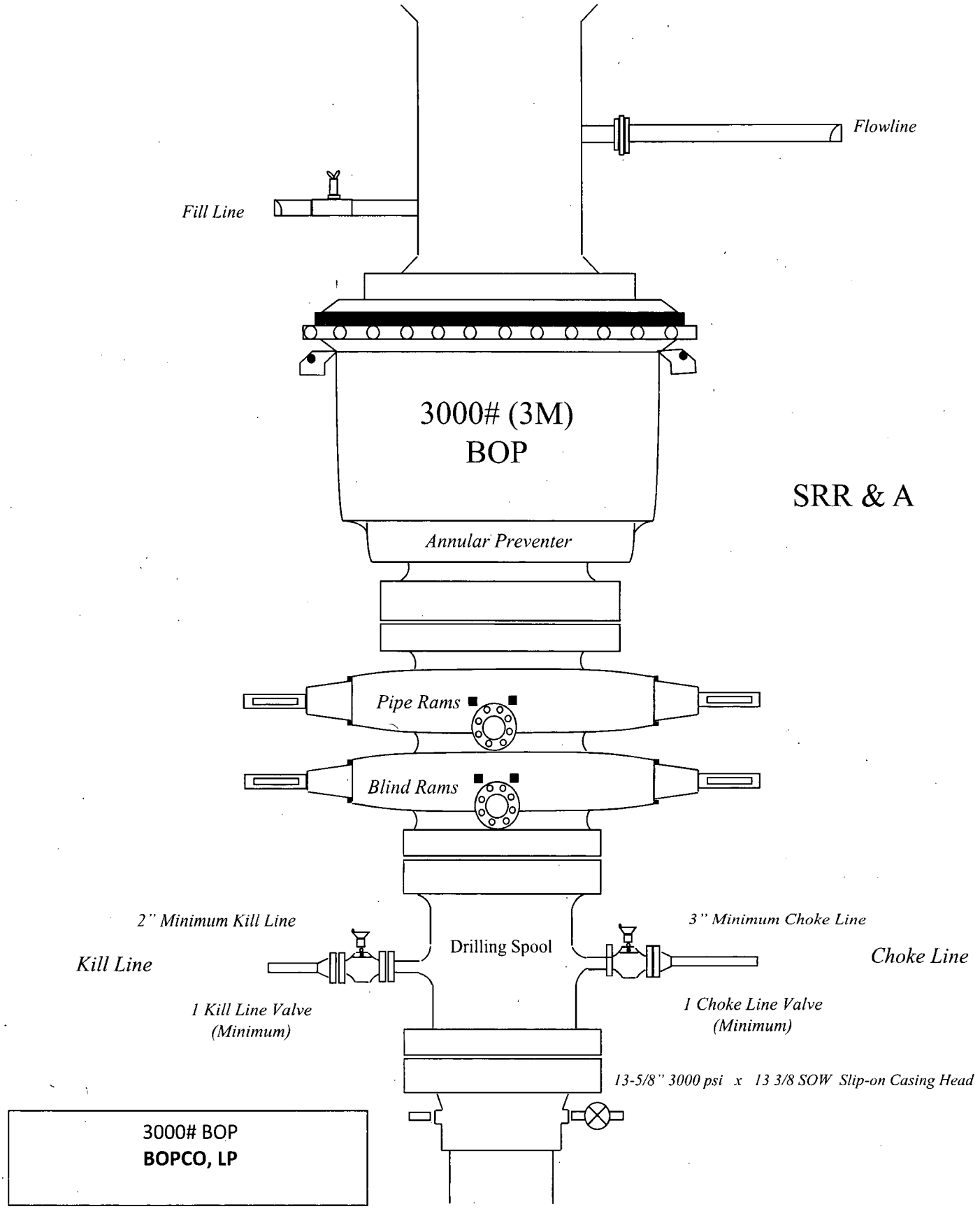
Other Variance attachment:

JRU_DI_12_FH_20180915143037.pdf
JRU_DI_12_MBS_20190805072816.pdf



Drilling Operations
Choke Manifold
2M & 3M Service

2M & 3M Choke Manifold Diagram
BOPCO, LP


Flowline
Fill Line
3000# (3M)
BOP
SRR & A
Annular Preventer
Pipe Rams
Blind Rams
2" Minimum Kill Line
3" Minimum Choke Line
Kill Line
Drilling Spool
Choke Line
1 Kill Line Valve
(Minimum)
1 Choke Line Valve
(Minimum)
13-5/8" 3000 psi x 13 3/8 SOW Slip-on Casing Head
3000# BOP
BOPCO, LP

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
James Ranch Unit DI2 224H
Eddy County, NM

1. **CASING PROGRAM:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 640'	13-3/8"	48#	STC	H-40	New	1.44	2.63	10.48
12-1/4"	0' – 3880'	9-5/8"	36#	LTC	J-55	New	1.06	1.65	3.24
8-3/4" x 8-1/2"	0' – 23366'	5-1/2"	17#	BTC	P-110	New	1.12	1.30	1.85

- 9-5/8" collapse assumes ½ evacuation and fresh water internally.
- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35.

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom
B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
   - Wellhead will be installed by manufacturer's representatives.
   - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
   - Manufacturer will witness installation of test plug for initial test.
   - Operator will test the 9-5/8" casing to 70% of casing burst before drilling out.

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
James Ranch Unit DI2 226H
Eddy County, NM

1. **CASING PROGRAM:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 640'	13-3/8"	48#	STC	H-40	New	1.44	2.63	10.48
12-1/4"	0' – 3880'	9-5/8"	36#	LTC	J-55	New	1.06	1.65	3.24
8-3/4" x 8-1/2"	0' – 23142'	5-1/2"	17#	BTC	P-110	New	1.12	1.30	1.85

- 9-5/8" collapse assumes ½ evacuation and fresh water internally.
- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35.

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom
B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
   - Wellhead will be installed by manufacturer's representatives.
   - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
   - Manufacturer will witness installation of test plug for initial test.
   - Operator will test the 9-5/8" casing to 70% of casing burst before drilling out.

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
James Ranch Unit DI2 227H
Eddy County, NM

1. **CASING PROGRAM:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 640'	13-3/8"	48#	STC	H-40	New	1.44	2.63	10.48
12-1/4"	0' – 3880'	9-5/8"	36#	LTC	J-55	New	1.06	1.65	3.24
8-3/4" x 8-1/2"	0' – 23321'	5-1/2"	17#	BTC	P-110	New	1.12	1.30	1.85

- 9-5/8" collapse assumes ½ evacuation and fresh water internally.
- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35.

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom
B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
   - Wellhead will be installed by manufacturer's representatives.
   - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
   - Manufacturer will witness installation of test plug for initial test.
   - Operator will test the 9-5/8" casing to 70% of casing burst before drilling out.

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
James Ranch Unit DI2 274H
Eddy County, NM

1. **CASING PROGRAM:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 640'	13-3/8"	48#	STC	H-40	New	1.44	2.63	10.48
12-1/4"	0' – 3880'	9-5/8"	36#	LTC	J-55	New	1.06	1.65	3.24
8-3/4" x 8-1/2"	0' – 24638'	5-1/2"	17#	BTC	P-110	New	1.12	1.30	1.85

- 9-5/8" collapse assumes ½ evacuation and fresh water internally.
- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35.

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 5M top flange x 13-3/8" SOW bottom
B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
   - Wellhead will be installed by manufacturer's representatives.
   - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
   - Manufacturer will witness installation of test plug for initial test.
   - Operator will test the 9-5/8" casing to 70% of casing burst before drilling out.

GENERAL OFFICES – MIDLAND, TEXAS

BOPCO, L.P.

6401 Holiday Hill Road
Midland, Tx 79707
(432) 683-2277

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

BOPCO, L.P. 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
BOPCO, L.P. 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

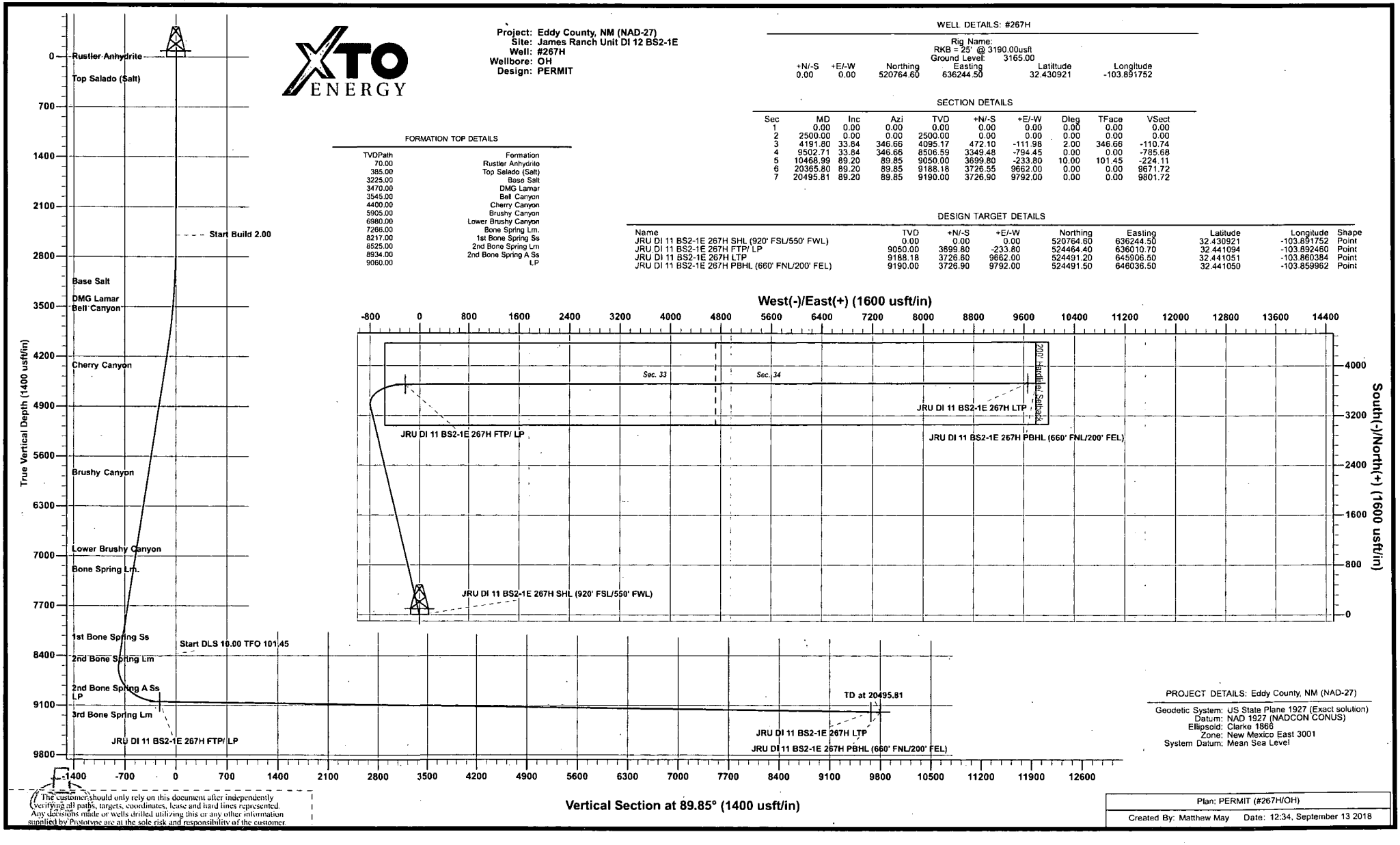
Eddy County, NM (NAD-27)
James Ranch Unit DI 12 BS2-1E
#267H

OH

Plan: PERMIT

Standard Planning Report

13 September, 2018



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

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #267H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3190.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3190.00usft
Site:	James Ranch Unit DI 12 BS2-1E	**North Reference:**	Grid
Well:	#267H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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	James Ranch Unit DI 12 BS2-1E				
Site Position:		**Northing:**	520,764.60 usft	**Latitude:**	32.430921
From:	Map	**Easting:**	636,244.50 usft	**Longitude:**	-103.891752
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.24 °

Well	#267H					
Well Position	**+N/-S**	0.00 usft	**Northing:**	520,764.60 usft	**Latitude:**	32.430921
	+E/-W	0.00 usft	**Easting:**	636,244.50 usft	**Longitude:**	-103.891752
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,165.00 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	9/13/2018	6.98	60.19	47,901

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	89.85

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	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,191.80	33.84	346.66	4,095.17	472.10	-111.98	2.00	2.00	0.00	346.66	
9,502.71	33.84	346.66	8,506.59	3,349.48	-794.45	0.00	0.00	0.00	0.00	
10,468.99	89.20	89.85	9,050.00	3,699.80	-233.80	10.00	5.73	10.68	101.45	JRU DI 11 BS2-1E
20,365.80	89.20	89.85	9,188.18	3,726.55	9,662.00	0.00	0.00	0.00	0.00	JRU DI 11 BS2-1E
20,495.81	89.20	89.85	9,190.00	3,726.90	9,792.00	0.00	0.00	0.00	0.00	JRU DI 11 BS2-1E

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #267H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3190.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3190.00usft
Site:	James Ranch Unit DI 12 BS2-1E	**North Reference:**	Grid
Well:	#267H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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
JRU DI 11 BS2-1E 267H SHL (920' FSL/550' FWL)									
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
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
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	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	2.00	346.66	2,599.98	1.70	-0.40	-0.40	2.00	2.00	0.00
2,700.00	4.00	346.66	2,699.84	6.79	-1.61	-1.59	2.00	2.00	0.00
2,800.00	6.00	346.66	2,799.45	15.27	-3.62	-3.58	2.00	2.00	0.00
2,900.00	8.00	346.66	2,898.70	27.13	-6.43	-6.36	2.00	2.00	0.00
3,000.00	10.00	346.66	2,997.47	42.35	-10.04	-9.93	2.00	2.00	0.00
3,100.00	12.00	346.66	3,095.62	60.91	-14.45	-14.29	2.00	2.00	0.00
3,200.00	14.00	346.66	3,193.06	82.80	-19.64	-19.42	2.00	2.00	0.00
3,300.00	16.00	346.66	3,289.64	107.98	-25.61	-25.33	2.00	2.00	0.00
3,400.00	18.00	346.66	3,385.27	136.43	-32.36	-32.00	2.00	2.00	0.00
3,500.00	20.00	346.66	3,479.82	168.10	-39.87	-39.43	2.00	2.00	0.00
3,600.00	22.00	346.66	3,573.17	202.97	-48.14	-47.61	2.00	2.00	0.00
3,700.00	24.00	346.66	3,665.21	240.99	-57.16	-56.53	2.00	2.00	0.00
3,800.00	26.00	346.66	3,755.84	282.11	-66.91	-66.17	2.00	2.00	0.00
3,900.00	28.00	346.66	3,844.94	326.28	-77.39	-76.53	2.00	2.00	0.00
4,000.00	30.00	346.66	3,932.39	373.45	-88.58	-87.60	2.00	2.00	0.00
4,100.00	32.00	346.66	4,018.11	423.56	-100.46	-99.35	2.00	2.00	0.00
4,191.80	33.84	346.66	4,095.17	472.10	-111.98	-110.74	2.00	2.00	0.00
4,200.00	33.84	346.66	4,101.98	476.54	-113.03	-111.78	0.00	0.00	0.00
4,300.00	33.84	346.66	4,185.04	530.72	-125.88	-124.49	0.00	0.00	0.00
4,400.00	33.84	346.66	4,268.10	584.90	-138.73	-137.20	0.00	0.00	0.00
4,500.00	33.84	346.66	4,351.17	639.08	-151.58	-149.91	0.00	0.00	0.00
4,600.00	33.84	346.66	4,434.23	693.26	-164.43	-162.62	0.00	0.00	0.00
4,700.00	33.84	346.66	4,517.29	747.43	-177.28	-175.32	0.00	0.00	0.00
4,800.00	33.84	346.66	4,600.36	801.61	-190.13	-188.03	0.00	0.00	0.00
4,900.00	33.84	346.66	4,683.42	855.79	-202.98	-200.74	0.00	0.00	0.00
5,000.00	33.84	346.66	4,766.48	909.97	-215.83	-213.45	0.00	0.00	0.00
5,100.00	33.84	346.66	4,849.55	964.15	-228.68	-226.16	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #267H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3190.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3190.00usft
Site:	James Ranch Unit DI 12 BS2-1E	**North Reference:**	Grid
Well:	#267H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
5,200.00	33.84	346.66	4,932.61	1,018.33	-241.53	-238.87	0.00	0.00	0.00
5,300.00	33.84	346.66	5,015.67	1,072.51	-254.38	-251.58	0.00	0.00	0.00
5,400.00	33.84	346.66	5,098.74	1,126.68	-267.23	-264.28	0.00	0.00	0.00
5,500.00	33.84	346.66	5,181.80	1,180.86	-280.08	-276.99	0.00	0.00	0.00
5,600.00	33.84	346.66	5,264.86	1,235.04	-292.94	-289.70	0.00	0.00	0.00
5,700.00	33.84	346.66	5,347.93	1,289.22	-305.79	-302.41	0.00	0.00	0.00
5,800.00	33.84	346.66	5,430.99	1,343.40	-318.64	-315.12	0.00	0.00	0.00
5,900.00	33.84	346.66	5,514.06	1,397.58	-331.49	-327.83	0.00	0.00	0.00
6,000.00	33.84	346.66	5,597.12	1,451.76	-344.34	-340.53	0.00	0.00	0.00
6,100.00	33.84	346.66	5,680.18	1,505.94	-357.19	-353.24	0.00	0.00	0.00
6,200.00	33.84	346.66	5,763.25	1,560.11	-370.04	-365.95	0.00	0.00	0.00
6,300.00	33.84	346.66	5,846.31	1,614.29	-382.89	-378.66	0.00	0.00	0.00
6,400.00	33.84	346.66	5,929.37	1,668.47	-395.74	-391.37	0.00	0.00	0.00
6,500.00	33.84	346.66	6,012.44	1,722.65	-408.59	-404.08	0.00	0.00	0.00
6,600.00	33.84	346.66	6,095.50	1,776.83	-421.44	-416.79	0.00	0.00	0.00
6,700.00	33.84	346.66	6,178.56	1,831.01	-434.29	-429.49	0.00	0.00	0.00
6,800.00	33.84	346.66	6,261.63	1,885.19	-447.14	-442.20	0.00	0.00	0.00
6,900.00	33.84	346.66	6,344.69	1,939.36	-459.99	-454.91	0.00	0.00	0.00
7,000.00	33.84	346.66	6,427.75	1,993.54	-472.84	-467.62	0.00	0.00	0.00
7,100.00	33.84	346.66	6,510.82	2,047.72	-485.69	-480.33	0.00	0.00	0.00
7,200.00	33.84	346.66	6,593.88	2,101.90	-498.54	-493.04	0.00	0.00	0.00
7,300.00	33.84	346.66	6,676.94	2,156.08	-511.39	-505.75	0.00	0.00	0.00
7,400.00	33.84	346.66	6,760.01	2,210.26	-524.24	-518.45	0.00	0.00	0.00
7,500.00	33.84	346.66	6,843.07	2,264.44	-537.09	-531.16	0.00	0.00	0.00
7,600.00	33.84	346.66	6,926.13	2,318.62	-549.94	-543.87	0.00	0.00	0.00
7,700.00	33.84	346.66	7,009.20	2,372.79	-562.79	-556.58	0.00	0.00	0.00
7,800.00	33.84	346.66	7,092.26	2,426.97	-575.64	-569.29	0.00	0.00	0.00
7,900.00	33.84	346.66	7,175.32	2,481.15	-588.50	-582.00	0.00	0.00	0.00
8,000.00	33.84	346.66	7,258.39	2,535.33	-601.35	-594.71	0.00	0.00	0.00
8,100.00	33.84	346.66	7,341.45	2,589.51	-614.20	-607.41	0.00	0.00	0.00
8,200.00	33.84	346.66	7,424.51	2,643.69	-627.05	-620.12	0.00	0.00	0.00
8,300.00	33.84	346.66	7,507.58	2,697.87	-639.90	-632.83	0.00	0.00	0.00
8,400.00	33.84	346.66	7,590.64	2,752.04	-652.75	-645.54	0.00	0.00	0.00
8,500.00	33.84	346.66	7,673.71	2,806.22	-665.60	-658.25	0.00	0.00	0.00
8,600.00	33.84	346.66	7,756.77	2,860.40	-678.45	-670.96	0.00	0.00	0.00
8,700.00	33.84	346.66	7,839.83	2,914.58	-691.30	-683.67	0.00	0.00	0.00
8,800.00	33.84	346.66	7,922.90	2,968.76	-704.15	-696.37	0.00	0.00	0.00
8,900.00	33.84	346.66	8,005.96	3,022.94	-717.00	-709.08	0.00	0.00	0.00
9,000.00	33.84	346.66	8,089.02	3,077.12	-729.85	-721.79	0.00	0.00	0.00
9,100.00	33.84	346.66	8,172.09	3,131.30	-742.70	-734.50	0.00	0.00	0.00
9,200.00	33.84	346.66	8,255.15	3,185.47	-755.55	-747.21	0.00	0.00	0.00
9,300.00	33.84	346.66	8,338.21	3,239.65	-768.40	-759.92	0.00	0.00	0.00
9,400.00	33.84	346.66	8,421.28	3,293.83	-781.25	-772.63	0.00	0.00	0.00
9,502.71	33.84	346.66	8,506.59	3,349.48	-794.45	-785.68	0.00	0.00	0.00
9,550.00	33.18	355.15	8,546.04	3,375.20	-798.59	-789.75	10.00	-1.38	17.95
9,600.00	33.14	4.29	8,587.93	3,402.48	-798.72	-789.81	10.00	-0.09	18.30
9,650.00	33.75	13.30	8,629.67	3,429.64	-794.50	-785.52	10.00	1.23	18.02
9,700.00	34.99	21.89	8,670.97	3,456.48	-785.95	-776.90	10.00	2.49	17.17
9,750.00	36.80	29.85	8,711.49	3,482.79	-773.15	-764.02	10.00	3.61	15.92
9,800.00	39.09	37.08	8,750.94	3,508.37	-756.18	-746.99	10.00	4.58	14.47
9,850.00	41.78	43.58	8,789.01	3,533.03	-735.17	-725.92	10.00	5.39	13.00
9,900.00	44.81	49.39	8,825.41	3,556.58	-710.30	-700.99	10.00	6.04	11.63
9,950.00	48.09	54.60	8,859.87	3,578.83	-681.74	-672.37	10.00	6.57	10.41
10,000.00	51.59	59.28	8,892.12	3,599.63	-649.72	-640.29	10.00	6.99	9.36

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #267H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3190.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3190.00usft
Site:	James Ranch Unit DI 12 BS2-1E	**North Reference:**	Grid
Well:	#267H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
10,050.00	55.25	63.51	8,921.92	3,618.82	-614.47	-604.99	10.00	7.33	8.47
10,100.00	59.05	67.38	8,949.04	3,636.24	-576.26	-566.74	10.00	7.60	7.74
10,150.00	62.96	70.95	8,973.27	3,651.76	-535.40	-525.84	10.00	7.81	7.14
10,200.00	66.95	74.28	8,994.44	3,665.27	-492.18	-482.58	10.00	7.98	6.65
10,250.00	71.01	77.41	9,012.38	3,676.66	-446.93	-437.31	10.00	8.11	6.27
10,300.00	75.11	80.40	9,026.94	3,685.85	-400.01	-390.36	10.00	8.21	5.97
10,350.00	79.26	83.27	9,038.03	3,692.76	-351.77	-342.10	10.00	8.29	5.74
10,400.00	83.42	86.06	9,045.56	3,697.35	-302.57	-292.89	10.00	8.34	5.59
10,450.00	87.61	88.81	9,049.47	3,699.58	-252.78	-243.10	10.00	8.37	5.49
10,468.99	89.20	89.85	9,050.00	3,699.80	-233.80	-224.11	10.00	8.38	5.46
JRU DI 11 BS2-1E 267H FTP/ LP									
10,500.00	89.20	89.85	9,050.43	3,699.88	-202.80	-193.11	0.00	0.00	0.00
10,600.00	89.20	89.85	9,051.83	3,700.15	-102.81	-93.12	0.00	0.00	0.00
10,700.00	89.20	89.85	9,053.23	3,700.42	-2.82	6.87	0.00	0.00	0.00
10,800.00	89.20	89.85	9,054.62	3,700.69	97.17	106.86	0.00	0.00	0.00
10,900.00	89.20	89.85	9,056.02	3,700.96	197.16	206.85	0.00	0.00	0.00
11,000.00	89.20	89.85	9,057.41	3,701.24	297.15	306.84	0.00	0.00	0.00
11,100.00	89.20	89.85	9,058.81	3,701.51	397.14	406.83	0.00	0.00	0.00
11,200.00	89.20	89.85	9,060.21	3,701.78	497.13	506.82	0.00	0.00	0.00
11,300.00	89.20	89.85	9,061.60	3,702.05	597.12	606.81	0.00	0.00	0.00
11,400.00	89.20	89.85	9,063.00	3,702.32	697.11	706.80	0.00	0.00	0.00
11,500.00	89.20	89.85	9,064.40	3,702.59	797.10	806.79	0.00	0.00	0.00
11,600.00	89.20	89.85	9,065.79	3,702.86	897.09	906.78	0.00	0.00	0.00
11,700.00	89.20	89.85	9,067.19	3,703.13	997.08	1,006.77	0.00	0.00	0.00
11,800.00	89.20	89.85	9,068.58	3,703.40	1,097.07	1,106.76	0.00	0.00	0.00
11,900.00	89.20	89.85	9,069.98	3,703.67	1,197.06	1,206.75	0.00	0.00	0.00
12,000.00	89.20	89.85	9,071.38	3,703.94	1,297.05	1,306.74	0.00	0.00	0.00
12,100.00	89.20	89.85	9,072.77	3,704.21	1,397.04	1,406.73	0.00	0.00	0.00
12,200.00	89.20	89.85	9,074.17	3,704.48	1,497.03	1,506.72	0.00	0.00	0.00
12,300.00	89.20	89.85	9,075.57	3,704.75	1,597.02	1,606.71	0.00	0.00	0.00
12,400.00	89.20	89.85	9,076.96	3,705.02	1,697.01	1,706.70	0.00	0.00	0.00
12,500.00	89.20	89.85	9,078.36	3,705.29	1,797.00	1,806.69	0.00	0.00	0.00
12,600.00	89.20	89.85	9,079.75	3,705.56	1,896.99	1,906.68	0.00	0.00	0.00
12,700.00	89.20	89.85	9,081.15	3,705.83	1,996.98	2,006.68	0.00	0.00	0.00
12,800.00	89.20	89.85	9,082.55	3,706.10	2,096.97	2,106.67	0.00	0.00	0.00
12,900.00	89.20	89.85	9,083.94	3,706.37	2,196.96	2,206.66	0.00	0.00	0.00
13,000.00	89.20	89.85	9,085.34	3,706.64	2,296.95	2,306.65	0.00	0.00	0.00
13,100.00	89.20	89.85	9,086.74	3,706.91	2,396.94	2,406.64	0.00	0.00	0.00
13,200.00	89.20	89.85	9,088.13	3,707.18	2,496.93	2,506.63	0.00	0.00	0.00
13,300.00	89.20	89.85	9,089.53	3,707.45	2,596.92	2,606.62	0.00	0.00	0.00
13,400.00	89.20	89.85	9,090.92	3,707.72	2,696.91	2,706.61	0.00	0.00	0.00
13,500.00	89.20	89.85	9,092.32	3,707.99	2,796.90	2,806.60	0.00	0.00	0.00
13,600.00	89.20	89.85	9,093.72	3,708.26	2,896.89	2,906.59	0.00	0.00	0.00
13,700.00	89.20	89.85	9,095.11	3,708.53	2,996.88	3,006.58	0.00	0.00	0.00
13,800.00	89.20	89.85	9,096.51	3,708.80	3,096.87	3,106.57	0.00	0.00	0.00
13,900.00	89.20	89.85	9,097.91	3,709.07	3,196.86	3,206.56	0.00	0.00	0.00
14,000.00	89.20	89.85	9,099.30	3,709.34	3,296.85	3,306.55	0.00	0.00	0.00
14,100.00	89.20	89.85	9,100.70	3,709.61	3,396.84	3,406.54	0.00	0.00	0.00
14,200.00	89.20	89.85	9,102.09	3,709.88	3,496.83	3,506.53	0.00	0.00	0.00
14,300.00	89.20	89.85	9,103.49	3,710.15	3,596.82	3,606.52	0.00	0.00	0.00
14,400.00	89.20	89.85	9,104.89	3,710.42	3,696.81	3,706.51	0.00	0.00	0.00
14,500.00	89.20	89.85	9,106.28	3,710.69	3,796.80	3,806.50	0.00	0.00	0.00
14,600.00	89.20	89.85	9,107.68	3,710.97	3,896.79	3,906.49	0.00	0.00	0.00
14,700.00	89.20	89.85	9,109.08	3,711.24	3,996.78	4,006.48	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #267H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3190.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3190.00usft
Site:	James Ranch Unit DI 12 BS2-1E	**North Reference:**	Grid
Well:	#267H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
14,800.00	89.20	89.85	9,110.47	3,711.51	4,096.77	4,106.47	0.00	0.00	0.00
14,900.00	89.20	89.85	9,111.87	3,711.78	4,196.76	4,206.46	0.00	0.00	0.00
15,000.00	89.20	89.85	9,113.26	3,712.05	4,296.75	4,306.45	0.00	0.00	0.00
15,100.00	89.20	89.85	9,114.66	3,712.32	4,396.74	4,406.44	0.00	0.00	0.00
15,200.00	89.20	89.85	9,116.06	3,712.59	4,496.73	4,506.43	0.00	0.00	0.00
15,300.00	89.20	89.85	9,117.45	3,712.86	4,596.72	4,606.42	0.00	0.00	0.00
15,400.00	89.20	89.85	9,118.85	3,713.13	4,696.71	4,706.41	0.00	0.00	0.00
15,500.00	89.20	89.85	9,120.25	3,713.40	4,796.70	4,806.40	0.00	0.00	0.00
15,600.00	89.20	89.85	9,121.64	3,713.67	4,896.69	4,906.39	0.00	0.00	0.00
15,700.00	89.20	89.85	9,123.04	3,713.94	4,996.68	5,006.38	0.00	0.00	0.00
15,800.00	89.20	89.85	9,124.43	3,714.21	5,096.67	5,106.37	0.00	0.00	0.00
15,900.00	89.20	89.85	9,125.83	3,714.48	5,196.66	5,206.36	0.00	0.00	0.00
16,000.00	89.20	89.85	9,127.23	3,714.75	5,296.65	5,306.35	0.00	0.00	0.00
16,100.00	89.20	89.85	9,128.62	3,715.02	5,396.64	5,406.34	0.00	0.00	0.00
16,200.00	89.20	89.85	9,130.02	3,715.29	5,496.63	5,506.33	0.00	0.00	0.00
16,300.00	89.20	89.85	9,131.42	3,715.56	5,596.62	5,606.32	0.00	0.00	0.00
16,400.00	89.20	89.85	9,132.81	3,715.83	5,696.61	5,706.31	0.00	0.00	0.00
16,500.00	89.20	89.85	9,134.21	3,716.10	5,796.60	5,806.30	0.00	0.00	0.00
16,600.00	89.20	89.85	9,135.60	3,716.37	5,896.59	5,906.29	0.00	0.00	0.00
16,700.00	89.20	89.85	9,137.00	3,716.64	5,996.58	6,006.29	0.00	0.00	0.00
16,800.00	89.20	89.85	9,138.40	3,716.91	6,096.57	6,106.28	0.00	0.00	0.00
16,900.00	89.20	89.85	9,139.79	3,717.18	6,196.56	6,206.27	0.00	0.00	0.00
17,000.00	89.20	89.85	9,141.19	3,717.45	6,296.55	6,306.26	0.00	0.00	0.00
17,100.00	89.20	89.85	9,142.59	3,717.72	6,396.54	6,406.25	0.00	0.00	0.00
17,200.00	89.20	89.85	9,143.98	3,717.99	6,496.53	6,506.24	0.00	0.00	0.00
17,300.00	89.20	89.85	9,145.38	3,718.26	6,596.51	6,606.23	0.00	0.00	0.00
17,400.00	89.20	89.85	9,146.77	3,718.53	6,696.50	6,706.22	0.00	0.00	0.00
17,500.00	89.20	89.85	9,148.17	3,718.80	6,796.49	6,806.21	0.00	0.00	0.00
17,600.00	89.20	89.85	9,149.57	3,719.07	6,896.48	6,906.20	0.00	0.00	0.00
17,700.00	89.20	89.85	9,150.96	3,719.34	6,996.47	7,006.19	0.00	0.00	0.00
17,800.00	89.20	89.85	9,152.36	3,719.61	7,096.46	7,106.18	0.00	0.00	0.00
17,900.00	89.20	89.85	9,153.76	3,719.88	7,196.45	7,206.17	0.00	0.00	0.00
18,000.00	89.20	89.85	9,155.15	3,720.15	7,296.44	7,306.16	0.00	0.00	0.00
18,100.00	89.20	89.85	9,156.55	3,720.42	7,396.43	7,406.15	0.00	0.00	0.00
18,200.00	89.20	89.85	9,157.94	3,720.70	7,496.42	7,506.14	0.00	0.00	0.00
18,300.00	89.20	89.85	9,159.34	3,720.97	7,596.41	7,606.13	0.00	0.00	0.00
18,400.00	89.20	89.85	9,160.74	3,721.24	7,696.40	7,706.12	0.00	0.00	0.00
18,500.00	89.20	89.85	9,162.13	3,721.51	7,796.39	7,806.11	0.00	0.00	0.00
18,600.00	89.20	89.85	9,163.53	3,721.78	7,896.38	7,906.10	0.00	0.00	0.00
18,700.00	89.20	89.85	9,164.93	3,722.05	7,996.37	8,006.09	0.00	0.00	0.00
18,800.00	89.20	89.85	9,166.32	3,722.32	8,096.36	8,106.08	0.00	0.00	0.00
18,900.00	89.20	89.85	9,167.72	3,722.59	8,196.35	8,206.07	0.00	0.00	0.00
19,000.00	89.20	89.85	9,169.11	3,722.86	8,296.34	8,306.06	0.00	0.00	0.00
19,100.00	89.20	89.85	9,170.51	3,723.13	8,396.33	8,406.05	0.00	0.00	0.00
19,200.00	89.20	89.85	9,171.91	3,723.40	8,496.32	8,506.04	0.00	0.00	0.00
19,300.00	89.20	89.85	9,173.30	3,723.67	8,596.31	8,606.03	0.00	0.00	0.00
19,400.00	89.20	89.85	9,174.70	3,723.94	8,696.30	8,706.02	0.00	0.00	0.00
19,500.00	89.20	89.85	9,176.10	3,724.21	8,796.29	8,806.01	0.00	0.00	0.00
19,600.00	89.20	89.85	9,177.49	3,724.48	8,896.28	8,906.00	0.00	0.00	0.00
19,700.00	89.20	89.85	9,178.89	3,724.75	8,996.27	9,005.99	0.00	0.00	0.00
19,800.00	89.20	89.85	9,180.28	3,725.02	9,096.26	9,105.98	0.00	0.00	0.00
19,900.00	89.20	89.85	9,181.68	3,725.29	9,196.25	9,205.97	0.00	0.00	0.00
20,000.00	89.20	89.85	9,183.08	3,725.56	9,296.24	9,305.96	0.00	0.00	0.00
20,100.00	89.20	89.85	9,184.47	3,725.83	9,396.23	9,405.95	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #267H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3190.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3190.00usft
Site:	James Ranch Unit DI 12 BS2-1E	**North Reference:**	Grid
Well:	#267H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
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)
20,200.00	89.20	89.85	9,185.87	3,726.10	9,496.22	9,505.94	0.00	0.00	0.00
20,300.00	89.20	89.85	9,187.27	3,726.37	9,596.21	9,605.93	0.00	0.00	0.00
20,365.80	89.20	89.85	9,188.18	3,726.55	9,662.00	9,671.72	0.00	0.00	0.00
JRU DI 11 BS2-1E 267H LTP									
20,400.00	89.20	89.85	9,188.66	3,726.64	9,696.20	9,705.92	0.00	0.00	0.00
20,495.81	89.20	89.85	9,190.00	3,726.90	9,792.00	9,801.72	0.00	0.00	0.00
JRU DI 11 BS2-1E 267H PBHL (660' FNL/200' FEL)									

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
JRU DI 11 BS2-1E 26 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	520,764.60	636,244.50	32.430921	-103.891752
JRU DI 11 BS2-1E 26 - plan hits target center - Point	0.00	0.00	9,050.00	3,699.80	-233.80	524,464.40	636,010.70	32.441094	-103.892460
JRU DI 11 BS2-1E 26 - plan misses target center by 0.05usft at 20365.80usft MD (9188.18 TVD, 3726.55 N, 9662.00 E) - Point	0.00	0.00	9,188.18	3,726.60	9,662.00	524,491.20	645,906.50	32.441051	-103.860384
JRU DI 11 BS2-1E 26 - plan hits target center - Point	0.00	0.00	9,190.00	3,726.90	9,792.00	524,491.50	646,036.50	32.441051	-103.859962

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
70.00	70.00	Rustler Anhydrite			
385.00	385.00	Top Salado (Salt)			
3,232.97	3,225.00	Base Salt			
3,489.56	3,470.00	DMG Lamar			
3,569.68	3,545.00	Bell Canyon			
4,558.79	4,400.00	Cherry Canyon			
6,370.66	5,905.00	Brushy Canyon			
7,664.85	6,980.00	Lower Brushy Canyon			
8,009.16	7,266.00	Bone Spring Lm.			
9,154.07	8,217.00	1st Bone Spring Ss			
9,524.82	8,525.00	2nd Bone Spring Lm			
10,071.65	8,934.00	2nd Bone Spring A Ss			
11,185.20	9,060.00	LP			

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

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

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

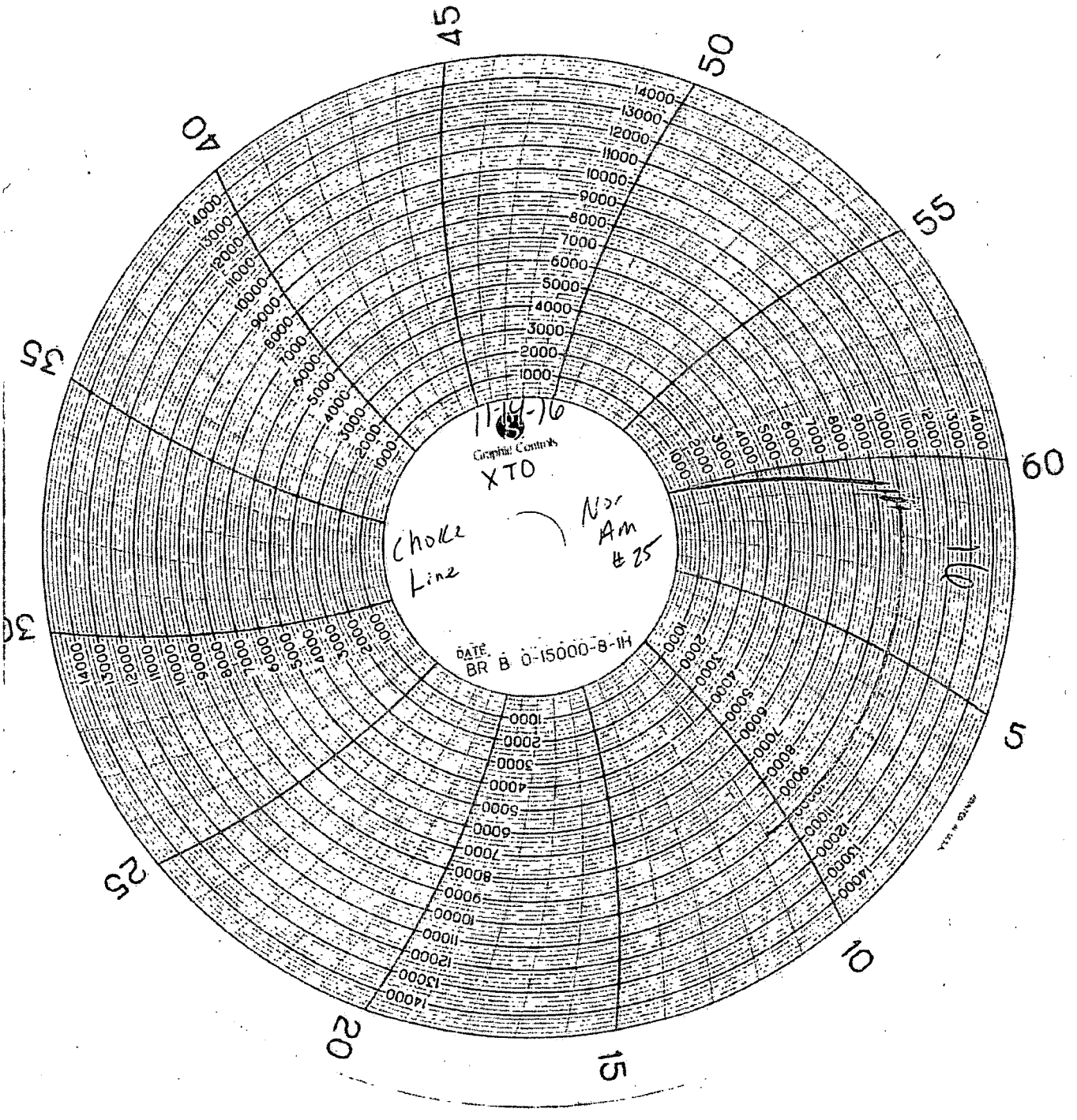
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

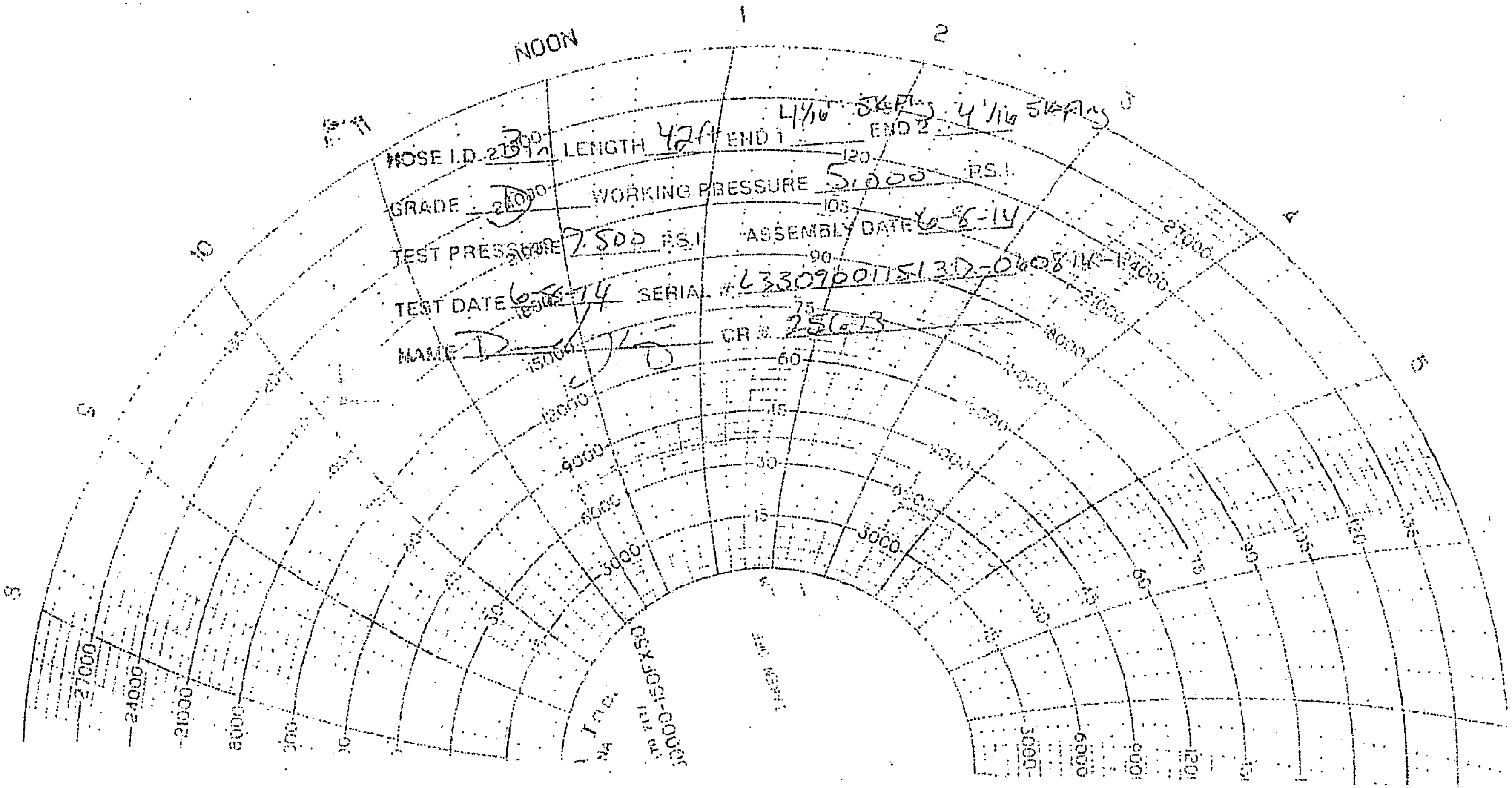
Product Description:	FD3.042.0R41/16.5KFLGE/E LE

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 :	L33090011S13D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

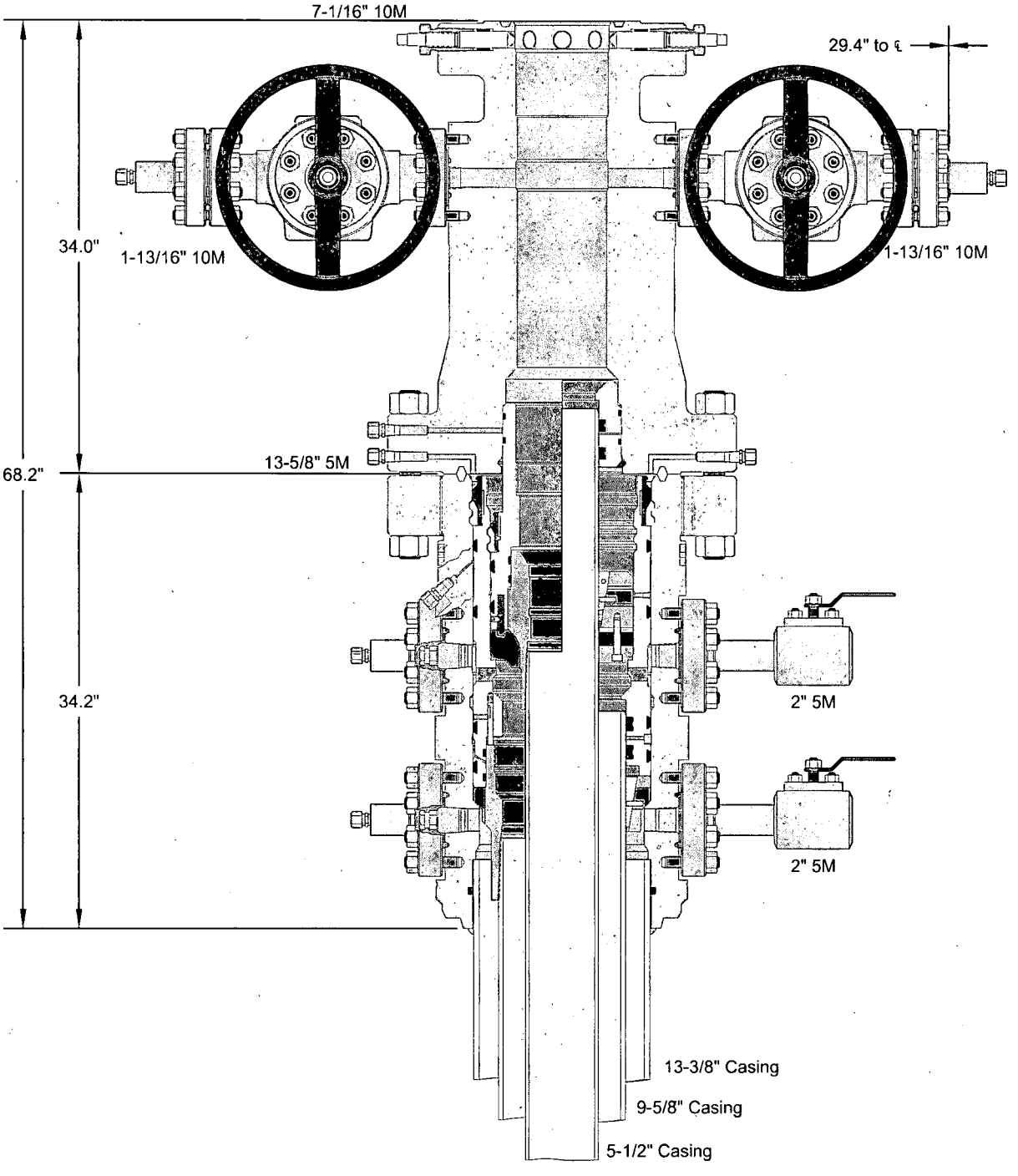
Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance 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 :	


45
50
55
60
5
10
15
20
25
30
35
40
11-14-16
Graphic Controls
XTO
Choke Line
Nor Am #25
DATE
BR B 0-15000-8-11H


NOON
1
2
3
4
5
HOSE I.D.
LENGTH
END 1
END 2
GRADE
WORKING PRESSURE 5,000 P.S.I.
TEST PRESSURE 7,500 P.S.I.
ASSEMBLY DATE 6-8-14
TEST DATE 6-8-14
SERIAL #
NAME
CR #

GE Oil & Gas



ALL DIMENSIONS ARE APPROXIMATE

XTO ENERGY, INC.

13-3/8" x 9-5/8" x 5-1/2" 10M RSH-2 Wellhead Assembly, With T-EBS-F Tubing Head

DRAWN	VJK	16FEB17
APPRV	KN	16FEB17

FOR REFERENCE ONLY
DRAWING NO. 10012842

APD ID: 10400034155 **Submission Date:** 09/15/2018

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Well Type: OIL 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:

JRU_DI_12_267H_ERoad_20180915143058.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT **Row(s) Exist?** YES

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:

JRU_DI_12_Road_20190805071757.pdf

New road type: RESOURCE

Length: 13042.12 Feet **Width (ft.):** 50

Max slope (%): 2 **Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 30

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? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Surface material will be native caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Approximately 6 inches of topsoil (root zone) will be stripped from the proposed access road prior to any further construction activity. The topsoil that was stripped will be spread along the edge of the road and within the ditch. The topsoil will be seeded with the proper seed mix designated by the BLM.
Access other construction information: Construction, reclamation, and/or routine maintenance will not be conducted during periods when the soil conditions for construction could lead to impacts to the surrounding environment, or when watershed damage is likely to occur as a result of these activities.
Access miscellaneous information: The James Ranch Unit DI 11 is accessed from the intersection of Potash Mines Road (State Rd. 31) and Cimarron Road. Go East on Cimarron Road approximately 4.2 miles to and arriving at the proposed road, the location is to the Southwest. Transportation Plan identifying existing roads that will be used to access the project area is included from Frank's Surveying marked as, 'Vicinity Map.' There are existing access roads to the proposed James Ranch Unit 11 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.
Number of access turnouts: 0 **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

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

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

JRU_DI_12_1_Mile_20180915143126.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. Two (2) 600' x 600' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB). JRU DI 12 N CTB is located in the NWSW of Section 33-21S-30E NMPM, Eddy County, New Mexico [Centerpoint: 769'FWL & 2082'FSL, 33-21S-30E]. JRU DI 12 S CTB is located in SESE & SWSE of Section 32-21S-30E, NMPM, Eddy County, New Mexico [Centerpoint: 1100'FEL & 467'FSL, 32-21S-30E]. Plats of the proposed CTBs are attached. Only the area necessary to maintain the facility will be disturbed. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment. Flowlines. JRU DI 12 N CTB: One Hundred & Five (105) 3676.21' buried 10" or less steel or poly flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 N CTB for future production (oil, gas, water). One Hundred & Five (105) additional 5601.56' buried 10" or less steel flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 N for gas lift. JRU DI 12 S CTB: One Hundred & Five (105) 3676.21' buried 10" or less steel or poly flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 S CTB for future production (oil, gas, water). One Hundred & Five (105) additional 3676.21' buried 10" or less steel flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 S for gas lift. Total Flowlines to the Battery with this application: 420 buried. The anticipated width of the corridors to the CTBs is anticipated to be 150' wide. Gas & Oil Pipeline. A gas purchaser has been identified. One (1) 110' wide and 4422.45' long corridor is requested to connect the JRU DI 12 CTBs to the Aggie CS MSO Lateral by 11 lines to transport and carry oil, gas, and water. XTO will be installing the line with anticipated risers located on the CTBs. See attached line sheet for specific line information. Disposal Facilities. Produced water will be piped from location to a 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. No flare is being applied for with this application. 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 ½ times the capacity of the largest tank and away from cut or fill areas. Electrical. All electrical poles and lines will be run in proposed lease road corridors. All lines will be primary 12,740 volt to properly run expected production equipment. 4636.75' 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:

JRU_DI_12_CTBN_20190805071934.pdf
JRU_DI_12_CTBS_20190805071942.pdf
JRU_DI_12_FL_20190805071951.pdf
JRU_DI_12_GS_20190805071958.pdf
JRU_DI_12_OHE_20190805072006.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: Fresh Water; Section 21-T23S-R30E

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

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 330000 **Source volume (acre-feet):** 42.53472

Source volume (gal): 13860000

Water source type: OTHER

Describe type: Fresh Water; Section 13-T17S-R33E

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

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 330000 **Source volume (acre-feet):** 42.53472

Source volume (gal): 13860000

Water source and transportation map:

JRU_DI_12_267H_Wtr_20180915143225.pdf

Water source comments: The well will be drilled using a combination of water mud systems as outlined in the Drilling Program. The water will be obtained from a 3rd party vendor and hauled to the existing frac 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: Rockhouse Water Water for drilling, completion and dust control will be supplied by Rockhouse Water for sale to BOPCO, L.P. from Section 13-T17S-R33E, Eddy County, New Mexico. In the event that Rockhouse Water does not have the appropriate water for BOPCO at time of drilling and completion from this location, then BOPCO water will come from with the location of the water being in Section 21-T23S-R30E, 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 330,000 barrels of water per horizontal well. Actual water volumes used during operations will depend on the depth of the well and length of horizontal sections.
New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: 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. 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. Anticipated Caliche Locations: a. Pit 1: State Caliche Pit, Section 32-T21S-R31E b. Pit 2: Private Caliche Pit, Section 16-T23S-R30E
Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

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 (575) 393-1079

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 (575) 393-1079

Waste type: SEWAGE

Waste content description: Human Waste

Amount of waste: 250 gallons

Waste disposal frequency : Weekly

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

Waste type: GARBAGE

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

Amount of waste: 250 pounds

Waste disposal frequency : Weekly

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

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

Disposal location description: A licensed 3rd party vendor will be contracted to haul and safely dispose of garbage, junk and non-flammable waste materials.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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? YES

Description of cuttings location Cuttings. The well will be drilled utilizing a closed-loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site. Drilling Fluids. These will be contained in steel mud pits and then taken to a NMOCD approved commercial disposal facility. Produced Fluids. Water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility. Oil produced during operations will be stored in tanks until sold.
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 Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

JRU_DI_12_267H_Well_20180915143310.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:** JAMES RANCH UNIT DI

Multiple Well Pad Number: 12

Recontouring attachment:

Drainage/Erosion control construction: No surface reclamation is planned for this well. BOPCO, L.P. requests a variance to interim reclamation until all wells on the drill island have been drilled and completed, at which time, BOPCO, L.P will contact the appropriate BLM personnel to discuss appropriate interim reclamation plans.

Drainage/Erosion control reclamation: No surface reclamation is planned for this well. BOPCO, L.P. requests a variance to interim reclamation until all wells on the drill island have been drilled and completed, at which time, BOPCO, L.P will contact the appropriate BLM personnel to discuss appropriate interim reclamation plans.

Well pad proposed disturbance (acres): 0	**Well pad interim reclamation (acres):** 0	**Well pad long term disturbance (acres):** 0
Road proposed disturbance (acres): 0	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 0
Powerline proposed disturbance (acres): 0	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0
Pipeline proposed disturbance (acres): 0	**Pipeline interim reclamation (acres):** 0	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 0	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 0
Total proposed disturbance: 0	**Total interim reclamation:** 0	**Total long term disturbance:** 0

Disturbance Comments: No additional surface disturbance is required for this well.

Reconstruction method: No surface reclamation is planned for this well. BOPCO, L.P. requests a variance to interim reclamation until all wells on the drill island have been drilled and completed, at which time, BOPCO, L.P will contact the appropriate BLM personnel to discuss appropriate interim reclamation plans.
Topsoil redistribution: No surface reclamation is planned for this well. BOPCO, L.P. requests a variance to interim reclamation until all wells on the drill island have been drilled and completed, at which time, BOPCO, L.P will contact the appropriate BLM personnel to discuss appropriate interim reclamation plans.
Soil treatment: No surface reclamation is planned for this well. BOPCO, L.P. requests a variance to interim reclamation until all wells on the drill island have been drilled and completed, at which time, BOPCO, L.P will contact the appropriate BLM personnel to discuss appropriate interim reclamation plans.
Existing Vegetation at the well pad: 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 attachment:

Existing Vegetation Community at the road: 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 attachment:

Existing Vegetation Community at the pipeline: 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 attachment:

Existing Vegetation Community at other disturbances: 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 attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Jeff **Last Name:** Raines

Phone: (432)620-4349 **Email:** jeffrey_raines@xtoenergy.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

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 attachment:

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 attachment:

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:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

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: 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:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

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: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT,STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NM STATE LAND OFFICE HOBBS

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:

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: Flowline

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

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: Distribution OHE

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

Right of Way needed? YES **Use APD as ROW?** YES

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

ROW Applications

SUPO Additional Information:

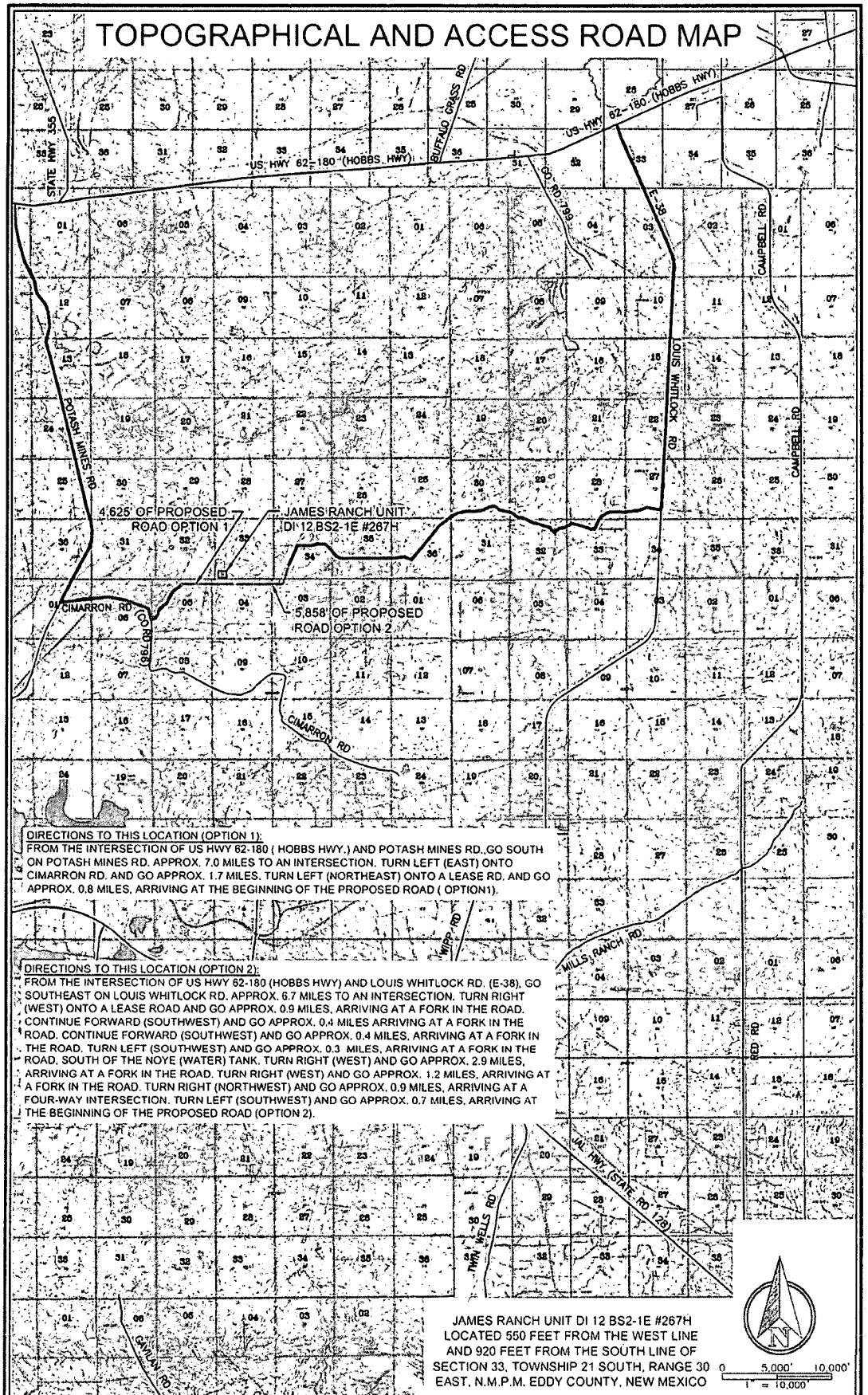
Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

JRU_DI_12_OL_20190805072252.pdf
JRU_DI_12_Well_List_20190805072305.pdf
JRU_DI_12_SUPO_20190805072319.pdf
JRU_DI_12_LS_20190805072330.pdf

TOPOGRAPHICAL AND ACCESS ROAD MAP



DIRECTIONS TO THIS LOCATION (OPTION 1):
FROM THE INTERSECTION OF US HWY 62-180 (HOBBS HWY.) AND POTASH MINES RD.,GO SOUTH ON POTASH MINES RD. APPROX. 7.0 MILES TO AN INTERSECTION. TURN LEFT (EAST) ONTO CIMARRON RD. AND GO APPROX. 1.7 MILES. TURN LEFT (NORTHEAST) ONTO A LEASE RD. AND GO APPROX. 0.8 MILES, ARRIVING AT THE BEGINNING OF THE PROPOSED ROAD (OPTION1).

DIRECTIONS TO THIS LOCATION (OPTION 2):
FROM THE INTERSECTION OF US HWY 62-180 (HOBBS HWY) AND LOUIS WHITLOCK RD. (E-38), GO SOUTHEAST ON LOUIS WHITLOCK RD. APPROX. 6.7 MILES TO AN INTERSECTION. TURN RIGHT (WEST) ONTO A LEASE ROAD AND GO APPROX. 0.9 MILES, ARRIVING AT A FORK IN THE ROAD. CONTINUE FORWARD (SOUTHWEST) AND GO APPROX. 0.4 MILES ARRIVING AT A FORK IN THE ROAD. CONTINUE FORWARD (SOUTHWEST) AND GO APPROX. 0.4 MILES, ARRIVING AT A FORK IN THE ROAD. TURN LEFT (SOUTHWEST) AND GO APPROX. 0.3 MILES, ARRIVING AT A FORK IN THE ROAD, SOUTH OF THE NOYE (WATER) TANK. TURN RIGHT (WEST) AND GO APPROX. 2.9 MILES, ARRIVING AT A FORK IN THE ROAD. TURN RIGHT (WEST) AND GO APPROX. 1.2 MILES, ARRIVING AT A FORK IN THE ROAD. TURN RIGHT (NORTHWEST) AND GO APPROX. 0.9 MILES, ARRIVING AT A FOUR-WAY INTERSECTION. TURN LEFT (SOUTHWEST) AND GO APPROX. 0.7 MILES, ARRIVING AT THE BEGINNING OF THE PROPOSED ROAD (OPTION 2).

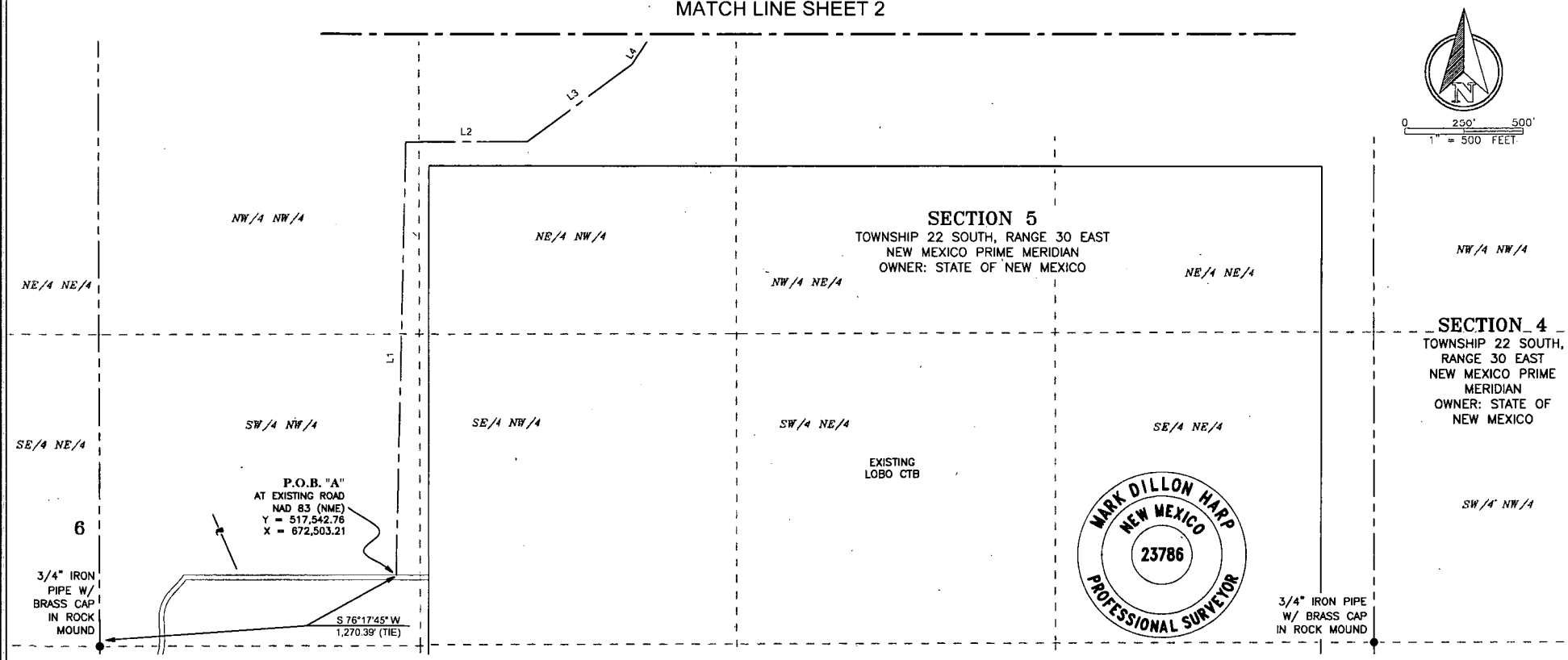
JAMES RANCH UNIT DI 12 BS2-1E #267H
LOCATED 550 FEET FROM THE WEST LINE AND 920 FEET FROM THE SOUTH LINE OF SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

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

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:	8-13-2018	PROJECT NO.	20180711749
DRAWN BY:	JC	SCALE:	1" = 10,000'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	DL	REVISION:	NO

MATCH LINE SHEET 2



GENERAL NOTES

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

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:	7-25-2019
DRAWN BY:	AI
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017111946
SCALE:	1" = 500'
SHEET:	1 OF 3
REVISION:	4

PLAT OF:

PROPOSED CENTERLINE OF ACCESS ROADS FOR:

XTO PERMIAN OPERATING, LLC.

JAMES RANCH UNIT DI 12

SITUATED IN SECTIONS 4 AND 5, TOWNSHIP 22 SOUTH, RANGE 30 EAST, AND SECTIONS 32 AND 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

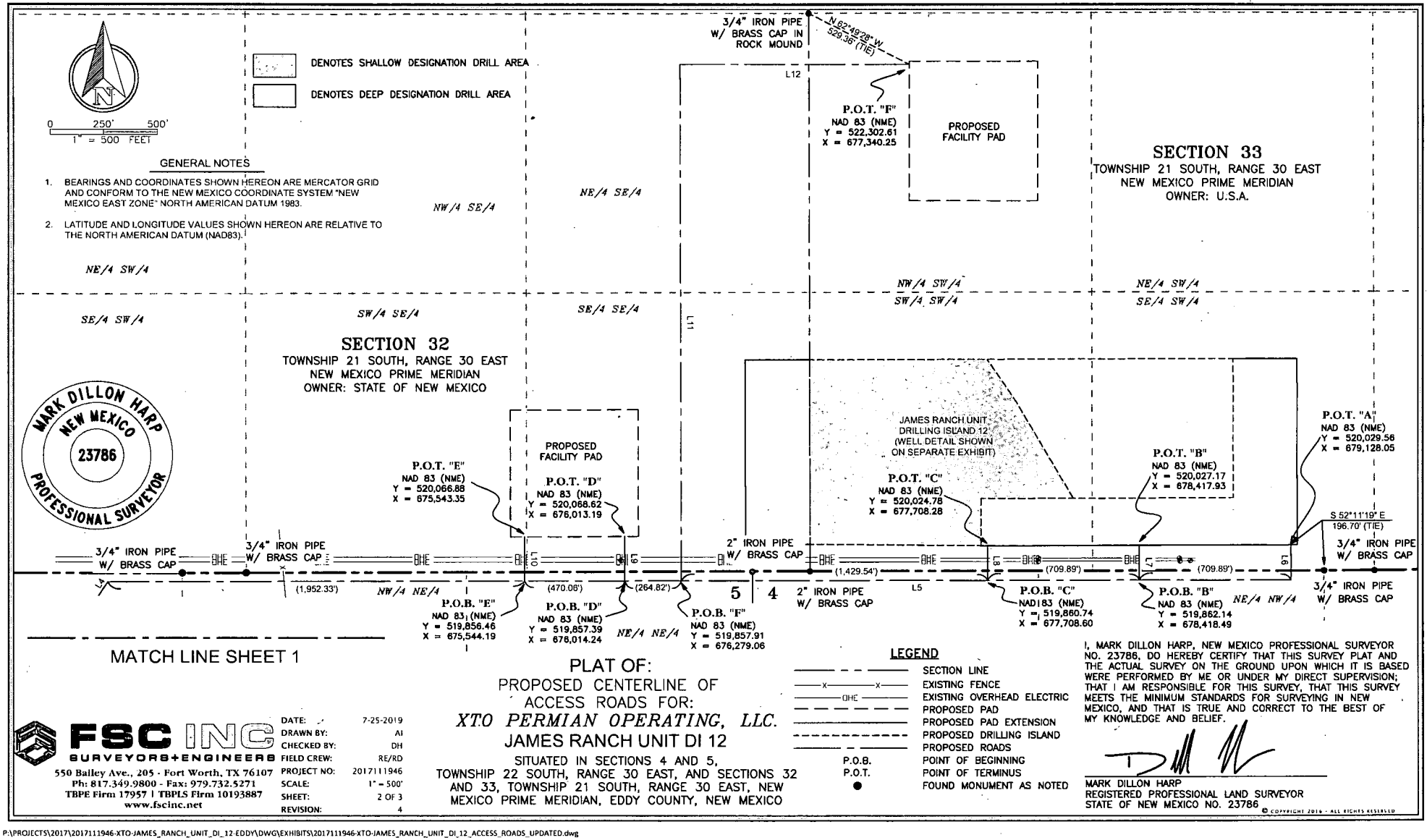
LEGEND

	SECTION LINE
-X-X-	EXISTING FENCE
OHE	EXISTING OVERHEAD ELECTRIC
-P-P-	EXISTING PIPELINE
	PROPOSED PAD
	PROPOSED PAD EXTENSION
	PROPOSED DRILLING ISLAND
	PROPOSED ROAD
P.O.B.	POINT OF BEGINNING
P.O.T.	POINT OF TERMINUS
●	FOUND MONUMENT AS NOTED

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

P:\PROJECTS\2017\2017111946-XTO-JAMES_RANCH_UNIT_DI_12-EDDY\DWG\EXHIBITS\2017111946-XTO-JAMES_RANCH_UNIT_DI_12_ACCESS_ROADS_UPDATED.dwg



PLAT OF:

PROPOSED CENTERLINE OF ACCESS ROADS FOR:

XTO PERMIAN OPERATING, LLC.

JAMES RANCH UNIT DI 12

SITUATED IN SECTIONS 4 AND 5, TOWNSHIP 22 SOUTH, RANGE 30 EAST, AND SECTIONS 32 AND 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

LEGEND

— — —	SECTION LINE
—x—x—	EXISTING FENCE
—OHE—	EXISTING OVERHEAD ELECTRIC
— — —	PROPOSED PAD
———	PROPOSED PAD EXTENSION
- - - - -	PROPOSED DRILLING ISLAND
— - —	PROPOSED ROADS
P.O.B.	POINT OF BEGINNING
P.O.T.	POINT OF TERMINUS
●	FOUND MONUMENT AS NOTED

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

DATE:	7-25-2019
DRAWN BY:	AI
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017111946
SCALE:	1" = 500'
SHEET:	2 OF 3
REVISION:	4

P:\PROJECTS\2017\2017111946-XTO-JAMES_RANCH_UNIT_DI_12-EDDY\DWG\EXHIBITS\2017111946-XTO-JAMES_RANCH_UNIT_DI_12_ACCESS_ROADS_UPDATED.dwg

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 01°11'50" E	1837.22'
L2	N 89°49'18" E	518.26'
L3	N 53°09'21" E	549.24'
L4	N 33°03'37" E	169.50'
L5	N 89°53'12" E	5536.53'
L6	N 00°06'48" W	166.01'

LINE TABLE "B"

L7	N 00°11'34" W	165.02'

LINE TABLE "C"

L8	N 00°06'48" W	164.04'

LINE TABLE "D"

L9	N 00°17'11" W	211.24'

LINE TABLE "E"

L10	N 00°13'46" W	210.43'

LINE TABLE "F"

L11	N 00°12'23" W	2444.63'
L12	N 89°59'44" E	1070.00'

TOTAL LENGTH = 13,042.12 FEET
OR 790.43 RODS

JAMES RANCH UNIT DI 12 PROPOSED ACCESS ROADS DESCRIPTION:

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 13,042.12 FEET, 790.43 RODS, OR 2.47 MILES IN LENGTH CROSSING SECTIONS 4 AND 5, TOWNSHIP 22 SOUTH, RANGE 30 EAST, AND SECTIONS 32 AND 33, TOWNSHIP 21 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 8.91 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

SW/4 NW/4 SECTION 5 = 1,022.43 FEET = 61.97 RODS = 0.70 OF AN ACRE
NW/4 NW/4 SECTION 5 = 872.10 FEET = 52.85 RODS = 0.60 OF AN ACRE
NE/4 NW/4 SECTION 5 = 1,523.62 FEET = 92.34 RODS = 1.05 ACRES
NW/4 NE/4 SECTION 5 = 1,337.12 FEET = 81.04 RODS = 0.92 OF AN ACRE
NE/4 NE/4 SECTION 5 = 1,469.70 FEET = 89.07 RODS = 0.98 OF AN ACRE
NW/4 NW/4 SECTION 4 = 1,381.80 FEET = 83.74 RODS = 0.94 OF AN ACRE
NE/4 NW/4 SECTION 4 = 1,270.96 FEET = 77.03 RODS = 0.86 OF AN ACRE
SW/4 SE/4 SECTION 32 = 166.70 FEET = 10.10 RODS = 0.10 OF AN ACRE
SE/4 SE/4 SECTION 32 = 1,487.30 FEET = 90.14 RODS = 1.04 ACRES
NE/4 SE/4 SECTION 32 = 1,679.66 FEET = 101.80 RODS = 1.16 ACRES
SW/4 SW/4 SECTION 33 = 119.02 FEET = 7.21 RODS = 0.08 OF AN ACRE
NW/4 SW/4 SECTION 33 = 470.05 FEET = 28.49 RODS = 0.32 OF AN ACRE
SE/4 SW/4 SECTION 33 = 241.66 FEET = 14.65 RODS = 0.16 OF AN ACRE

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

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:	7-25-2019
DRAWN BY:	AI
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017111946
SCALE:	
SHEET:	3 OF 3
REVISION:	4

PLAT OF:
PROPOSED CENTERLINE OF ACCESS ROADS FOR:
XTO PERMIAN OPERATING, LLC.
JAMES RANCH UNIT DI 12

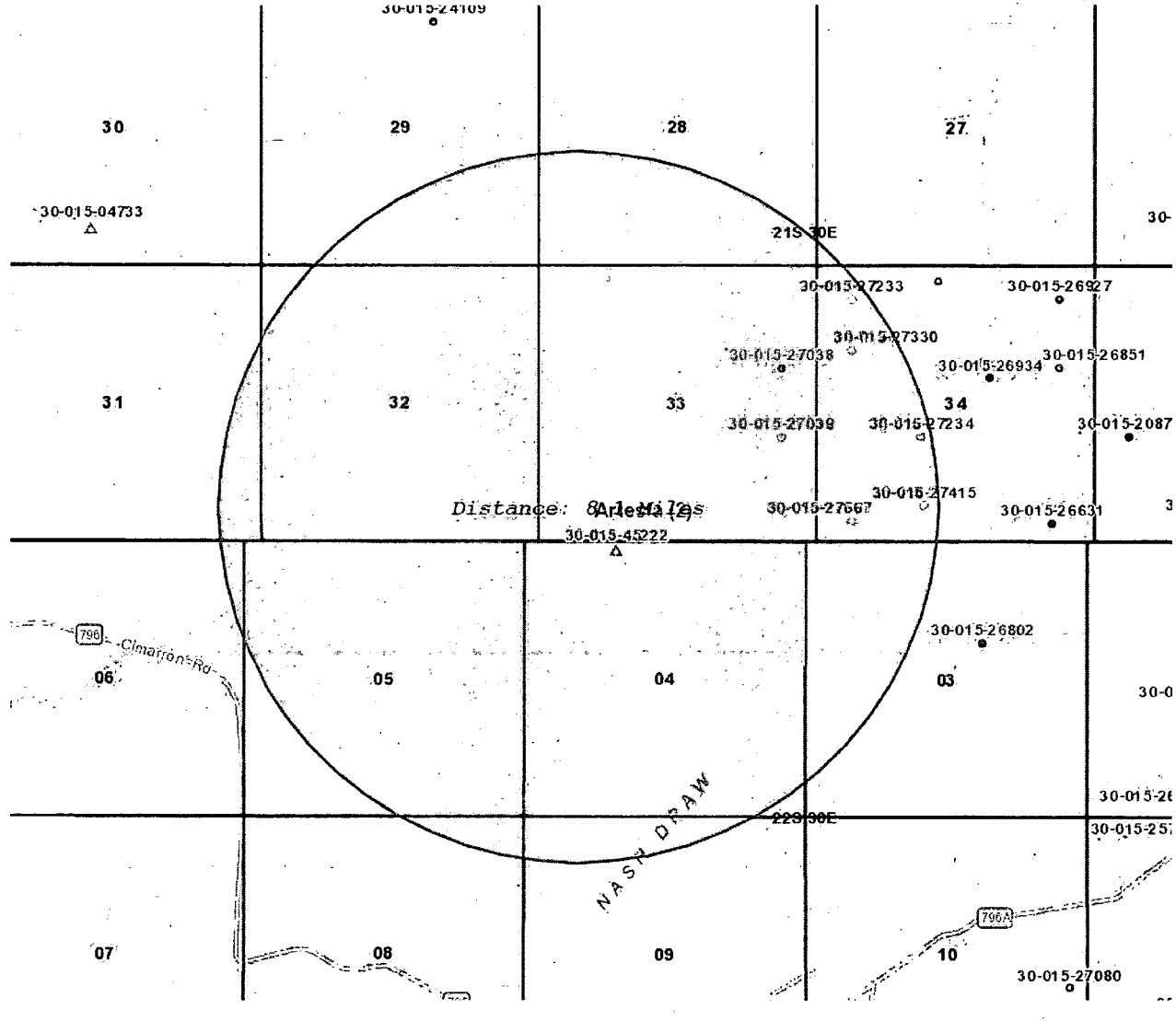
SITUATED IN SECTIONS 4 AND 5, TOWNSHIP 22 SOUTH, RANGE 30 EAST, AND SECTIONS 32 AND 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

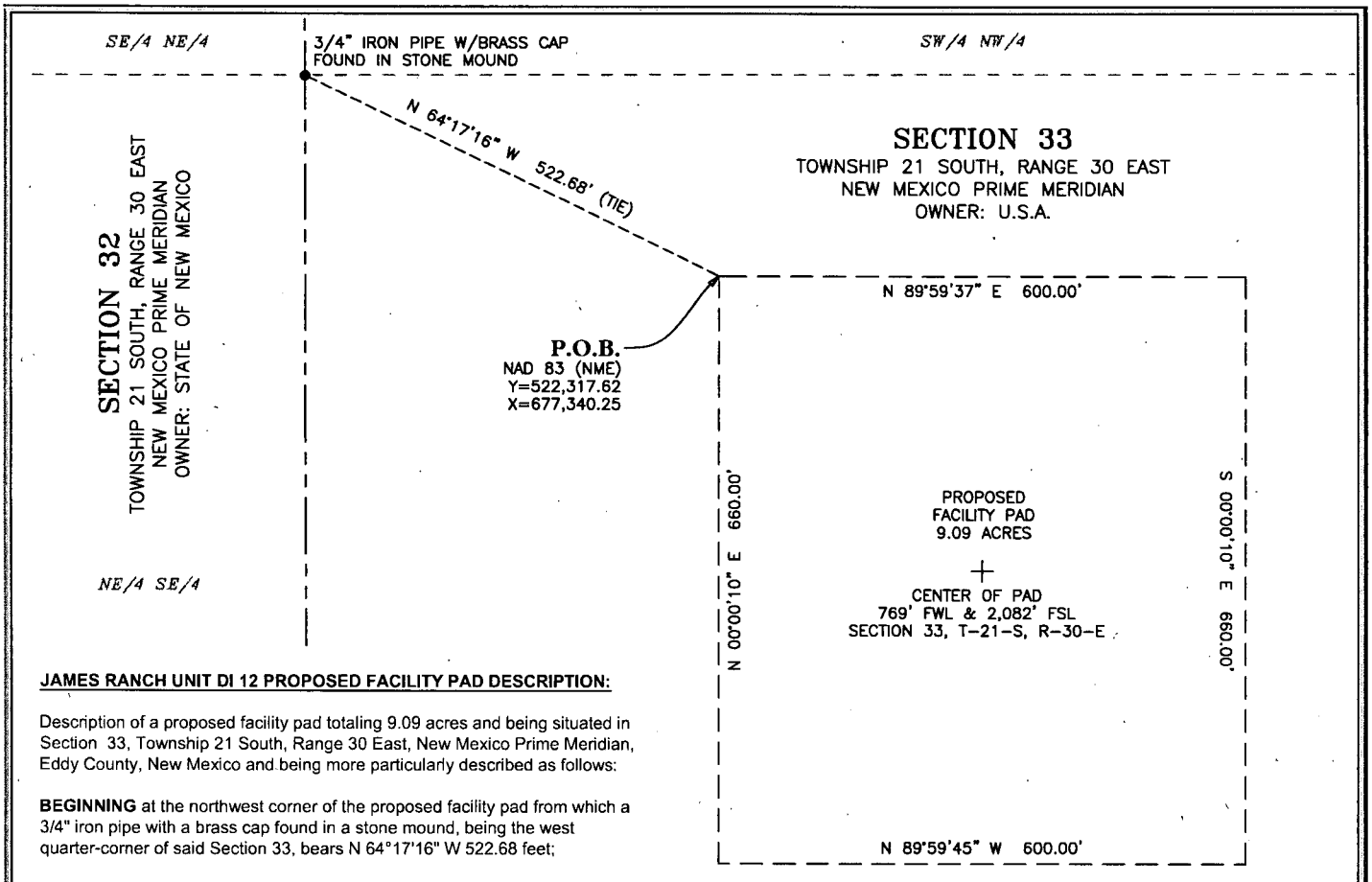
I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS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

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

P:\PROJECTS\2017\2017111946-XTO-JAMES_RANCH_UNIT_DI_12-EDDY\DWG\EXHIBITS\2017111946-XTO-JAMES_RANCH_UNIT_DI_12_ACCESS_ROADS_UPDATED.dwg

James Ranch Unit DI 12 1-Mile Map





JAMES RANCH UNIT DI 12 PROPOSED FACILITY PAD DESCRIPTION:

Description of a proposed facility pad totaling 9.09 acres and being situated in Section 33, Township 21 South, Range 30 East, New Mexico Prime Meridian, Eddy County, New Mexico and being more particularly described as follows:

BEGINNING at the northwest corner of the proposed facility pad from which a 3/4" iron pipe with a brass cap found in a stone mound, being the west quarter-corner of said Section 33, bears N 64°17'16" W 522.68 feet;

THENCE over and across said Section 33, the following courses and distances:

N 89°59'37" E, a distance of 600.00 feet to a point;

S 00°00'10" E, a distance of 660.00 feet to a point;

N 89°59'45" W, a distance of 600.00 feet to a point;

N 00°00'10" W, a distance of 660.00 feet to the POINT OF BEGINNING containing a total of **9.09 acres**, more or less.

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

NW/4 SW/4 Section 33 = 9.09 ACRES

GENERAL NOTES

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

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

LEGEND

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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 PERMIAN OPERATING, LLC.

PROPOSED FACILITY PAD
JAMES RANCH UNIT DI 12

SURVEY FOR A PROPOSED FACILITY PAD SITUATED IN THE SW/4 OF SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

DATE:	07-22-2019	PROJECT NO:	2017111946
DRAWN BY:	AW	SCALE:	1" = 200'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RD	REVISION:	2

P:\PROJECTS\2017\2017111946-XTO-JAMES RANCH UNIT DI 12-EDDY\DWG\FACILITY PAD\2017111946-XTO-JAMES RANCH UNIT DI 12 FACILITY PAD NORTH.dwg

JAMES RANCH UNIT DI 12 PROPOSED FACILITY PAD DESCRIPTION:

Description of a proposed facility pad totaling 8.26 acres and being situated in Section 32, Township 21 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" iron pipe with a brass cap found, being the southeast corner of said Section 32, bears S 78°23'23" E 817.33 feet;

THENCE over and across said Section 32, the following courses and distances:

S 89°47'17" W, a distance of 600.00 feet to a point;

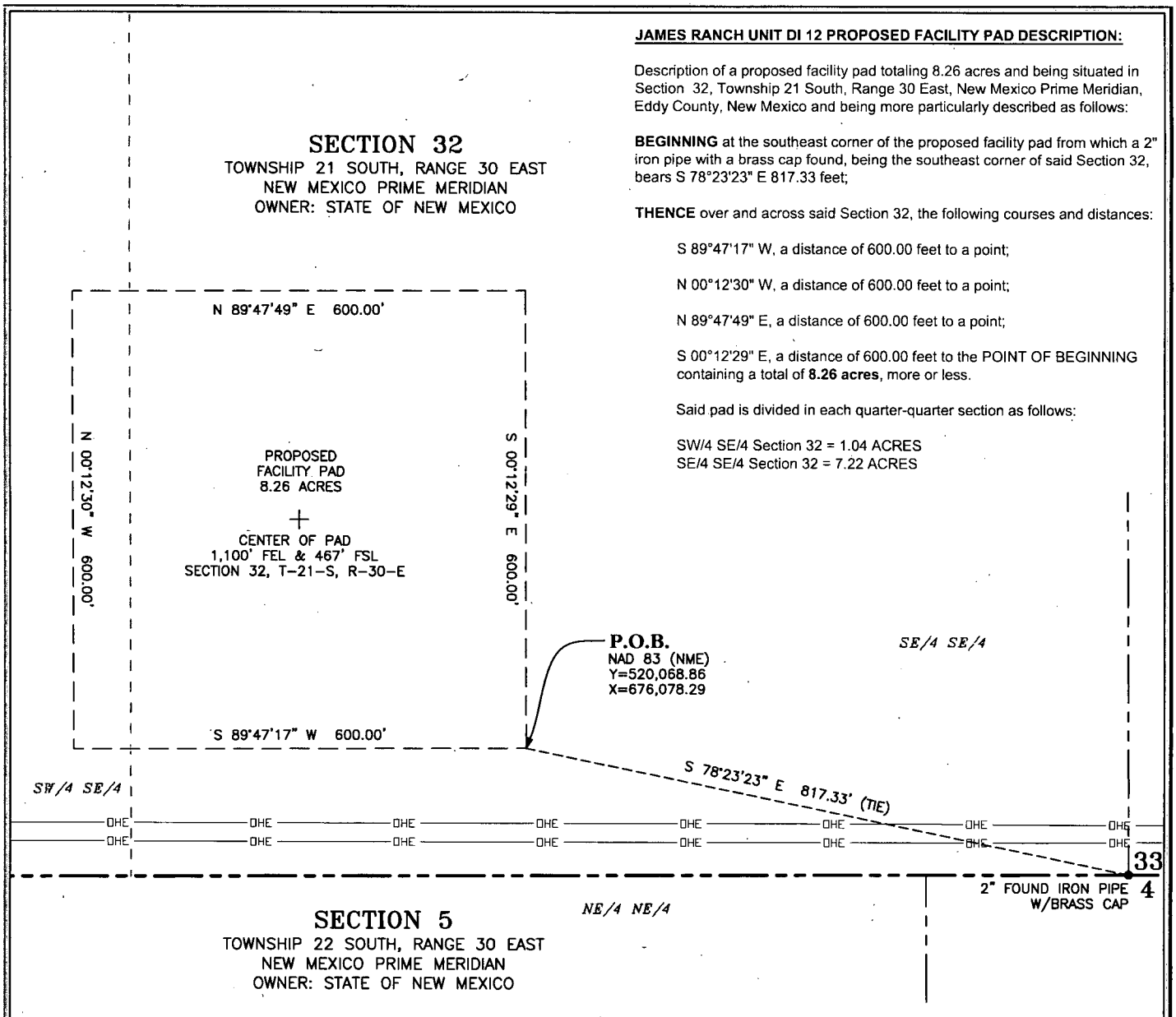
N 00°12'30" W, a distance of 600.00 feet to a point;

N 89°47'49" E, a distance of 600.00 feet to a point;

S 00°12'29" E, a distance of 600.00 feet to the POINT OF BEGINNING containing a total of **8.26 acres**, more or less.

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

SW/4 SE/4 Section 32 = 1.04 ACRES
SE/4 SE/4 Section 32 = 7.22 ACRES



GENERAL NOTES

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

0 100' 200'
1" = 200 FEET

LEGEND

SECTION LINE
PROPOSED FACILITY PAD
OHE EXISTING OVERHEAD ELECTRIC
P.O.B. POINT OF BEGINNING
● FOUND MONUMENT AS NOTED

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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

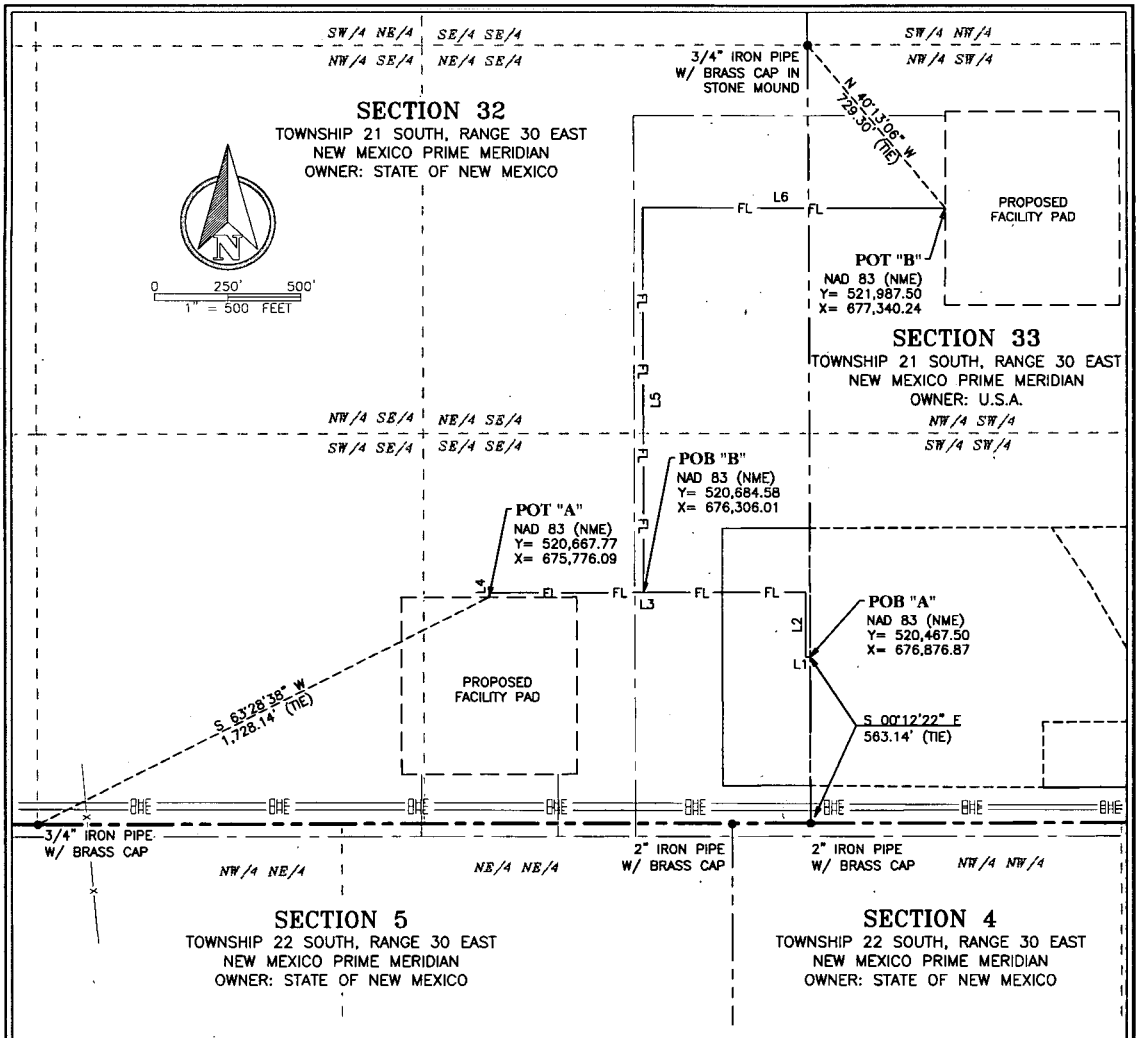
XTO PERMIAN OPERATING, LLC.

PROPOSED FACILITY PAD
JAMES RANCH UNIT DI 12

SURVEY FOR A PROPOSED FACILITY PAD SITUATED IN THE SE/4 OF SECTION 32, TOWNSHIP 21 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

DATE:	07-22-2019	PROJECT NO:	2017111946
DRAWN BY:	AW	SCALE:	1" = 200'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RD	REVISION:	NO

P:\PROJECTS\2017\2017111946-XTO-JAMES RANCH UNIT DI 12-EDDY\DWG\FACILITY PAD\2017111946-XTO-JAMES RANCH UNIT DI 12 FACILITY PAD SOUTH.dwg



JAMES RANCH UNIT DI 12 PROPOSED BURIED AND SURFACE FLOW LINES
DESCRIPTION:

SURVEY OF A STRIP OF LAND 3,676.21 FEET, 222.80 RODS, OR 0.70 MILES IN LENGTH CROSSING SECTIONS 32 AND 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO AND BEING 75.0 FEET RIGHT AND 75.0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE SURVEY, COMPRISING OF 11.79 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

SE/4 SE/4 SECTION 32 = 1,872.62 FEET = 113.49 RODS = 1.61 ACRES
NE/4 SE/4 SECTION 32 = 1,334.70 FEET = 80.89 RODS = 4.60 ACRES
NW/4 SW/4 SECTION 33 = 468.89 FEET = 28.42 RODS = 5.58 ACRES

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	S 89°15'19" W	15.03'
L2	N 00°11'13" W	219.29'
L3	S 89°47'30" W	1,085.10'
L4	S 00°11'30" E	14.88'

LINE TABLE "B"

L5	N 00°12'23" W	1,302.99'
L6	S 89°59'49" E	1,038.92'

TOTAL LENGTH = 3,676.21 FEET
OR 222.80 RODS

GENERAL NOTES

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

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

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- EXISTING FENCE
- EXISTING OVERHEAD ELECTRIC
- PROPOSED PAD
- PROPOSED PAD EXTENSION
- PROPOSED DRILLING ISLAND
- PROPOSED BURIED AND SURFACE FLOW LINES
- PROPOSED ROADS
- P.O.B. POINT OF BEGINNING
- P.O.T. POINT OF TERMINUS
- FOUND MONUMENT AS NOTED

PLAT OF:
PROPOSED CENTERLINE OF BURIED AND SURFACE FLOW LINES FOR:
XTO PERMIAN OPERATING, LLC.
JAMES RANCH UNIT DI 12
SITUATED IN SECTIONS 32 AND 33,
TOWNSHIP 21 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

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:	07-19-2019
DRAWN BY:	AI/TM
CHECKED BY:	DH
FIELD CREW:	RE/MR
PROJECT NO:	2017111946
SCALE:	1" = 500'
SHEET:	1 OF 1
REVISION:	2

P:\PROJECTS\2017\2017111946-XTO-JAMES_RANCH_UNIT_DI_12-EDDY\DWG\EXHIBITS\2017111946-XTO-JAMES_RANCH_UNIT_DI_12_FLOW_LINE_FINAL_07-19-2019.dwg

EXHIBIT A

QUANTITIES TABLE - SEC 5, T22S, R30E		
LOCATION	LENGTH	AREA
LOT 1	135.39 FT./8.20 RODS	0.342 ACRES

QUANTITIES TABLE - SEC 32, T21S, R30E		
LOCATION	LENGTH	AREA
SE/4 OF SE/4	1320.88 FT./80.05 RODS	3.336 ACRES
NE/4 OF SE/4	1895.89 FT./114.91 RODS	4.787 ACRES

QUANTITIES TABLE - SEC 33, T21S, R30E		
LOCATION	LENGTH	AREA
NW/4 OF SW/4	1070.29 FT./64.87 RODS	2.701 ACRES

SECTION 32
TOWNSHIP 21 SOUTH
RANGE 30 EAST
N.M.P.M.
STATE OF NEW MEXICO

PROPOSED EASEMENT
3216.77 Feet, 194.96 Rods
SEC 32, T21S, R30E

SECTION 33
TOWNSHIP 21 SOUTH
RANGE 30 EAST
N.M.P.M.
BUREAU OF LAND MANAGEMENT

PROPOSED EASEMENT
1070.29 Feet, 64.87 Rods
SEC 33, T21S, R30E

N19°41'29"W - 3044.75'

Y=522,317.95'
X=677,885.18'
LAT.=32.4351402°
LONG.=-103.8907388°

℄ PROP. 110' WIDE PERM. EASEMENT

CENTERLINE PROPOSED 110' WIDE PERMANENT EASEMENT
TOTAL LINEAR FEET = 4,422.45
TOTAL RODS = 268.03
TOTAL MILES = 0.84

PROPOSED 110' WIDE PERMANENT EASEMENT
TOTAL ACREAGE = 11.166

NW/4 OF SE/4 | NE/4 OF SE/4 | Future Pad | NE/4 OF SW/4
NW/4 OF SW/4
SW/4 OF SE/4 | Future Pad | SE/4 OF SE/4 | SW/4 OF SW/4 | SE/4 OF SW/4

L1 L2 L3

N73°58'18"E 494.63'

℄ Future Aggie Compressor Station Mainline MSO Lateral

Perm. MSO Surface Site

Y=519,765.68'
X=676,134.50'
LAT.=32.4281445°
LONG.=-103.8964471°

LOT 3 | LOT 4 | LOT 2 | LOT 1

Future Balto Laydown Yard

℄ Future BEU Phase 2 MSO Corridor

SECTION 5
TOWNSHIP 22 SOUTH
RANGE 30 EAST
N.M.P.M.
STATE OF NEW MEXICO

PROPOSED EASEMENT
135.39 Feet, 8.20 Rods
SEC 5, T22S, R30E

Future Husky MSO Facility

GEODETIC
0.23432°
8.91°
MAGNETIC
N
GRID

℄ 110' WIDE PERM. EASEMENT		
LINE	BEARING	DISTANCE
L1	N00°12'51"W	2606.95'
L2	N89°59'23"E	1760.53'
L3	S00°05'34"W	54.97'

XTO HOLDINGS, LLC

Revisions

Project: PROPOSED 110' WIDE PERMANENT EASEMENT
JRU DI 12 MSO TIE-IN
SECTION 5, T22S, R30E
SECTIONS 32 & 33, T21S, R30E
N.M.P.M., EDDY COUNTY, NEW MEXICO

Date: 6/19/2019 G:\2019\396569\ROW\E-6569ROW(OVERALL)A

Page 1 of 1

SURVEYING & MAPPING INC.
2004 W. Grande Blvd.
Tyler, Texas 75703
(903) 581-7759

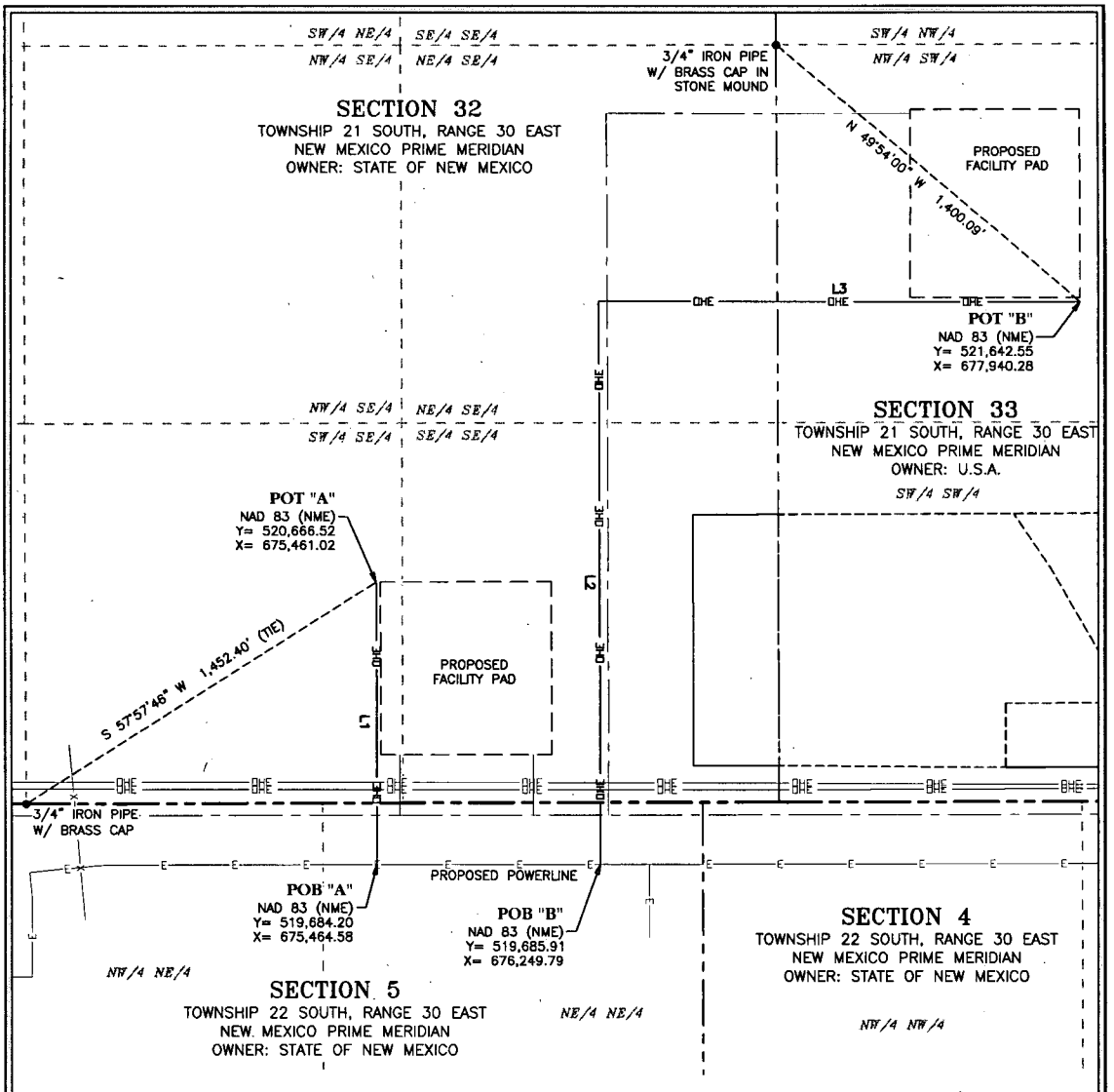
Checked By C.G.B.

1000' 500' 0 1000'
1" = 1000'

= ℄ Easement

NOTES:
BEARINGS, DISTANCES & AREAS ARE GRID BASED ON THE TRANSVERSE MERCATOR PROJECTION OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE (3001), NAD 83 (2011) US SURVEY FEET AS DERIVED FROM GPS OBSERVATIONS.
SURVEYOR HAS NOT ABSTRACTED TITLE. OWNERSHIP INFORMATION SHOWN HEREON IS BASED ON DATA PROVIDED BY OTHERS.
℄ PROPOSED EASEMENT IS BASED ON AN ACTUAL SURVEY PERFORMED ON THE GROUND UNDER MY SUPERVISION ON 5/12/2019.
NO GUARANTEE IS GIVEN OR IMPLIED BY E.L.S. SURVEYING AND MAPPING, INC. AS TO THE EXACT LOCATION OF EXISTING PIPELINES OR UNDER GROUND UTILITIES. ALSO THERE IS NO GUARANTEE GIVEN OR IMPLIED THAT WE HAVE LOCATED ALL EXISTING PIPELINES OR UNDER GROUND UTILITIES.

Drafter: KRH | FB/PG 2563/35; 2605/5 | Job No. 396569 | Map No. E-6569ROW(OVERALL)A



JAMES RANCH UNIT DI 12 PROPOSED OVERHEAD ELECTRIC LINE DESCRIPTION:

SURVEY OF A STRIP OF LAND 4,636.75 FEET, 281.02 RODS, OR 0.88 MILES IN LENGTH CROSSING SECTIONS 32 AND 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, AND SECTION 5, 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 3.20 ACRES AND DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

SW/4 SE/4 SECTION 32 = 766.59 FEET = 46.46 RODS = 0.53 OF AN ACRE
SE/4 SE/4 SECTION 32 = 1,320.36 FEET = 80.02 RODS = 0.91 ACRES
NE/4 SE/4 SECTION 32 = 1,049.90 FEET = 63.63 RODS = 0.72 ACRES
NW/4 SW/4 SECTION 33 = 1,067.68 FEET = 64.71 RODS = 0.74 OF AN ACRE
NE/4 NE/4 SECTION 5 = 432.22 FEET = 26.20 RODS = 0.30 OF AN ACRE

0 250' 500'
1" = 500 FEET

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 00°12'27" W	982.33'

LINE TABLE "B"

L2	N 00°12'16" W	1,956.94'
L3	S 89°59'24" E	1,697.48'

TOTAL LENGTH = 4,636.75 FEET
OR 281.02 RODS

GENERAL NOTES

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

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- EXISTING FENCE
- EXISTING OVERHEAD ELECTRIC
- PROPOSED PAD
- PROPOSED PAD EXTENSION
- PROPOSED DRILLING ISLAND
- PROPOSED OVERHEAD ELECTRIC LINE
- PROPOSED ROADS
- P.O.B. POINT OF BEGINNING
- P.O.T. POINT OF TERMINUS
- FOUND MONUMENT AS NOTED

PLAT OF:
PROPOSED CENTERLINE OF OVERHEAD ELECTRIC LINE FOR:
XTO PERMIAN OPERATING, LLC.
JAMES RANCH UNIT DI 12

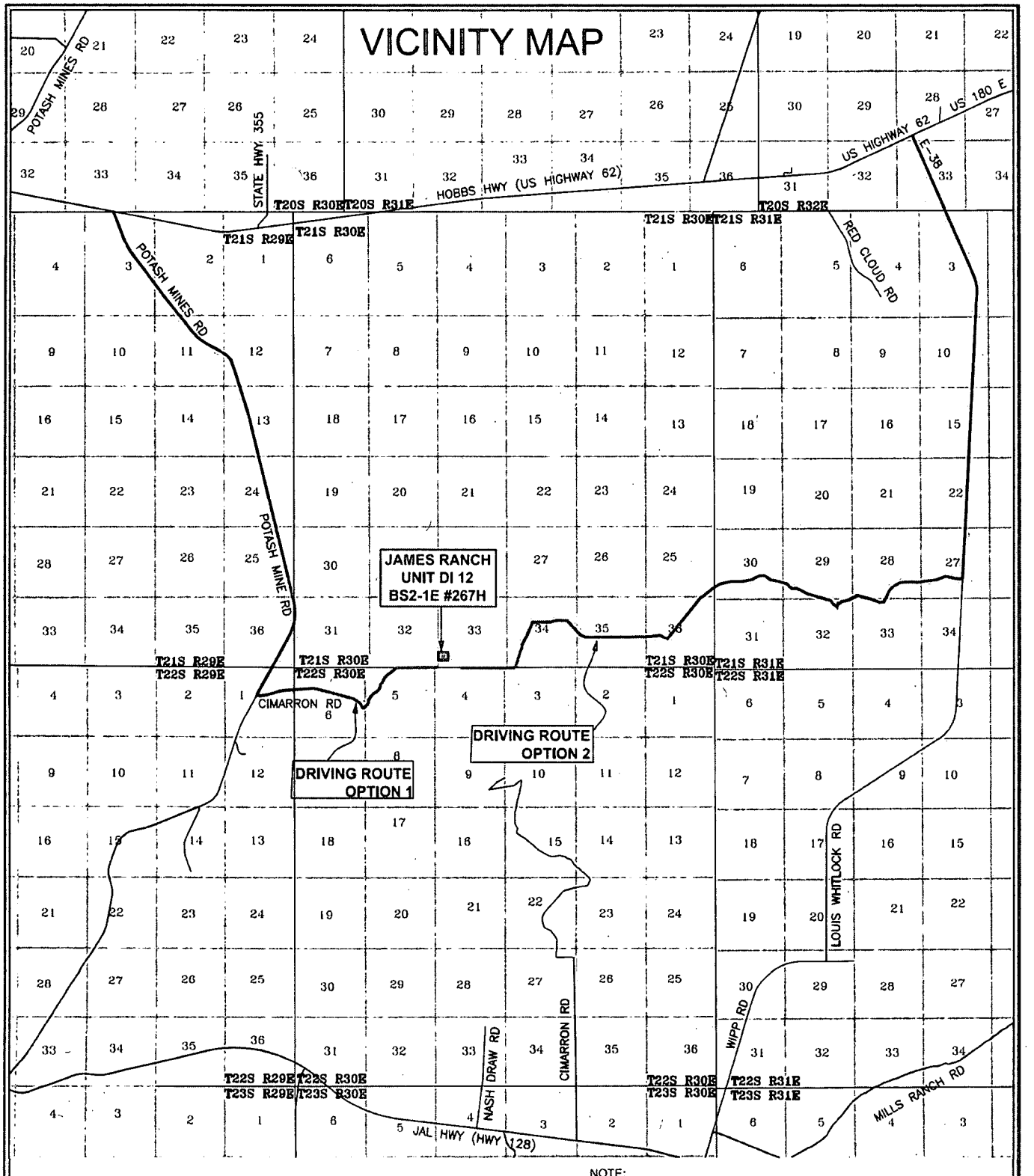
SITUATED IN SECTIONS 32 AND 33,
TOWNSHIP 21 SOUTH, RANGE 30 EAST, AND
SECTION 5, TOWNSHIP 22 SOUTH, RANGE 30 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

DATE:	07-19-2019
DRAWN BY:	AI/TM
CHECKED BY:	DH
FIELD CREW:	RE/MR
PROJECT NO:	2017111946
SCALE:	1" = 500'
SHEET:	1 OF 1
REVISION:	1

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

P:\PROJECTS\2017\2017111946-XTO-JAMES_RANCH_UNIT_DI_12-EDDY\DWG\EXHIBITS\2017111946-XTO-JAMES_RANCH_UNIT_DI_12_ELECTRIC_LINE.dwg

VICINITY MAP



NOTE:

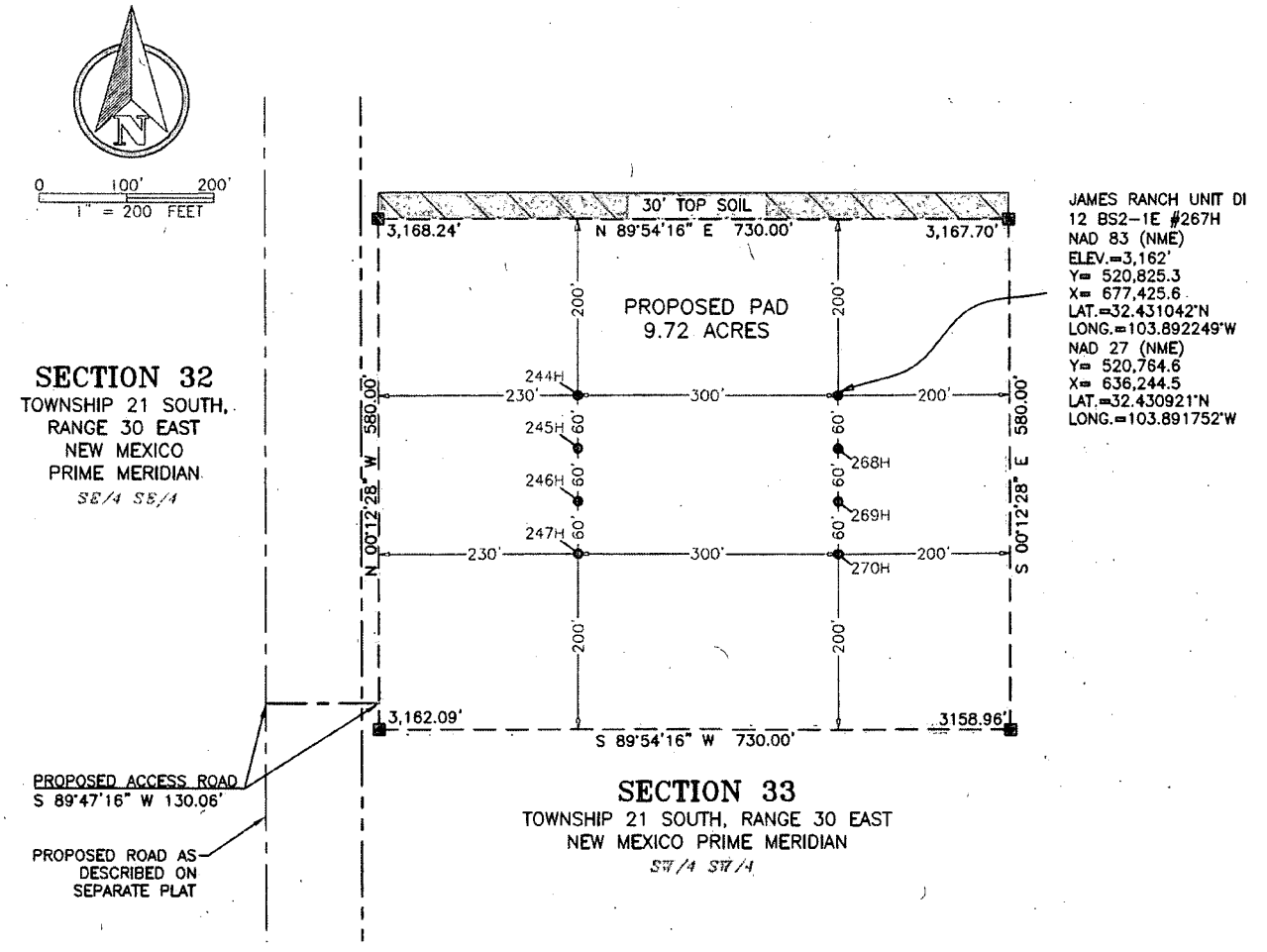
1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR DRIVING DIRECTIONS

JAMES RANCH UNIT DI 12 BS2-1E #267H
LOCATED 550 FEET FROM THE WEST LINE AND 920 FEET FROM THE SOUTH LINE OF SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

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

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:	08-10-2018
DRAWN BY:	JC
CHECKED BY:	DH
FIELD CREW:	
PROJECT NO:	2018071749
SCALE:	1"= 10,000'
SHEET:	1 OF 1
REVISION:	NO



DIRECTIONS TO THIS LOCATION:

DIRECTIONS TO THIS LOCATION (OPTION 1):
FROM THE INTERSECTION OF US HWY 62-180 (HOBBS HWY.) AND POTASH MINES RD.,GO SOUTH ON POTASH MINES RD. APPROX. 7.0 MILES TO AN INTERSECTION. TURN LEFT (EAST) ONTO CIMARRON RD. AND GO APPROX. 1.7 MILES. TURN LEFT (NORTHEAST) ONTO A LEASE RD. AND GO APPROX. 0.8 MILES, ARRIVING AT THE BEGINNING OF THE PROPOSED ROAD (OPTION1).

DIRECTIONS TO THIS LOCATION (OPTION 2):
FROM THE INTERSECTION OF US HWY 62-180 (HOBBS HWY) AND LOUIS WHITLOCK RD. (E-38), GO SOUTHEAST ON LOUIS WHITLOCK RD. APPROX. 6.7 MILES TO AN INTERSECTION. TURN RIGHT (WEST) ONTO A LEASE ROAD AND GO APPROX. 0.9 MILES, ARRIVING AT A FORK IN THE ROAD. CONTINUE FORWARD (SOUTHWEST) AND GO APPROX. 0.4 MILES ARRIVING AT A FORK IN THE ROAD. CONTINUE FORWARD (SOUTHWEST) AND GO APPROX. 0.4 MILES, ARRIVING AT A FORK IN THE ROAD. TURN LEFT (SOUTHWEST) AND GO APPROX. 0.3 MILES, ARRIVING AT A FORK IN THE ROAD, SOUTH OF THE NOYE (WATER) TANK. TURN RIGHT (WEST) AND GO APPROX. 2.9 MILES, ARRIVING AT A FORK IN THE ROAD. TURN RIGHT (WEST) AND GO APPROX. 1.2 MILES, ARRIVING AT A FORK IN THE ROAD. TURN RIGHT (NORTHWEST) AND GO APPROX. 0.9 MILES, ARRIVING AT A FOUR-WAY INTERSECTION. TURN LEFT (SOUTHWEST) AND GO APPROX. 0.7 MILES, ARRIVING AT THE BEGINNING OF THE PROPOSED ROAD (OPTION 2).

LEGEND

PROPOSED PAD
SECTION LINE
PROPOSED ROAD

NOTE:

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

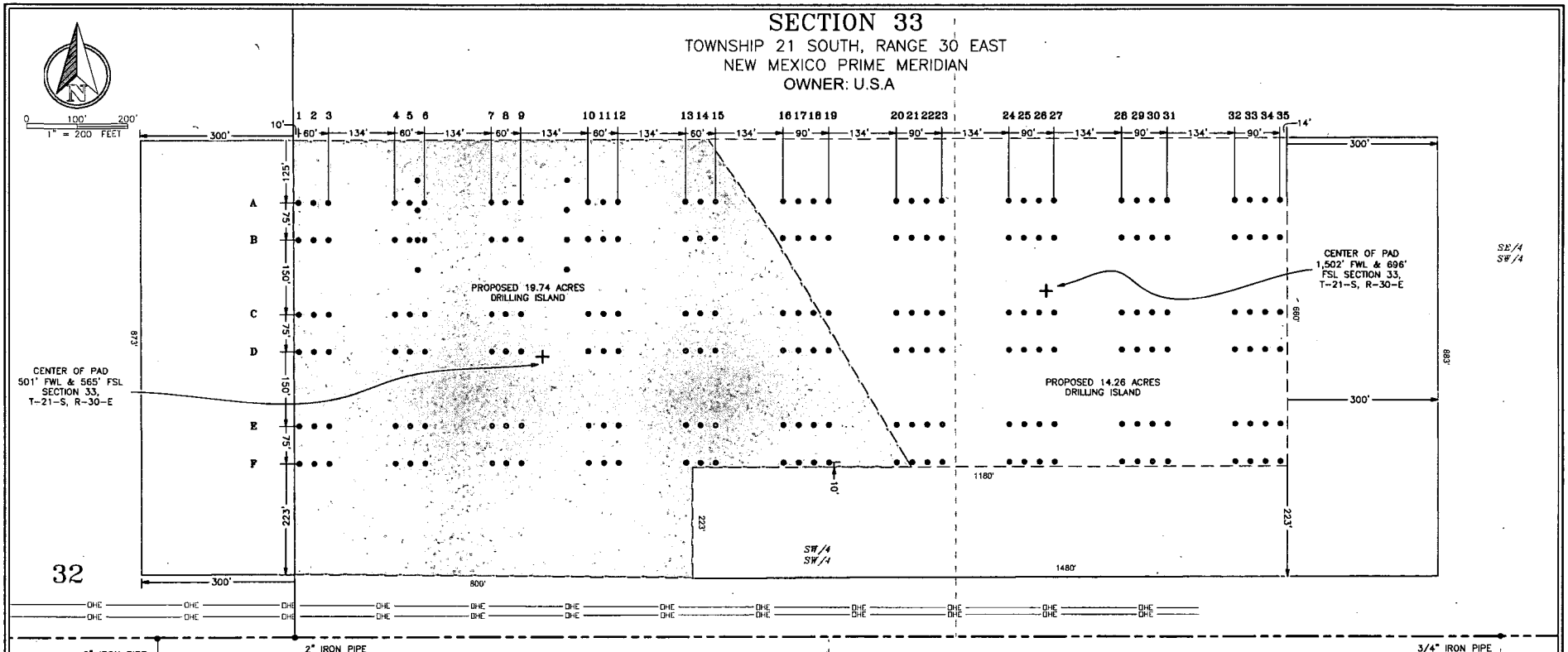
XTO PERMIAN OPERATING, LLC.

WELL SITE PLAN

JAMES RANCH UNIT DI 12 BS2-1E #267H
LOCATED 550 FEET FROM THE WEST LINE AND 920 FEET FROM THE SOUTH LINE OF SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

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:	08-10-2018	PROJECT NO:	2018071749
DRAWN BY:	RS/TM	SCALE:	1" = 200'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	DL	REVISION:	1



LEGEND

- SECTION LINE
- OHE — EXISTING OVERHEAD ELECTRIC
- PROPOSED DRILLING ISLAND
- PROPOSED PAD EXTENSION
- FOUND MONUMENT AS NOTED
- DENOTES SHALLOW DESIGNATION DRILL AREA
- DENOTES DEEP DESIGNATION DRILL AREA

GENERAL NOTES

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

WELL NAMES

- FUTURE WELL
- PERMITTED WELL
- ELKHORN WELLS

EXHIBIT OF:

OVERALL PAD LAYOUT FOR:

XTO PERMIAN OPERATING, LLC.

JAMES RANCH UNIT DI 12

DRILLING ISLAND

SITUATED IN SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

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

MARK DILLON HARP
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEICO 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

DATE:	7-22-2019
DRAWN BY:	AI/JC
CHECKED BY:	DH
FIELD CREW:	RE
PROJECT NO:	2017111946
SCALE:	1" = 200'
SHEET:	1 OF 3
REVISION:	1

P:\PROJECTS\2017\2017111946-XTO-JAMES_RANCH_UNIT_DI_12-EDDY\DWG\DRILLING_ISLAND\2017111946-XTO-JAMES_RANCH_UNIT_DI_12_DRILLING_ISLAND_PAD_LAYOUT.dwg

WELL LOCATION INFORMATION

WELL	FOOTAGE CALLS
A1	10' FWL & 875' FSL SEC. 33
A2	40' FWL & 875' FSL SEC. 33
A3	70' FWL & 875' FSL SEC. 33
A4	204' FWL & 875' FSL SEC. 33
A5	234' FWL & 875' FSL SEC. 33
A6	264' FWL & 875' FSL SEC. 33
A7	398' FWL & 876' FSL SEC. 33
A8	428' FWL & 876' FSL SEC. 33
A9	458' FWL & 876' FSL SEC. 33
A10	592' FWL & 876' FSL SEC. 33
A11	622' FWL & 876' FSL SEC. 33
A12	652' FWL & 876' FSL SEC. 33
A13	786' FWL & 876' FSL SEC. 33
A14	816' FWL & 876' FSL SEC. 33
A15	846' FWL & 877' FSL SEC. 33
A16	980' FWL & 877' FSL SEC. 33
A17	1,010' FWL & 877' FSL SEC. 33
A18	1,040' FWL & 877' FSL SEC. 33
A19	1,070' FWL & 877' FSL SEC. 33
A20	1,204' FWL & 877' FSL SEC. 33
A21	1,234' FWL & 877' FSL SEC. 33
A22	1,264' FWL & 877' FSL SEC. 33
A23	1,294' FWL & 877' FSL SEC. 33
A24	1,428' FWL & 878' FSL SEC. 33
A25	1,458' FWL & 878' FSL SEC. 33
A26	1,488' FWL & 878' FSL SEC. 33
A27	1,518' FWL & 878' FSL SEC. 33
A28	1,652' FWL & 878' FSL SEC. 33
A29	1,682' FWL & 878' FSL SEC. 33
A30	1,712' FWL & 878' FSL SEC. 33
A31	1,742' FWL & 878' FSL SEC. 33
A32	1,876' FWL & 879' FSL SEC. 33
A33	1,906' FWL & 879' FSL SEC. 33
A34	1,936' FWL & 879' FSL SEC. 33
A35	1,966' FWL & 879' FSL SEC. 33

WELL	FOOTAGE CALLS
B1	10' FWL & 800' FSL SEC. 33
B2	40' FWL & 800' FSL SEC. 33
B3	70' FWL & 800' FSL SEC. 33
B4	204' FWL & 800' FSL SEC. 33
B5	234' FWL & 800' FSL SEC. 33
B6	264' FWL & 800' FSL SEC. 33
B7	398' FWL & 801' FSL SEC. 33
B8	428' FWL & 801' FSL SEC. 33
B9	458' FWL & 801' FSL SEC. 33
B10	592' FWL & 801' FSL SEC. 33
B11	622' FWL & 801' FSL SEC. 33
B12	652' FWL & 801' FSL SEC. 33
B13	786' FWL & 801' FSL SEC. 33
B14	816' FWL & 801' FSL SEC. 33
B15	846' FWL & 802' FSL SEC. 33
B16	980' FWL & 802' FSL SEC. 33
B17	1,010' FWL & 802' FSL SEC. 33
B18	1,040' FWL & 802' FSL SEC. 33
B19	1,070' FWL & 802' FSL SEC. 33
B20	1,204' FWL & 802' FSL SEC. 33
B21	1,234' FWL & 802' FSL SEC. 33
B22	1,264' FWL & 802' FSL SEC. 33
B23	1,294' FWL & 802' FSL SEC. 33
B24	1,428' FWL & 803' FSL SEC. 33
B25	1,458' FWL & 803' FSL SEC. 33
B26	1,488' FWL & 803' FSL SEC. 33
B27	1,518' FWL & 803' FSL SEC. 33
B28	1,652' FWL & 803' FSL SEC. 33
B29	1,682' FWL & 803' FSL SEC. 33
B30	1,712' FWL & 803' FSL SEC. 33
B31	1,742' FWL & 803' FSL SEC. 33
B32	1,876' FWL & 804' FSL SEC. 33
B33	1,906' FWL & 804' FSL SEC. 33
B34	1,936' FWL & 804' FSL SEC. 33
B35	1,966' FWL & 804' FSL SEC. 33

WELL	FOOTAGE CALLS
C1	10' FWL & 650' FSL SEC. 33
C2	40' FWL & 650' FSL SEC. 33
C3	70' FWL & 650' FSL SEC. 33
C4	204' FWL & 650' FSL SEC. 33
C5	234' FWL & 650' FSL SEC. 33
C6	264' FWL & 650' FSL SEC. 33
C7	398' FWL & 651' FSL SEC. 33
C8	428' FWL & 651' FSL SEC. 33
C9	458' FWL & 651' FSL SEC. 33
C10	592' FWL & 651' FSL SEC. 33
C11	622' FWL & 651' FSL SEC. 33
C12	652' FWL & 651' FSL SEC. 33
C13	786' FWL & 651' FSL SEC. 33
C14	816' FWL & 651' FSL SEC. 33
C15	846' FWL & 652' FSL SEC. 33
C16	980' FWL & 652' FSL SEC. 33
C17	1,010' FWL & 652' FSL SEC. 33
C18	1,040' FWL & 652' FSL SEC. 33
C19	1,070' FWL & 652' FSL SEC. 33
C20	1,204' FWL & 652' FSL SEC. 33
C21	1,234' FWL & 652' FSL SEC. 33
C22	1,264' FWL & 652' FSL SEC. 33
C23	1,294' FWL & 652' FSL SEC. 33
C24	1,428' FWL & 653' FSL SEC. 33
C25	1,458' FWL & 653' FSL SEC. 33
C26	1,488' FWL & 653' FSL SEC. 33
C27	1,518' FWL & 653' FSL SEC. 33
C28	1,652' FWL & 653' FSL SEC. 33
C29	1,682' FWL & 653' FSL SEC. 33
C30	1,712' FWL & 653' FSL SEC. 33
C31	1,742' FWL & 653' FSL SEC. 33
C32	1,876' FWL & 654' FSL SEC. 33
C33	1,906' FWL & 654' FSL SEC. 33
C34	1,936' FWL & 654' FSL SEC. 33
C35	1,966' FWL & 654' FSL SEC. 33

WELL	FOOTAGE CALLS
D1	10' FWL & 575' FSL SEC. 33
D2	40' FWL & 575' FSL SEC. 33
D3	70' FWL & 575' FSL SEC. 33
D4	204' FWL & 575' FSL SEC. 33
D5	234' FWL & 575' FSL SEC. 33
D6	264' FWL & 575' FSL SEC. 33
D7	398' FWL & 576' FSL SEC. 33
D8	428' FWL & 576' FSL SEC. 33
D9	458' FWL & 576' FSL SEC. 33
D10	592' FWL & 576' FSL SEC. 33
D11	622' FWL & 576' FSL SEC. 33
D12	652' FWL & 576' FSL SEC. 33
D13	786' FWL & 576' FSL SEC. 33
D14	816' FWL & 576' FSL SEC. 33
D15	846' FWL & 577' FSL SEC. 33
D16	980' FWL & 577' FSL SEC. 33
D17	1,010' FWL & 577' FSL SEC. 33
D18	1,040' FWL & 577' FSL SEC. 33
D19	1,070' FWL & 577' FSL SEC. 33
D20	1,204' FWL & 577' FSL SEC. 33
D21	1,234' FWL & 577' FSL SEC. 33
D22	1,264' FWL & 577' FSL SEC. 33
D23	1,294' FWL & 577' FSL SEC. 33
D24	1,428' FWL & 578' FSL SEC. 33
D25	1,458' FWL & 578' FSL SEC. 33
D26	1,488' FWL & 578' FSL SEC. 33
D27	1,518' FWL & 578' FSL SEC. 33
D28	1,652' FWL & 578' FSL SEC. 33
D29	1,682' FWL & 578' FSL SEC. 33
D30	1,712' FWL & 578' FSL SEC. 33
D31	1,742' FWL & 578' FSL SEC. 33
D32	1,876' FWL & 579' FSL SEC. 33
D33	1,906' FWL & 579' FSL SEC. 33
D34	1,936' FWL & 579' FSL SEC. 33
D35	1,966' FWL & 579' FSL SEC. 33

WELL	FOOTAGE CALLS
E1	10' FWL & 425' FSL SEC. 33
E2	40' FWL & 425' FSL SEC. 33
E3	70' FWL & 425' FSL SEC. 33
E4	204' FWL & 425' FSL SEC. 33
E5	234' FWL & 425' FSL SEC. 33
E6	264' FWL & 425' FSL SEC. 33
E7	398' FWL & 426' FSL SEC. 33
E8	428' FWL & 426' FSL SEC. 33
E9	458' FWL & 426' FSL SEC. 33
E10	592' FWL & 426' FSL SEC. 33
E11	622' FWL & 426' FSL SEC. 33
E12	652' FWL & 426' FSL SEC. 33
E13	786' FWL & 426' FSL SEC. 33
E14	816' FWL & 426' FSL SEC. 33
E15	846' FWL & 427' FSL SEC. 33
E16	980' FWL & 427' FSL SEC. 33
E17	1,010' FWL & 427' FSL SEC. 33
E18	1,040' FWL & 427' FSL SEC. 33
E19	1,070' FWL & 427' FSL SEC. 33
E20	1,204' FWL & 427' FSL SEC. 33
E21	1,234' FWL & 427' FSL SEC. 33
E22	1,264' FWL & 427' FSL SEC. 33
E23	1,294' FWL & 427' FSL SEC. 33
E24	1,428' FWL & 428' FSL SEC. 33
E25	1,458' FWL & 428' FSL SEC. 33
E26	1,488' FWL & 428' FSL SEC. 33
E27	1,518' FWL & 428' FSL SEC. 33
E28	1,652' FWL & 428' FSL SEC. 33
E29	1,682' FWL & 428' FSL SEC. 33
E30	1,712' FWL & 428' FSL SEC. 33
E31	1,742' FWL & 428' FSL SEC. 33
E32	1,876' FWL & 429' FSL SEC. 33
E33	1,906' FWL & 429' FSL SEC. 33
E34	1,936' FWL & 429' FSL SEC. 33
E35	1,966' FWL & 429' FSL SEC. 33

WELL	FOOTAGE CALLS
F1	10' FWL & 350' FSL SEC. 33
F2	40' FWL & 350' FSL SEC. 33
F3	70' FWL & 350' FSL SEC. 33
F4	204' FWL & 350' FSL SEC. 33
F5	234' FWL & 350' FSL SEC. 33
F6	264' FWL & 350' FSL SEC. 33
F7	398' FWL & 351' FSL SEC. 33
F8	428' FWL & 351' FSL SEC. 33
F9	458' FWL & 351' FSL SEC. 33
F10	592' FWL & 351' FSL SEC. 33
F11	622' FWL & 351' FSL SEC. 33
F12	652' FWL & 351' FSL SEC. 33
F13	786' FWL & 351' FSL SEC. 33
F14	816' FWL & 351' FSL SEC. 33
F15	846' FWL & 352' FSL SEC. 33
F16	980' FWL & 352' FSL SEC. 33
F17	1,010' FWL & 352' FSL SEC. 33
F18	1,040' FWL & 352' FSL SEC. 33
F19	1,070' FWL & 352' FSL SEC. 33
F20	1,204' FWL & 352' FSL SEC. 33
F21	1,234' FWL & 352' FSL SEC. 33
F22	1,264' FWL & 352' FSL SEC. 33
F23	1,294' FWL & 352' FSL SEC. 33
F24	1,428' FWL & 353' FSL SEC. 33
F25	1,458' FWL & 353' FSL SEC. 33
F26	1,488' FWL & 353' FSL SEC. 33
F27	1,518' FWL & 353' FSL SEC. 33
F28	1,652' FWL & 353' FSL SEC. 33
F29	1,682' FWL & 353' FSL SEC. 33
F30	1,712' FWL & 353' FSL SEC. 33
F31	1,742' FWL & 353' FSL SEC. 33
F32	1,876' FWL & 354' FSL SEC. 33
F33	1,906' FWL & 354' FSL SEC. 33
F34	1,936' FWL & 354' FSL SEC. 33
F35	1,966' FWL & 354' FSL SEC. 33

GENERAL NOTES

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

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

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

EXHIBIT OF:
OVERALL PAD LAYOUT FOR:
XTO PERMIAN OPERATING, LLC.
JAMES RANCH UNIT DI 12
DRILLING ISLAND

SITUATED IN SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

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:	7-22-2019
DRAWN BY:	AI
CHECKED BY:	DH
FIELD CREW:	
PROJECT NO:	2017111946
SCALE:	
SHEET:	2 OF 3
REVISION:	NO

P:\PROJECTS\2017\2017111946-XTO-JAMES RANCH UNIT DI 12-EDDY\DWG\DRILLING ISLAND\2017111946-XTO-JAMES RANCH UNIT DI 12 DRILLING ISLAND PAD LAYOUT.dwg

WELL LOCATION DECODER

PERMITTED WELL

WELL NAMES	FOOTAGE
JAMES RANCH UNIT DI 12 #267H	FWL 550' & FSL 920'

GENERAL NOTES

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

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

EXHIBIT OF:
OVERALL PAD LAYOUT FOR:
XTO PERMIAN OPERATING, LLC.
JAMES RANCH UNIT DI 12
DRILLING ISLAND

SITUATED IN SECTION 33, TOWNSHIP 21 SOUTH, RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

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:	7-22-2019
DRAWN BY:	JC
CHECKED BY:	DH
FIELD CREW:	
PROJECT NO:	2017111946
SCALE:	
SHEET:	3 OF 3
REVISION:	1

P:\PROJECTS\2017\2017111946-XTO-JAMES RANCH UNIT DI 12-EDDY\DWG\DRILLING ISLAND\2017111946-XTO-JAMES RANCH UNIT DI 12 DRILLING ISLAND PAD LAYOUT.dwg

XTO Permian Operating, LLC
James Ranch Unit DI 12 Associated Well List [210 Wells]
07/23/2019

Slot Locations Correspond to JRU DI 12_OL.pdf
Exhibit Attached to APD

James Ranch Unit DI 12 Elkhorn #702: Slot E35
Surface Hole Location: 429' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 330' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #703: Slot E34
Surface Hole Location: 429' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 990' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #900H: Slot B30
Surface Hole Location: 803' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 2,310' FNL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #901: Slot E33
Surface Hole Location: 429' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 990' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #110H: Slot B29
Surface Hole Location: 803' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 2,310' FNL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #111H: Slot B31
Surface Hole Location: 803' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 1,650' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Elkhorn #112: Slot E32
Surface Hole Location: 429' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: 330' FSL & 50' FEL, Section 34, T. 21 S. R. 30 E.

James Ranch Unit DI 12 Future Well #1: Slot A1
Surface Hole Location: 875' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #2: Slot A2
Surface Hole Location: 875' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #3: Slot A3
Surface Hole Location: 875' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #4: Slot A4
Surface Hole Location: 875' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #5: Slot A5
Surface Hole Location: 875' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #6: Slot A6
Surface Hole Location: 875' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #7: Slot A7
Surface Hole Location: 876' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #8: Slot A8
Surface Hole Location: 876' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #9: Slot A9
Surface Hole Location: 876' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #10: Slot A10
Surface Hole Location: 876' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #11: Slot A11
Surface Hole Location: 876' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #12: Slot A12
Surface Hole Location: 876' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #13: Slot A13
Surface Hole Location: 876' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #14: Slot A14
Surface Hole Location: 876' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #15: Slot A15
Surface Hole Location: 877' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #16: Slot A16
Surface Hole Location: 877' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #17: Slot A17
Surface Hole Location: 877' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #18: Slot A18
Surface Hole Location: 877' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #19: Slot A19
Surface Hole Location: 877' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #20: Slot A20
Surface Hole Location: 877' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #21: Slot A21
Surface Hole Location: 877' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #22: Slot A22
Surface Hole Location: 877' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #23: Slot A23
Surface Hole Location: 877' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #24: Slot A24
Surface Hole Location: 878' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #25: Slot A25
Surface Hole Location: 878' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #26: Slot A26
Surface Hole Location: 878' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #27: Slot A27
Surface Hole Location: 878' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #28: Slot A28
Surface Hole Location: 878' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #29: Slot A29
Surface Hole Location: 878' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #30: Slot A30
Surface Hole Location: 878' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #31: Slot A31
Surface Hole Location: 878' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #32: Slot A32
Surface Hole Location: 879' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #33: Slot A33
Surface Hole Location: 879' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #34: Slot A34
Surface Hole Location: 879' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #35: Slot A35
Surface Hole Location: 879' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #36: Slot B1
Surface Hole Location: 800' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

JR James Ranch Unit DI 12 Future Well #37: Slot B2
Surface Hole Location: 800' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #38: Slot B3
Surface Hole Location: 800' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #39: Slot B4
Surface Hole Location: 800' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #40: Slot B5
Surface Hole Location: 800' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #41: Slot B6
Surface Hole Location: 800' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #42: Slot B7
Surface Hole Location: 801' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #43: Slot B8
Surface Hole Location: 801' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #44: Slot B9
Surface Hole Location: 801' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #45: Slot B10
Surface Hole Location: 801' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #46: Slot B11
Surface Hole Location: 801' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #47: Slot B12
Surface Hole Location: 801' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #48: Slot B13
Surface Hole Location: 801' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #49: Slot B14
Surface Hole Location: 801' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #50: Slot B15
Surface Hole Location: 802' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #51: Slot B16
Surface Hole Location: 802' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #52: Slot B17
Surface Hole Location: 802' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #53: Slot B18
Surface Hole Location: 802' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #54: Slot B19
Surface Hole Location: 802' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #55: Slot B20
Surface Hole Location: 802' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #56: Slot B21
Surface Hole Location: 802' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #57: Slot B22
Surface Hole Location: 802' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #58: Slot B23
Surface Hole Location: 802' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #59: Slot B24
Surface Hole Location: 803' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #60: Slot B25
Surface Hole Location: 803' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #61: Slot B26
Surface Hole Location: 803' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #62: Slot B27
Surface Hole Location: 803' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #63: Slot B28
Surface Hole Location: 803' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #64: Slot B32
Surface Hole Location: 804' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #65: Slot B33
Surface Hole Location: 804' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #66: Slot B34
Surface Hole Location: 804' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #67: Slot B35
Surface Hole Location: 804' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #68: Slot C1
Surface Hole Location: 650' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #69: Slot C2
Surface Hole Location: 650' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #70: Slot C3
Surface Hole Location: 650' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #71: Slot C4
Surface Hole Location: 650' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #72: Slot C5
Surface Hole Location: 650' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #73: Slot C6
Surface Hole Location: 650' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #74: Slot C7
Surface Hole Location: 651' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #75: Slot C8
Surface Hole Location: 651' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #76: Slot C9
Surface Hole Location: 651' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #77: Slot C10
Surface Hole Location: 651' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #78: Slot C11
Surface Hole Location: 651' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #79: Slot C12
Surface Hole Location: 651' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #80: Slot C13
Surface Hole Location: 651' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #81: Slot C14
Surface Hole Location: 651' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #82: Slot C15
Surface Hole Location: 652' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #83: Slot C16
Surface Hole Location: 652' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #84: Slot C17
Surface Hole Location: 652' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #85: Slot C18
Surface Hole Location: 652' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #86: Slot C19
Surface Hole Location: 652' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #87: Slot C20
Surface Hole Location: 652' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #88: Slot C21
Surface Hole Location: 652' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #89: Slot C22
Surface Hole Location: 652' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #90: Slot C23
Surface Hole Location: 652' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #91: Slot C24
Surface Hole Location: 653' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #92: Slot C25
Surface Hole Location: 653' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #93: Slot C26
Surface Hole Location: 653' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #94: Slot C27
Surface Hole Location: 653' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #95: Slot C28
Surface Hole Location: 653' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #96: Slot C29
Surface Hole Location: 653' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #97: Slot C30
Surface Hole Location: 653' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #98: Slot C31
Surface Hole Location: 653' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #99: Slot C32
Surface Hole Location: 654' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #100: Slot C33
Surface Hole Location: 654' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #101: Slot C34
Surface Hole Location: 654' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #102: Slot C35
Surface Hole Location: 654' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #103: Slot D1
Surface Hole Location: 575' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #104: Slot D2
Surface Hole Location: 575' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #105: Slot D3
Surface Hole Location: 575' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #106: Slot D4
Surface Hole Location: 575' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #107: Slot D5
Surface Hole Location: 575' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #108: Slot D6
Surface Hole Location: 575' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #109: Slot D7
Surface Hole Location: 575' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #110: Slot D8
Surface Hole Location: 575' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #111: Slot D9
Surface Hole Location: 576' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #112: Slot D10
Surface Hole Location: 576' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #113: Slot D11
Surface Hole Location: 576' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #114: Slot D12
Surface Hole Location: 576' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #115: Slot D13
Surface Hole Location: 576' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #116: Slot D14
Surface Hole Location: 576' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #117: Slot D15
Surface Hole Location: 577' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #118: Slot D16
Surface Hole Location: 577' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #119: Slot D17
Surface Hole Location: 577' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #120: Slot D18
Surface Hole Location: 577' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #121: Slot D19
Surface Hole Location: 577' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #122: Slot D20
Surface Hole Location: 577' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #123: Slot D21
Surface Hole Location: 577' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #124: Slot D22
Surface Hole Location: 577' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #125: Slot D23
Surface Hole Location: 577' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #126: Slot D24
Surface Hole Location: 578' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #127: Slot D25
Surface Hole Location: 578' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #128: Slot D26
Surface Hole Location: 578' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #129: Slot D27
Surface Hole Location: 578' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #130: Slot D28
Surface Hole Location: 578' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #131: Slot D29
Surface Hole Location: 578' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #132: Slot D30
Surface Hole Location: 578' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #133: Slot D31
Surface Hole Location: 578' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #134: Slot D32
Surface Hole Location: 579' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #135: Slot D33
Surface Hole Location: 579' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #136: Slot D34
Surface Hole Location: 579' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #137: Slot D35
Surface Hole Location: 579' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #138: Slot E1
Surface Hole Location: 425' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #139: Slot E2
Surface Hole Location: 425' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #140: Slot E3
Surface Hole Location: 425' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #141: Slot E4
Surface Hole Location: 425' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #142: Slot E5
Surface Hole Location: 425' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #143: Slot E6
Surface Hole Location: 425' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #144: Slot E7
Surface Hole Location: 426' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #145: Slot E8
Surface Hole Location: 426' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #146: Slot E9
Surface Hole Location: 426' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #147: Slot E10
Surface Hole Location: 426' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #148: Slot E11
Surface Hole Location: 426' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #149: Slot E12
Surface Hole Location: 426' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #150: Slot E13
Surface Hole Location: 426' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #151: Slot E14
Surface Hole Location: 426' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #152: Slot E15
Surface Hole Location: 427' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #153: Slot E16
Surface Hole Location: 427' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #154: Slot E17
Surface Hole Location: 427' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #155: Slot E18
Surface Hole Location: 427' FSL & 1,040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #156: Slot E19
Surface Hole Location: 427' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #157: Slot E20
Surface Hole Location: 427' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #158: Slot E21
Surface Hole Location: 427' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #159: Slot E22
Surface Hole Location: 427' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #160: Slot E23
Surface Hole Location: 427' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #161: Slot E24
Surface Hole Location: 428' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #162: Slot E25
Surface Hole Location: 428' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #163: Slot E26
Surface Hole Location: 428' FSL & 1,488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #164: Slot E27
Surface Hole Location: 428' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #165: Slot E28
Surface Hole Location: 428' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #166: Slot E29
Surface Hole Location: 428' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #167: Slot E30
Surface Hole Location: 428' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #168: Slot E31
Surface Hole Location: 428' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #169: Slot F1
Surface Hole Location: 350' FSL & 10' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #170: Slot F2
Surface Hole Location: 350' FSL & 40' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #171: Slot F3
Surface Hole Location: 350' FSL & 70' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #172: Slot F4
Surface Hole Location: 350' FSL & 204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #173: Slot F5
Surface Hole Location: 350' FSL & 234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #174: Slot F6
Surface Hole Location: 350' FSL & 264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #175: Slot F7
Surface Hole Location: 351' FSL & 398' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #176: Slot F8
Surface Hole Location: 351' FSL & 428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #177: Slot F9
Surface Hole Location: 351' FSL & 458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #178: Slot F10
Surface Hole Location: 351' FSL & 592' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #179: Slot F11
Surface Hole Location: 351' FSL & 622' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #180: Slot F12
Surface Hole Location: 351' FSL & 652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #181: Slot F13
Surface Hole Location: 351' FSL & 786' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #182: Slot F14
Surface Hole Location: 351' FSL & 816' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #183: Slot F15
Surface Hole Location: 352' FSL & 846' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #184: Slot F16
Surface Hole Location: 352' FSL & 980' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #185: Slot F17
Surface Hole Location: 352' FSL & 1,010' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #186: Slot F18
Surface Hole Location: 352' FSL & ,1040' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #187: Slot F19
Surface Hole Location: 352' FSL & 1,070' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #188: Slot F20
Surface Hole Location: 352' FSL & 1,204' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #189: Slot F21
Surface Hole Location: 352' FSL & 1,234' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #190: Slot F22
Surface Hole Location: 352' FSL & 1,264' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #191: Slot F23
Surface Hole Location: 352' FSL & 1,294' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #192: Slot F24
Surface Hole Location: 353' FSL & 1,428' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #193: Slot F25
Surface Hole Location: 353' FSL & 1,458' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #194: Slot F26
Surface Hole Location: 353' FSL & 1,4488' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #195: Slot F27
Surface Hole Location: 353' FSL & 1,518' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #196: Slot F28
Surface Hole Location: 353' FSL & 1,652' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #197: Slot F29
Surface Hole Location: 353' FSL & 1,682' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #198: Slot F30
Surface Hole Location: 353' FSL & 1,712' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #199: Slot F31
Surface Hole Location: 353' FSL & 1,742' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #200: Slot F32
Surface Hole Location: 354' FSL & 1,876' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #201: Slot F33
Surface Hole Location: 354' FSL & 1,906' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #202: Slot F34
Surface Hole Location: 354' FSL & 1,936' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

James Ranch Unit DI 12 Future Well #203: Slot F35
Surface Hole Location: 354' FSL & 1,966' FWL, Section 33, T. 21 S. R. 30 E.
Bottom Hole Location: TO BE DETERMINED

Well Site Locations

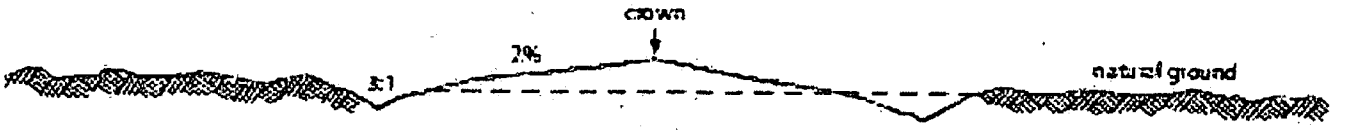
The James Ranch Unit DI 12 Program will develop economic quantities of oil and gas in the James Ranch Unit with multiple primary formations targeted. Well locations are determined based on cross-section variations and details. Locations will be selected to minimize the likelihood of encountering faults 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 James Ranch Unit DI 12 is accessed from the intersection of US Hwy 62/180 (Hobbs Hwy) and Potash Mines Road. Go South on Potash Mines Road approximately 7 miles to an intersection. Turn left (East) onto Cimarron Road and go approximately 1.7 miles. Turn left (northeast) onto a lease road and go approximately .8 miles, arriving at the beginning of the proposed road. Transportation Plan identifying existing roads that will be used to access the project area is included from Frank's Surveying marked as, 'Vicinity Map.'
   B. There are existing access roads to the proposed James Ranch Unit 12 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.** 13042.12' or 2.47 miles of new road will be necessary to access the James Ranch Unit DI 12 locations and central tank batteries.
   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 Permian Operating, LLC.
   E. **Road Dimensions.** The maximum width of the driving surface of new roads will be 30 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

- **Production Facilities**. Two (2) 600' x 600' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB). JRU DI 12 N CTB is located in the NWSW of Section 33-21S-30E NMPM, Eddy County, New Mexico [Centerpoint: 769'FWL & 2082'FSL, 33-21S-30E]. JRU DI 12 S CTB is located in SESE & SWSE of Section 32-21S-30E, NMPM, Eddy County, New Mexico [Centerpoint: 1100'FEL & 467'FSL, 32-21S-30E]. Plats of the proposed CTBs are attached. Only the area necessary to maintain the facility will be disturbed. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment.
- **Flowlines.**

  JRU DI 12 N CTB: One Hundred & Five (105) 3676.21' buried 10" or less steel or poly flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 N CTB for future production (oil, gas, water). One Hundred & Five (105) additional 5601.56' buried 10" or less steel flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 N for gas lift.

JRU DI 12 S CTB: One Hundred & Five (105) 3676.21' buried 10" or less steel or poly flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 S CTB for future production (oil, gas, water). One Hundred & Five (105) additional 3676.21' buried 10" or less steel flowlines with a maximum safety pressure rating of 1440psi (operating pressure: 750psi) are requested for the JRU DI 12 S for gas lift.
Total Flowlines to the Battery with this application: 420 buried. The anticipated width of the corridors to the CTBs is anticipated to be 150' wide.

- **Gas & Oil Pipeline.** No pipeline is being applied for with this application.
- **Disposal Facilities.** Produced water will be piped from location to a 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.** No flare is being applied for with this application.
- **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 ½ times the capacity of the largest tank and away from cut or fill areas.
- **Electrical.** All electrical poles and lines will be run in proposed lease road corridors. All lines will be primary 12,740 volt to properly run expected production equipment. 4636.75' 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.

1. **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 existing frac 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:
Rockhouse Water

Water for drilling, completion and dust control will be supplied by Rockhouse Water for sale to XTO Permian Operating, LLC. from Section 13-T17S-R33E, Eddy County, New Mexico. In the event that Rockhouse Water does not have the appropriate water for XTO at time of drilling and completion from this location, then XTO water will come from with the location of the water being in Section 21-T23S-R30E, 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 330,000 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.

2. **Construction Activities**

- 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.
- 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.
- Anticipated Caliche Locations:
    i. Pit 1: State Caliche Pit, Section 32-21S-31E
    ii. Pit 2: Private Caliche Pit, Section 16-23S-30E

3. 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.

4. Well Site Layout

A. **Rig Plat Diagrams**: There are 2 well pads in the James Ranch Unit DI 12 lease anticipated. This will allow enough space for cuts and fills and storm water control. Interim reclamation of these pads is anticipated after the drilling and completion of all wells on the pad.

   a. Well Pad A is anticipated to be: 520'x400' to support a minimum of 6 wells.

   b. Well Pad B is anticipated to be: 520'x400' to support a minimum of 8 wells.

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**: This well was staked with a V-Door orientation East.

D. A 600' x 600' area has been staked and flagged around the drill island. 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).

5. Plans for Surface Reclamation:

No surface reclamation is planned for this well. XTO Permian Operating, LLC. requests a variance to interim reclamation until all wells on the drill island have been drilled and completed, at which time, XTO Permian Operating, LLC. will contact the appropriate BLM personnel to discuss appropriate interim reclamation plans. Surface Ownership.

A. The James Ranch Unit DI 12 surface project area is 100% of the surface is under the administrative jurisdiction of the Bureau of Land Management.

B. The surface is multiple-use with the primary uses of the region for grazing and for the production of oil and gas.

12. **Other Information**

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 approximately: 1980'x883'. The drill island is not a perfect rectangle and has different dimensions, as depicted on the attached plat. The well pad associated with the drill island is 2580'x883', overlapping the drillable area of 1980'x883', and will be used for well locations for wells productive of oil and gas with no surface hole planned outside of the boundary of the approved drill island.

  West Half: 19.74acres [Centerpoint: 501'FWL & 565'FSL, 33-21S-30E]
  East Half: 14.26acres [Centerpoint: 1502'FWL & 695'FSL, 33-21S-30E]

The total size of the drill island [West and East Half Combined] is anticipated to be to: 34 acres.
The total size of the well pad, including drill island space, will be: 2580x883' or 52.30 acres.

A current detailed plat of the drill island is attached depicting the anticipated wells on the island as well as shallow and deep designation areas. 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 the onsite that no surface disturbance will be associated off of the drill island to the North. However, pad overlap (not well penetrations) can extend over the South, West, and Eastern portions of the drill island for best management practices and to maximize the use of the drill island for oil and gas development. This area is anticipated to be 300' off of the drill island for drilling, completion, and long-term maintenance operations and corridors, including flowlines and OHE, to prevent infrastructure placement on the drill island.

- **Well Sites**. Two (2) 520'x400' well pads have been staked on the drill island, known as James Ranch Unit DI 12. 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 lands with Jeffery Robertson, Bureau of Land Management Natural Resource Specialist, and the following individuals: Jim Rutley, Bureau of Land Management Geologist and Kyle Rybacki, Bureau of Land Management Cave/Karst specialist, in attendance. Well pads are allowed to fall off of the proposed edge of the drill island 300' to the South, West, and East while surface holes must remain on the drill island.
    - The wellbore paths will not leave the 1180'883' 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 James Ranch Unit DI 12 is attached.
    - 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.

- **Cultural Resources – Archaeology**: XTO Permian Operating, LLC. has made a payment for this island into the PA, except the flowline corridor, which has had a 3P archaeologist has conducted an archaeological survey of. A copy of the report has been submitted to the BLM.

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

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. The current vegetative community: none. The pad is caliche. No additional disturbance is necessary.

- **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
Contract Construction Lead
XTO Energy, Incorporated
500 W. Illinois St., Suite 100
Midland, Texas 79701
432-488-9955
james_scott@xtoenergy.com

DI 12 to Aggie MSO Lateral: XTO Permian Operating, LLC

Section 32-21S-30E (New Mexico State Land)
Section 33-21S-30E (Bureau of Land Management)
Sections 5-22S-30E (Bureau of Land Management)
Eddy County, New Mexico

Total Trunk Line Width:	110'
Total Trunk Line Length:	4422.45'
Temporary Federal Surface Disturbance:	11.166 Acres
Permanent Federal Surface Disturbance:	0 Acres [100% Reclamation]

Plat Designation Name: DI 12 to Aggie MSO Lateral Line Length: 4422.45'

Number	Purpose	Diameter	MAOP/Hydro	Material	Location
1	Oil 1	22" or Less	1440psi/1800psi	Steel	Buried
2	Oil 2	22" or Less	1440psi/1800psi	Steel	Buried
3	HP Gas 1	22" Or Less	1440psi/1800psi	Steel	Buried
4	HP Gas 2	22" or Less	1440psi/1800psi	Steel	Buried
5	Gas Lift	22" or Less	1440psi/1800psi	Steel	Buried
6	Fuel Gas	22" or Less	1440psi/1800psi	Steel	Buried
7	Condensate	22" or Less	125psi/250psi	Poly	Buried
8	Frac Water	22" or Less	125psi/250psi	Poly	Buried
9	Produced Water	22" or Less	125psi/250psi	Poly	Buried
10	Recycle Water	22" or Less	125psi/250psi	Poly	Buried
11	Fresh Water	22" or Less	125psi/250psi	Poly	Buried

AFMSS

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

PWD Data Report

10/09/2019

APD ID: 10400034155 **Submission Date:** 09/15/2018

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

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

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

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 specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Lined pit Monitor description:

Lined pit Monitor attachment:

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 attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

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 specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

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 evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

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

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 attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

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 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

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

Other PWD discharge volume (bbl/day):

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E **Well Number:** 267H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

10/09/2019

APD ID: 10400034155

Submission Date: 09/15/2018

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: JAMES RANCH UNIT DI 12 BS2-1E

Well Number: 267H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond Information

Federal/Indian APD: FED

BLM Bond number: COB000050

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment: