Form 3160-3
(June 2015)

Carlsbad Field Office
OCD Artesia RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APR 12 2019

DISTRICT II-ARTESIA O.C.D.

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
NMLC0063136A

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.
POKER LAKE / NMNM071016X

8. Lease Name and Well No.
POKER LAKE UNIT 29 BS
128H 325388

2. Name of Operator
XTO PERMIAN OPERATING LLC 373075

9. API Well No.
30-015-45880

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
PURPLE SAGE 98220

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SENE / 2310 FNL / 630 FEL / LAT 32.102218 / LONG -103.793764
At proposed prod. zone SESE / 200 FSL / 330 FEL / LAT 32.06529 / LONG -103.792857

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 29 / T25S / R31E / NMP

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

12. County or Parish
EDDY

13. State
NM

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

16. No of acres in lease
560

17. Spacing Unit dedicated to this well
800

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

19. Proposed Depth
11811 feet / 24904 feet

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3337 feet

22. Approximate date work will start*
06/01/2019

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
(Electronic Submission)

Name *(Printed/Typed)*
Kelly Kardos / Ph: (432)620-4374

Date
02/11/2019

Title
Regulatory Coordinator

Approved by *(Signature)*
(Electronic Submission)

Name *(Printed/Typed)*
Cody Layton / Ph: (575)234-5959

Date
04/05/2019

Title
Assistant Field Manager Lands & Minerals

Office
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

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/05/2019 KMP 4-18-19

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.

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Additional Operator Remarks

Location of Well

1. SHL: SENE / 2310 FNL / 630 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102218 / LONG: -103.793764 (TVD: 0 feet, MD: 0 feet)
   PPP: NENE / 330 FNL / 330 FEL / TWSP: 25S / RANGE: 31E / SECTION: 32 / LAT: 32.092154 / LONG: -103.793958 (TVD: 11811 feet, MD: 14796 feet)
   PPP: NESE / 2310 FSL / 330 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.100332 / LONG: -103.79281 (TVD: 11811 feet, MD: 12156 feet)
   BHL: SESE / 200 FSL / 330 FEL / TWSP: 26S / RANGE: 31E / SECTION: 5 / LAT: 32.06529 / LONG: -103.792857 (TVD: 11811 feet, MD: 24904 feet)

BLM Point of Contact

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

Approval Date: 04/05/2019

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.:	**NMLC-0063136A**
WELL NAME & NO.:	**Poker Lake Unit 29 BS 128H**
SURFACE HOLE FOOTAGE:	**2310' FNL & 0630' FEL**
BOTTOM HOLE FOOTAGE	**0200' FSL & 0330' FEL Sec. 05, T. 26 S., R 31 E.**
LOCATION:	**Section 29, T. 25 S., R 31 E., NMPM**
COUNTY:	**County, New Mexico**

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

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

A. DRILLING OPERATIONS REQUIREMENTS

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

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

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

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

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 Water Basin:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

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.

Medium 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 in the 3rd Bone Spring and all subsequent formations.

1. The **13-3/8** inch surface casing shall be set at approximately **1170** 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.

Formation below the 13-3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

☐ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

If cement does not circulate to surface on the intermediate casing, the cement on the production casing must come to surface.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

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

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

☐ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Excess calculates to 24% - Additional cement may be required.**

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.

C. PRESSURE CONTROL

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

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line

fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

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

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

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

    b. 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.

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

    d. 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.

e. 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.

f. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

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

E. DRILL STEM TEST

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

F. 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 030619

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 29 BS 128H
SURFACE HOLE FOOTAGE:	2310'/N & 630'/E
BOTTOM HOLE FOOTAGE	200'/S & 330'/E
LOCATION:	Section 29, T.25 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

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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.

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☐ **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)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Timing Limitation Exceptions:
The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Phantom Banks Heronries

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

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

Cave/Karst Surface Mitigation

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 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.

When crossing ephemeral drainages the pipeline 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.

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

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

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

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 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 Carlsbad Field Office at (575) 234-5972..

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.

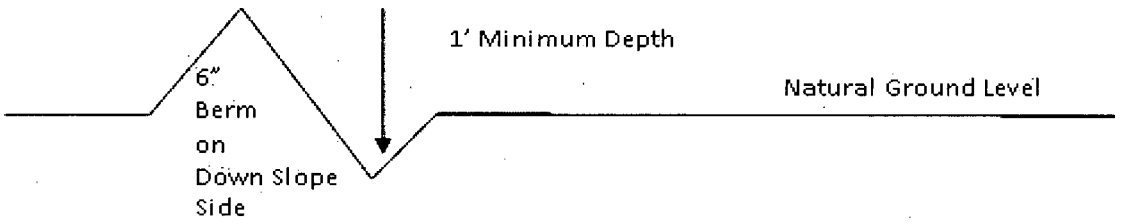
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

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

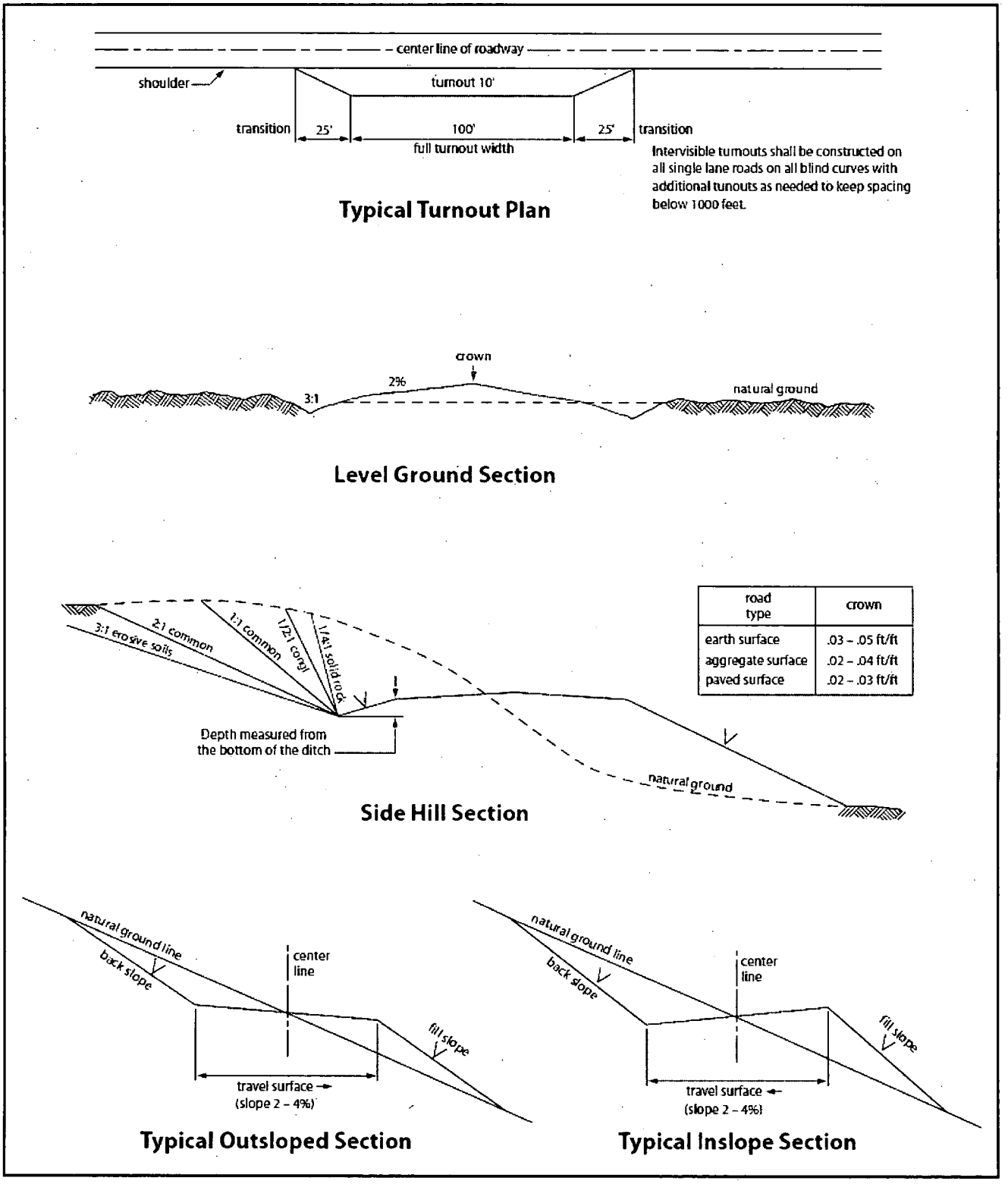


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

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

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

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

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

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

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;

b. Activities of other parties including, but not limited to:
   (1) Land clearing
   (2) Earth-disturbing and earth-moving work
   (3) Blasting
   (4) Vandalism and sabotage;

c. Acts of God.

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

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

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of 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/she 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 Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of **20** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

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

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

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

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

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible 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.

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

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

18. Special Stipulations:

a. **Lesser Prairie-Chicken:** Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted.

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 **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)

- Clearing of brush species within the 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.

() seed mixture 1	( ) seed mixture 3
( ) seed mixture 2	( ) seed mixture 4
(**X**) 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.

19. Special Stipulations:

Wildlife Mitigation Measures

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

Timing Limitation Exceptions:
The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

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.

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other

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

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

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

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

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

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

*Pounds of pure live seed:

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

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BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

04/09/2019

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: Kelly Kardos **Signed on:** 02/11/2019

Title: Regulatory Coordinator

Street Address:

City: Midland **State:** TX **Zip:** 79701

Phone: (432)620-4374

Email address: kelly_kardos@xtoenergy.com

Field Representative

Representative Name:

Street Address:

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

Phone:

Email address:

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

Application Data Report

04/09/2019

APD ID: 10400039003 **Submission Date:** 02/11/2019

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400039003 **Tie to previous NOS?** 10400013376 **Submission Date:** 02/11/2019

BLM Office: CARLSBAD **User:** Kelly Kardos **Title:** Regulatory Coordinator

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMLC0063136A **Lease Acres:** 560

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? YES **Federal or Indian agreement:** FEDERAL

Agreement number: NMNM071016X

Agreement name:

Keep application confidential? NO

Permitting Agent? NO **APD Operator:** XTO PERMIAN OPERATING LLC

Operator letter of designation:

Operator Info

Operator Organization Name: XTO PERMIAN OPERATING LLC

Operator Address: 6401 Holiday Hill Road, Bldg 5

Zip: 79707

Operator PO Box:

Operator City: Midland **State:** TX

Operator Phone: (432)682-8873

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Master Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** PURPLE SAGE **Pool Name:**

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Describe other minerals:

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:** POKER LAKE UNIT 29 BS **Number:** 4

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

Well Work Type: Drill

Well Type: CONVENTIONAL GAS WELL

Describe Well Type:

Well sub-Type: DELINEATION

Describe sub-type:

Distance to town: **Distance to nearest well:** 30 FT **Distance to lease line:** 330 FT

Reservoir well spacing assigned acres Measurement: 800 Acres

Well plat: PLU_29_BS_128H_C102_20190211084543.pdf

Well work start Date: 06/01/2019 **Duration:** 90 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number:

	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	2310	FNL	630	FEL	25S	31E	29	Aliquot SENE	32.102218	-103.793764	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0062140A	3337	0	0
KOP Leg #1	2310	FNL	630	FEL	25S	31E	29	Aliquot SENE	32.102218	-103.793764	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0062140A	-7934	11271	11271
PPP Leg #1	2310	FSL	330	FEL	25S	31E	29	Aliquot NESE	32.100332	-103.79281	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0063136A	-8474	12156	11811

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
PPP Leg #1	330	FNL	330	FEL	25S	31E	32	Aliquot NENE	32.092154	-103.793958	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-8474	14796	11811
EXIT Leg #1	330	FSL	330	FEL	26S	31E	5	Aliquot SESE	32.065647	-103.794988	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 0002790	-8474	24774	11811
BHL Leg #1	200	FSL	330	FEL	26S	31E	5	Aliquot SESE	32.06529	-103.792857	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 0002790	-8474	24904	11811

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BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

04/09/2019

APD ID: 10400039003 **Submission Date:** 02/11/2019

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	PERMIAN	3337	0	0	OTHER : Quaternary	NONE	No
2	RUSTLER	2510	826	826	SILTSTONE	USEABLE WATER	No
3	TOP SALT	2136	1200	1200	SALT	OTHER : Produced Water	No
4	BASE OF SALT	-573	3909	3909	SALT	OTHER : Produced Water	No
5	DELAWARE	-797	4133	4133	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	No
6	BONE SPRING	-4718	8054	8054	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	No
7	BONE SPRING 1ST	-5772	9108	9108	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	No
8	BONE SPRING 2ND	-6442	9778	9778	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	No
9	BONE SPRING 3RD	-7703	11039	11039	SANDSTONE	NATURAL GAS,OIL,OTHER : Produced Water	No
10	WOLFCAMP	-8130	11467	11467	SHALE	NATURAL GAS,OIL,OTHER : Produced Water	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 11811

Equipment: The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3728 psi.
Requesting Variance? YES

Variance request: A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).
Testing Procedure: All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling up on the 9-5/8", the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Choke Diagram Attachment:

PLU_29_BS_5MCM_20190131121751.pdf

BOP Diagram Attachment:

PLU_29_BS_5MBOP_20190131121806.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	1170	0	1170			1170	H-40	48	STC	1.44	1.41	DRY	5.73	DRY	5.73
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	3950	0	3950			3950	J-55	40	LTC	2.07	1.09	DRY	3.29	DRY	3.29
3	PRODUCTION	8.75	5.5	NEW	API	N	0	24904	0	11811			24904	P-110	17	BUTT	1.21	1.12	DRY	1.97	DRY	1.97

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_29_BS_128H_Csg_20190211085545.pdf

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_29_BS_128H_Csg_20190211085559.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_29_BS_128H_Csg_20190211085626.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	1170	640	1.87	12.9	1196.8	100	EconoCem-HLTRRC	None
SURFACE	Tail				300	1.35	14.8	405	100	HalCem-C	2% CaCl
INTERMEDIATE	Lead		0	3950	1140	1.88	12.9	2143	100	Halcem-C	2% CaCl
INTERMEDIATE	Tail				230	1.33	14.8	305.9	100	Halcem-C	2% CaCl
PRODUCTION	Lead		0	2490	890	2.69	10.5	2394.	30	NeoCem	None

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail				2640	1.61	13.2	4250.4	30	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
3950	11811	OTHER : FW / Cut Brine / Polymer	10	10.3							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	1170	OTHER : FW/Native	8.4	8.8							A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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
1170	3950	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: 6326 **Anticipated Surface Pressure:** 3727.58

Anticipated Bottom Hole Temperature(F): 170

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: POKER LAKE UNIT 29 BS **Well Number:** 128H

Hydrogen sulfide drilling operations plan:

PLU_29_BS_H2S_Plan_20181206110957.pdf

PLU_29_BS_H2S_Pad_4_20190205123110.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PLU_29_BS_128H_DD_20190211090128.pdf

Other proposed operations facets description:

XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

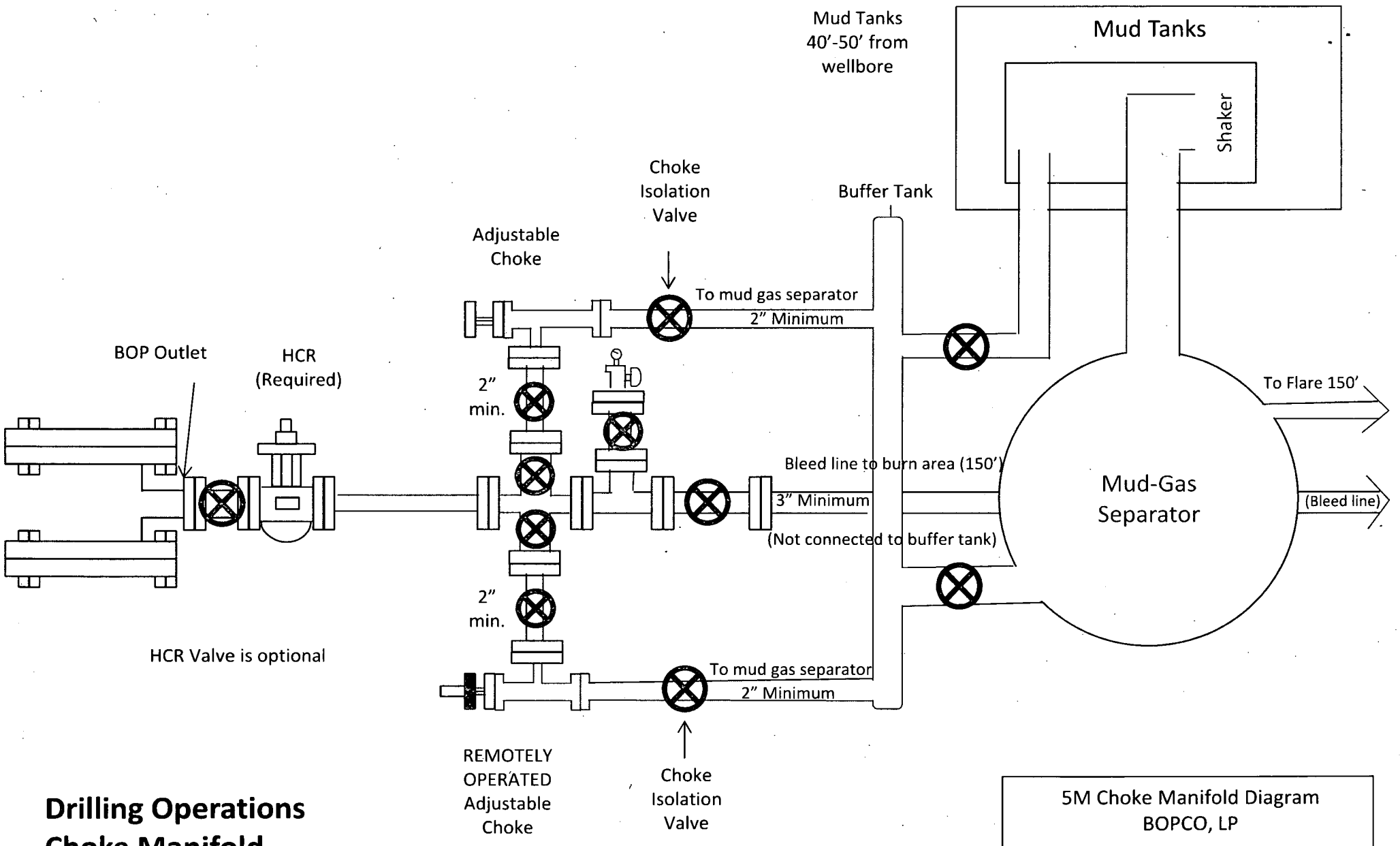
Other proposed operations facets attachment:

PLU_29_BS_128H_GCPE_20190211090149.pdf

PLU_29_BS_128H_GCPW_20190211090203.pdf

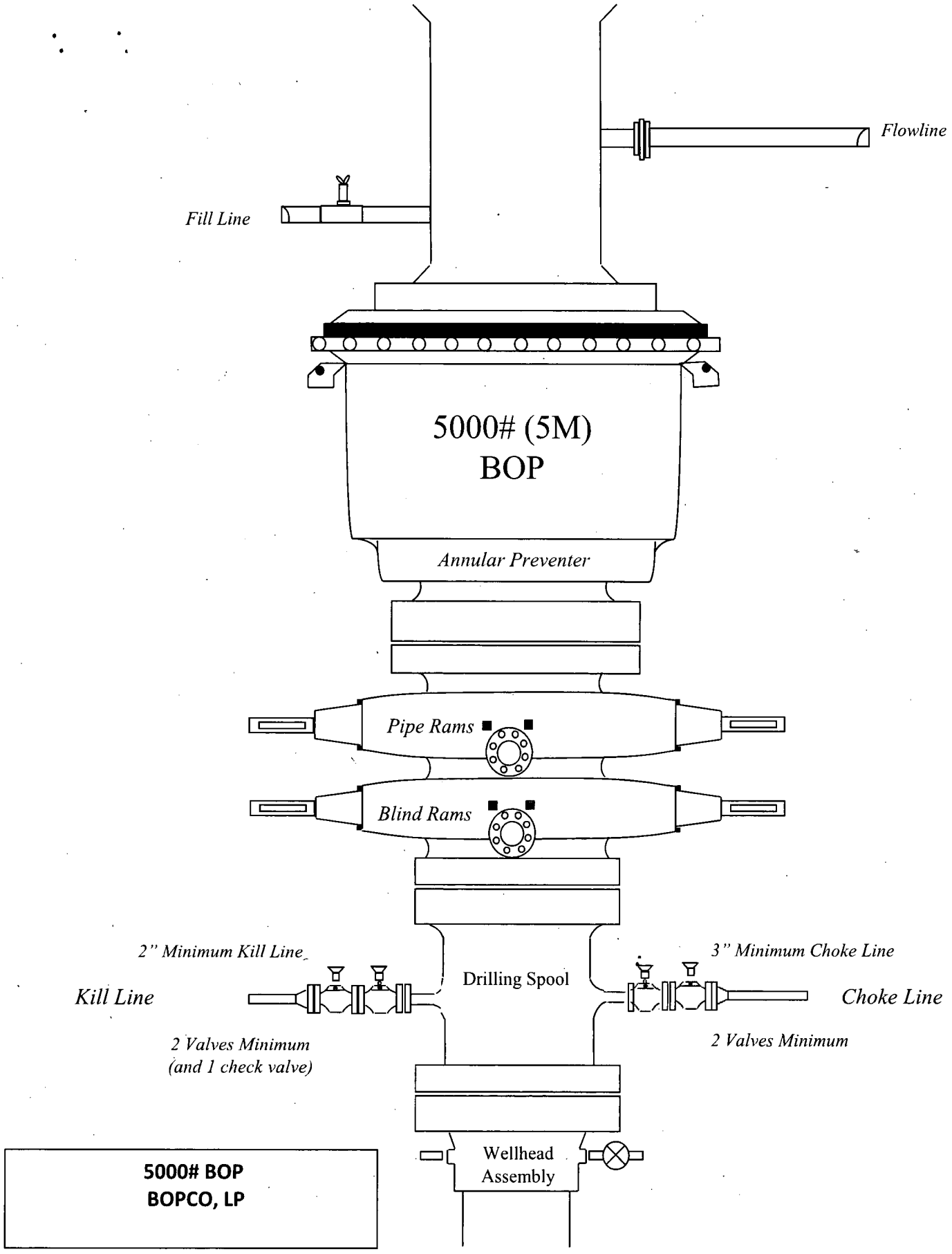
Other Variance attachment:

PLU_29_BS_FH_20181206111143.pdf



Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
BOPCO, LP



5000# BOP
BOPCO, LP

BOPCO, LP

Poker Lake Unit 29 Big Sinks 701H

Projected TD: 23272' MD / 10183' TVD

SHL: 2310' FNL & 600' FWL , Section 29, T25S, R31E

BHL: 200' FSL & 330' FWL , Section 5, T26S, R31E

Eddy County, NM

Casing Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3950'	9-5/8"	36#	LTC	J-55	New	1.26	1.63	3.19
8-3/4"	0' – 23272'	5-1/2"	17#	BTC	P-110	New	1.12	1.48	2.14

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

BOPCO, LP

Poker Lake Unit 29 Big Sinks 701H

Projected TD: 23272' MD / 10183' TVD

SHL: 2310' FNL & 600' FWL , Section 29, T25S, R31E

BHL: 200' FSL & 330' FWL , Section 5, T26S, R31E

Eddy County, NM

Casing Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3950'	9-5/8"	36#	LTC	J-55	New	1.26	1.63	3.19
8-3/4"	0' – 23272'	5-1/2"	17#	BTC	P-110	New	1.12	1.48	2.14

· XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

BOPCO, LP
Poker Lake Unit 29 Big Sinks 705H
Projected TD: 23309' MD / 10214' TVD
SHL: 2310' FNL & 2040' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 2310' FWL , Section 5, T26S, R31E
Eddy County, NM

Casing Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3960'	9-5/8"	36#	LTC	J-55	New	1.26	1.62	3.18
8-3/4"	0' – 23309'	5-1/2"	17#	BTC	P-110	New	1.12	1.48	2.14

· XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

BOPCO, LP

Poker Lake Unit 29 Big Sinks 705H

Projected TD: 23309' MD / 10214' TVD

SHL: 2310' FNL & 2040' FEL , Section 29, T25S, R31E

BHL: 200' FSL & 2310' FWL , Section 5, T26S, R31E

Eddy County, NM

Casing Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3960'	9-5/8"	36#	LTC	J-55	New	1.26	1.62	3.18
8-3/4"	0' – 23309'	5-1/2"	17#	BTC	P-110	New	1.12	1.48	2.14

· XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.

Poker Lake Unit 29 Big Sinks 905H
Projected TD: 24502' MD / 11406' TVD
SHL: 2310' FNL & 210' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 2310' FWL , Section 5, T26S, R31E
Eddy County, NM

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3960'	9-5/8"	36#	LTC	J-55	New	1.13	1.62	3.18
8-3/4"	0' – 24502'	5-1/2"	17#	BTC	P-110	New	1.12	1.32	1.98

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

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

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

Poker Lake Unit 29 Big Sinks 905H
Projected TD: 24502' MD / 11406' TVD
SHL: 2310' FNL & 210' FEL , Section 29, T25S, R31E
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Eddy County, NM

Casing Assumption Worksheet

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8-3/4"	0' – 24502'	5-1/2"	17#	BTC	P-110	New	1.12	1.32	1.98

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Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3950'	9-5/8"	40#	LTC	J-55	New	1.09	2.07	3.29
8-3/4"	0' – 24726'	5-1/2"	17#	BTC	P-110	New	1.12	1.21	1.97

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

WELLHEAD:

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.

Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
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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.

Poker Lake Unit 29 BS 126H
Projected TD: 24893' MD / 11798' TVD
SHL: 2310' FNL & 1950' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 1650' FEL , Section 5, T26S, R31E
Eddy County, NM

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3950'	9-5/8"	40#	LTC	J-55	New	1.09	2.07	3.29
8-3/4"	0' – 24893'	5-1/2"	17#	BTC	P-110	New	1.12	1.21	1.97

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

WELLHEAD:

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- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 9-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

Poker Lake Unit 29 BS 126H
Projected TD: 24893' MD / 11798' TVD
SHL: 2310' FNL & 1950' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 1650' FEL , Section 5, T26S, R31E
Eddy County, NM

Casing Assumption Worksheet

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8-3/4"	0' – 24893'	5-1/2"	17#	BTC	P-110	New	1.12	1.21	1.97

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.
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B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 9-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

Poker Lake Unit 29 BS 127H
Projected TD: 24736' MD / 11640' TVD
SHL: 2310' FNL & 660' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 990' FEL , Section 5, T26S, R31E
Eddy County, NM

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3950'	9-5/8"	40#	LTC	J-55	New	1.09	2.07	3.29
8-3/4"	0' – 24736'	5-1/2"	17#	BTC	P-110	New	1.12	1.21	1.97

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.
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Eddy County, NM

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- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 9-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

Poker Lake Unit 29 Big Sinks 907H
Projected TD: 24511' MD / 11417' TVD
SHL: 2310' FNL & 690' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 990' FEL , Section 5, T26S, R31E
Eddy County, NM

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
12-1/4"	0' – 3960'	9-5/8"	36#	LTC	J-55	New	1.13	1.62	3.18
8-3/4"	0' – 24511'	5-1/2"	17#	BTC	P-110	New	1.12	1.32	1.98

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.
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SHL: 2310' FNL & 690' FEL , Section 29, T25S, R31E
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Eddy County, NM

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- Operator will test the 9-5/8" casing per BLM Onshore Order 2
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Poker Lake Unit 29 BS 128H
Projected TD: 24904' MD / 11811' TVD
SHL: 2310' FNL & 630' FEL , Section 29, T25S, R31E
BHL: 200' FSL & 330' FEL , Section 5, T26S, R31E
Eddy County, NM

Casing Assumption Worksheet

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – 1170'	13-3/8"	48#	STC	H-40	New	1.41	1.44	5.73
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8-3/4"	0' – 24904'	5-1/2"	17#	BTC	P-110	New	1.12	1.21	1.97

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GENERAL OFFICES – MIDLAND, TEXAS

BOPCO, L.P.

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

HYDROGEN SULFIDE (H_2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H_2S 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:

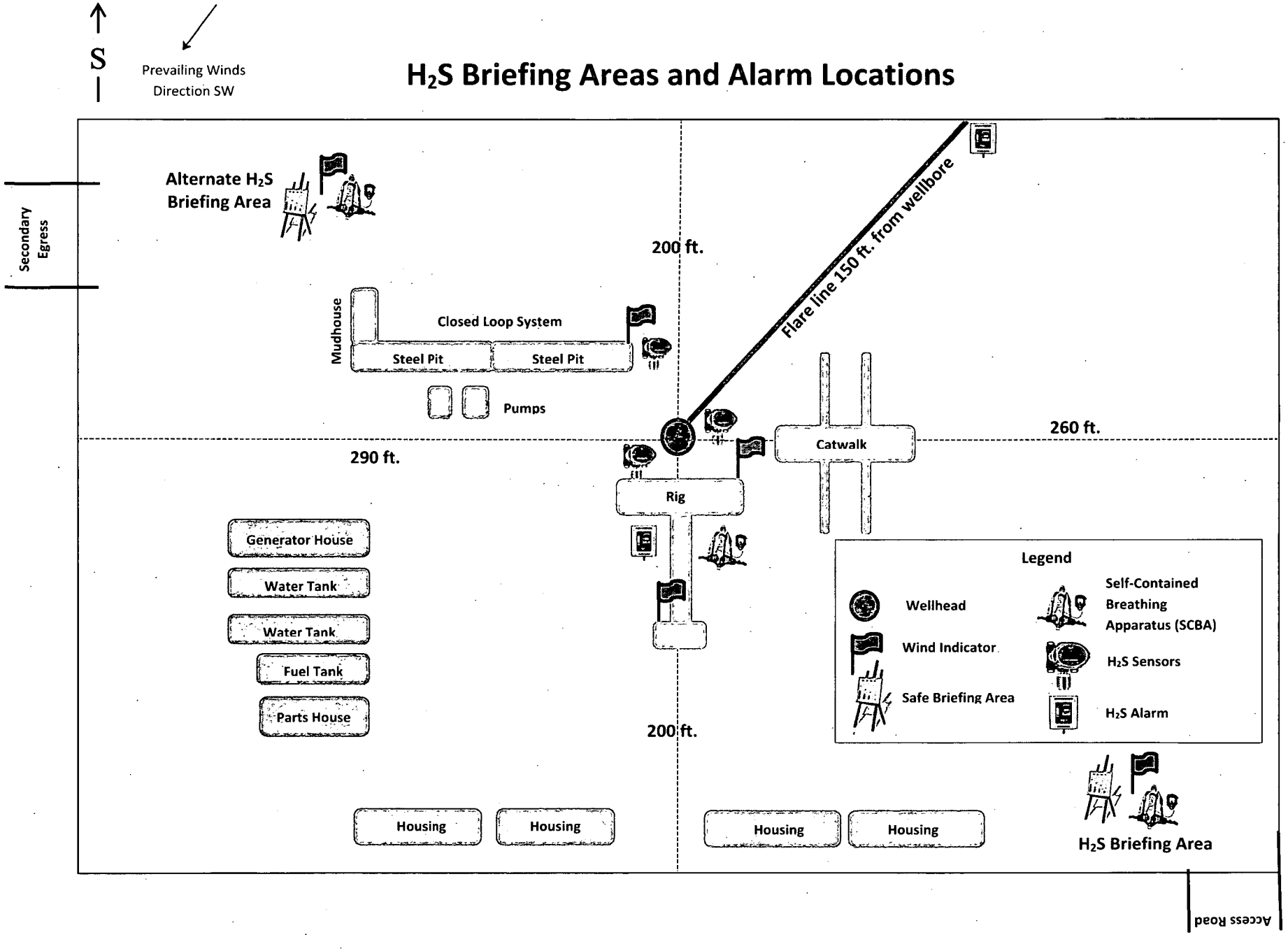
For Lea County:

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

H_2S Briefing Areas and Alarm Locations



XTO Energy

Eddy County, NM (NAD-27)
PLU 29 Big Sinks
#128H

OH

Plan: PERMIT

Standard Planning Report

08 December, 2017

XTO ENERGY

Project: Eddy County, NM (NAD-27)
Site: PLU 29 Big Sinks
Well: #128H
Wellbore: OH
Design: PERMIT

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

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

WELL DETAILS: #128H

Rig Name:
RKB = 27' @ 3364.00usft
Ground Level: 3337.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	401283.80	667227.10	32.102094	-103.793286

DESIGN TARGET DETAILS

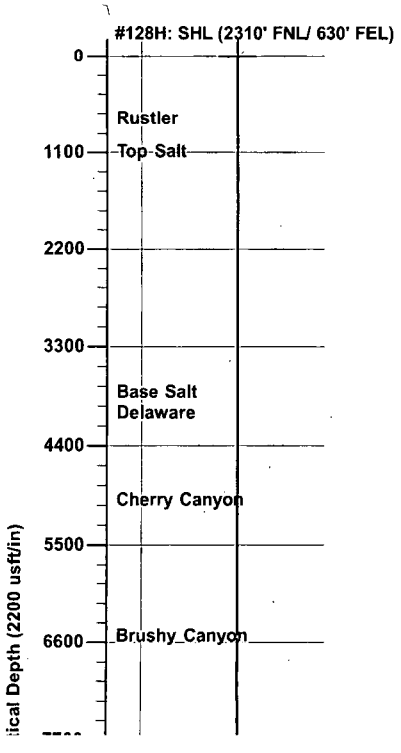
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
#128H: SHL (2310' FNL/ 630' FEL)	0.00	0.00	0.00	401283.80	667227.10	32.102094	-103.793286	Point
#128H: PBHL (200' FSL/ 330' FEL)	11699.76	-13432.10	347.70	387851.70	667574.80	32.065165	-103.792381	Point
#128H: LTP	11700.89	-13302.10	347.10	387981.70	667574.20	32.065523	-103.792381	Point
#128H: FTP/ LP	11811.00	-684.90	299.10	400598.90	667526.20	32.100207	-103.792331	Point

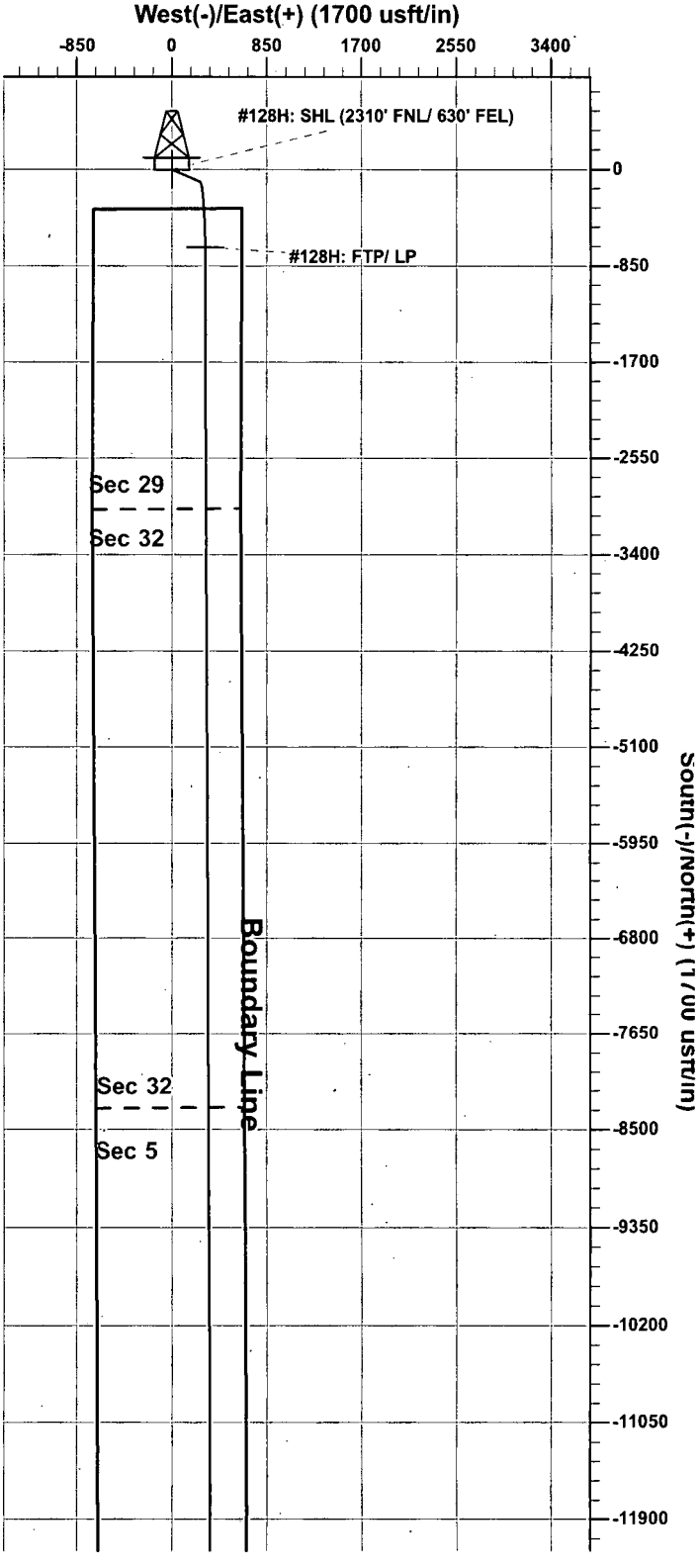
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	8000.00	0.00	0.00	8000.00	0.00	0.00	0.00	0.00	0.00
3	8249.93	5.00	113.08	8249.61	-4.27	10.02	2.00	113.08	4.31
4	11271.42	5.00	113.08	11259.62	-107.47	252.21	0.00	0.00	108.44
5	12156.66	90.50	179.78	11811.00	-684.90	299.10	10.00	66.74	686.04
6	24774.43	90.50	179.78	11700.89	-13302.10	347.20	0.00	0.00	13303.33
7	24904.44	90.50	179.78	11699.76	-13432.10	347.70	0.00	0.00	13433.34

FORMATION TOP DETAILS

TVDPath	Formation
822.00	Rustler
1198.00	Top Salt
3916.00	Base Salt
4142.00	Delaware
5107.00	Cherry Canyon
6636.00	Brushy Canyon
7858.00	Basal Brushy Canyon
8058.00	Bone Spring
9123.00	1st Bone Spring Ss
9545.00	2nd Bone Spring Lm
9780.00	2nd Bone Spring Ss
10304.00	3rd Bone Spring Lm
11043.00	3rd Bone Spring Ss
11467.00	Wolfcamp
11611.00	Wolfcamp A





Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
Company:	XTO Energy	**TVD Reference:**	RKB = 27' @ 3364.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 27' @ 3364.00usft
Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**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	PLU 29 Big Sinks				
Site Position:		**Northing:**	401,257.90 usft	**Latitude:**	32.102077
From:	Map	**Easting:**	663,265.10 usft	**Longitude:**	-103.806081
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.28 °

Well	#128H					
Well Position	**+N/-S**	25.90 usft	**Northing:**	401,283.80 usft	**Latitude:**	32.102094
	+E/-W	3,962.00 usft	**Easting:**	667,227.10 usft	**Longitude:**	-103.793286
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	0.00 usft	**Ground Level:**	3,337.00 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	12/7/2017	7.00	59.91	47,794

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	179.78	

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	
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,249.93	5.00	113.08	8,249.61	-4.27	10.02	2.00	2.00	0.00	113.08	
11,271.42	5.00	113.08	11,259.62	-107.47	252.21	0.00	0.00	0.00	0.00	
12,156.66	90.50	179.78	11,811.00	-684.90	299.10	10.00	9.66	7.53	66.74	#128H: FTP/ LP
24,774.43	90.50	179.78	11,700.89	-13,302.10	347.20	0.00	0.00	0.00	0.00	#128H: LTP
24,904.44	90.50	179.78	11,699.76	-13,432.10	347.70	0.00	0.00	0.00	0.00	#128H: PBHL (200'

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
Company:	XTO Energy	**TVD Reference:**	RKB = 27' @ 3364.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 27' @ 3364.00usft
Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**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
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	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
Company:	XTO Energy	**TVD Reference:**	RKB = 27' @ 3364.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 27' @ 3364.00usft
Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	2.00	113.08	8,099.98	-0.68	1.61	0.69	2.00	2.00	0.00
8,200.00	4.00	113.08	8,199.84	-2.74	6.42	2.76	2.00	2.00	0.00
8,249.93	5.00	113.08	8,249.61	-4.27	10.02	4.31	2.00	2.00	0.00
8,300.00	5.00	113.08	8,299.49	-5.98	14.04	6.04	0.00	0.00	0.00
8,400.00	5.00	113.08	8,399.11	-9.40	22.05	9.48	0.00	0.00	0.00
8,500.00	5.00	113.08	8,498.73	-12.81	30.07	12.93	0.00	0.00	0.00
8,600.00	5.00	113.08	8,598.35	-16.23	38.08	16.37	0.00	0.00	0.00
8,700.00	5.00	113.08	8,697.97	-19.64	46.10	19.82	0.00	0.00	0.00
8,800.00	5.00	113.08	8,797.59	-23.06	54.11	23.27	0.00	0.00	0.00
8,900.00	5.00	113.08	8,897.21	-26.47	62.13	26.71	0.00	0.00	0.00
9,000.00	5.00	113.08	8,996.83	-29.89	70.15	30.16	0.00	0.00	0.00
9,100.00	5.00	113.08	9,096.45	-33.31	78.16	33.61	0.00	0.00	0.00
9,200.00	5.00	113.08	9,196.07	-36.72	86.18	37.05	0.00	0.00	0.00
9,300.00	5.00	113.08	9,295.69	-40.14	94.19	40.50	0.00	0.00	0.00
9,400.00	5.00	113.08	9,395.31	-43.55	102.21	43.95	0.00	0.00	0.00
9,500.00	5.00	113.08	9,494.93	-46.97	110.22	47.39	0.00	0.00	0.00
9,600.00	5.00	113.08	9,594.55	-50.38	118.24	50.84	0.00	0.00	0.00
9,700.00	5.00	113.08	9,694.17	-53.80	126.25	54.28	0.00	0.00	0.00
9,800.00	5.00	113.08	9,793.79	-57.22	134.27	57.73	0.00	0.00	0.00
9,900.00	5.00	113.08	9,893.41	-60.63	142.29	61.18	0.00	0.00	0.00
10,000.00	5.00	113.08	9,993.03	-64.05	150.30	64.62	0.00	0.00	0.00
10,100.00	5.00	113.08	10,092.65	-67.46	158.32	68.07	0.00	0.00	0.00
10,200.00	5.00	113.08	10,192.27	-70.88	166.33	71.52	0.00	0.00	0.00
10,300.00	5.00	113.08	10,291.89	-74.29	174.35	74.96	0.00	0.00	0.00
10,400.00	5.00	113.08	10,391.51	-77.71	182.36	78.41	0.00	0.00	0.00
10,500.00	5.00	113.08	10,491.13	-81.12	190.38	81.85	0.00	0.00	0.00
10,600.00	5.00	113.08	10,590.75	-84.54	198.40	85.30	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
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Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**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)
10,700.00	5.00	113.08	10,690.37	-87.96	206.41	88.75	0.00	0.00	0.00
10,800.00	5.00	113.08	10,789.99	-91.37	214.43	92.19	0.00	0.00	0.00
10,900.00	5.00	113.08	10,889.61	-94.79	222.44	95.64	0.00	0.00	0.00
11,000.00	5.00	113.08	10,989.22	-98.20	230.46	99.09	0.00	0.00	0.00
11,100.00	5.00	113.08	11,088.84	-101.62	238.47	102.53	0.00	0.00	0.00
11,200.00	5.00	113.08	11,188.46	-105.03	246.49	105.98	0.00	0.00	0.00
11,271.42	5.00	113.08	11,259.62	-107.47	252.21	108.44	0.00	0.00	0.00
11,300.00	6.66	136.32	11,288.05	-109.16	254.50	110.14	10.00	5.83	81.34
11,350.00	10.84	154.96	11,337.46	-115.53	258.50	116.52	10.00	8.36	37.27
11,400.00	15.51	162.93	11,386.14	-126.19	262.46	127.19	10.00	9.34	15.94
11,450.00	20.34	167.23	11,433.70	-141.06	266.35	142.08	10.00	9.65	8.61
11,500.00	25.23	169.93	11,479.78	-160.04	270.13	161.08	10.00	9.78	5.40
11,550.00	30.15	171.80	11,524.04	-182.98	273.79	184.03	10.00	9.85	3.73
11,600.00	35.10	173.18	11,566.14	-209.70	277.29	210.76	10.00	9.89	2.77
11,650.00	40.06	174.26	11,605.76	-240.00	280.61	241.07	10.00	9.91	2.16
11,700.00	45.02	175.14	11,642.59	-273.65	283.72	274.73	10.00	9.93	1.76
11,750.00	49.99	175.88	11,676.35	-310.39	286.60	311.49	10.00	9.94	1.48
11,800.00	54.97	176.51	11,706.80	-349.95	289.22	351.05	10.00	9.95	1.27
11,850.00	59.94	177.08	11,733.69	-392.01	291.57	393.13	10.00	9.95	1.13
11,900.00	64.92	177.59	11,756.82	-436.28	293.63	437.40	10.00	9.96	1.02
11,950.00	69.90	178.06	11,776.02	-482.39	295.38	483.52	10.00	9.96	0.94
12,000.00	74.89	178.50	11,791.14	-530.01	296.81	531.15	10.00	9.96	0.88
12,050.00	79.87	178.92	11,802.06	-578.78	297.90	579.92	10.00	9.97	0.84
12,100.00	84.85	179.33	11,808.70	-628.31	298.66	629.45	10.00	9.97	0.82
12,150.00	89.84	179.73	11,811.02	-678.24	299.07	679.38	10.00	9.97	0.80
12,156.66	90.50	179.78	11,811.00	-684.90	299.10	686.04	10.00	9.97	0.80
12,200.00	90.50	179.78	11,810.62	-728.24	299.27	729.38	0.00	0.00	0.00
12,300.00	90.50	179.78	11,809.75	-828.23	299.65	829.38	0.00	0.00	0.00
12,400.00	90.50	179.78	11,808.88	-928.23	300.03	929.37	0.00	0.00	0.00
12,500.00	90.50	179.78	11,808.00	-1,028.23	300.41	1,029.37	0.00	0.00	0.00
12,600.00	90.50	179.78	11,807.13	-1,128.22	300.79	1,129.37	0.00	0.00	0.00
12,700.00	90.50	179.78	11,806.26	-1,228.22	301.17	1,229.36	0.00	0.00	0.00
12,800.00	90.50	179.78	11,805.39	-1,328.21	301.55	1,329.36	0.00	0.00	0.00
12,900.00	90.50	179.78	11,804.51	-1,428.21	301.93	1,429.36	0.00	0.00	0.00
13,000.00	90.50	179.78	11,803.64	-1,528.20	302.32	1,529.35	0.00	0.00	0.00
13,100.00	90.50	179.78	11,802.77	-1,628.20	302.70	1,629.35	0.00	0.00	0.00
13,200.00	90.50	179.78	11,801.90	-1,728.19	303.08	1,729.34	0.00	0.00	0.00
13,300.00	90.50	179.78	11,801.02	-1,828.19	303.46	1,829.34	0.00	0.00	0.00
13,400.00	90.50	179.78	11,800.15	-1,928.18	303.84	1,929.34	0.00	0.00	0.00
13,500.00	90.50	179.78	11,799.28	-2,028.18	304.22	2,029.33	0.00	0.00	0.00
13,600.00	90.50	179.78	11,798.40	-2,128.18	304.60	2,129.33	0.00	0.00	0.00
13,700.00	90.50	179.78	11,797.53	-2,228.17	304.98	2,229.33	0.00	0.00	0.00
13,800.00	90.50	179.78	11,796.66	-2,328.17	305.37	2,329.32	0.00	0.00	0.00
13,900.00	90.50	179.78	11,795.79	-2,428.16	305.75	2,429.32	0.00	0.00	0.00
14,000.00	90.50	179.78	11,794.91	-2,528.16	306.13	2,529.31	0.00	0.00	0.00
14,100.00	90.50	179.78	11,794.04	-2,628.15	306.51	2,629.31	0.00	0.00	0.00
14,200.00	90.50	179.78	11,793.17	-2,728.15	306.89	2,729.31	0.00	0.00	0.00
14,300.00	90.50	179.78	11,792.30	-2,828.14	307.27	2,829.30	0.00	0.00	0.00
14,400.00	90.50	179.78	11,791.42	-2,928.14	307.65	2,929.30	0.00	0.00	0.00
14,500.00	90.50	179.78	11,790.55	-3,028.13	308.03	3,029.30	0.00	0.00	0.00
14,600.00	90.50	179.78	11,789.68	-3,128.13	308.42	3,129.29	0.00	0.00	0.00
14,700.00	90.50	179.78	11,788.81	-3,228.13	308.80	3,229.29	0.00	0.00	0.00
14,800.00	90.50	179.78	11,787.93	-3,328.12	309.18	3,329.28	0.00	0.00	0.00
14,900.00	90.50	179.78	11,787.06	-3,428.12	309.56	3,429.28	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
Company:	XTO Energy	**TVD Reference:**	RKB = 27' @ 3364.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 27' @ 3364.00usft
Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**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)
15,000.00	90.50	179.78	11,786.19	-3,528.11	309.94	3,529.28	0.00	0.00	0.00
15,100.00	90.50	179.78	11,785.32	-3,628.11	310.32	3,629.27	0.00	0.00	0.00
15,200.00	90.50	179.78	11,784.44	-3,728.10	310.70	3,729.27	0.00	0.00	0.00
15,300.00	90.50	179.78	11,783.57	-3,828.10	311.08	3,829.26	0.00	0.00	0.00
15,400.00	90.50	179.78	11,782.70	-3,928.09	311.47	3,929.26	0.00	0.00	0.00
15,500.00	90.50	179.78	11,781.82	-4,028.09	311.85	4,029.26	0.00	0.00	0.00
15,600.00	90.50	179.78	11,780.95	-4,128.08	312.23	4,129.25	0.00	0.00	0.00
15,700.00	90.50	179.78	11,780.08	-4,228.08	312.61	4,229.25	0.00	0.00	0.00
15,800.00	90.50	179.78	11,779.21	-4,328.08	312.99	4,329.25	0.00	0.00	0.00
15,900.00	90.50	179.78	11,778.33	-4,428.07	313.37	4,429.24	0.00	0.00	0.00
16,000.00	90.50	179.78	11,777.46	-4,528.07	313.75	4,529.24	0.00	0.00	0.00
16,100.00	90.50	179.78	11,776.59	-4,628.06	314.13	4,629.23	0.00	0.00	0.00
16,200.00	90.50	179.78	11,775.72	-4,728.06	314.51	4,729.23	0.00	0.00	0.00
16,300.00	90.50	179.78	11,774.84	-4,828.05	314.90	4,829.23	0.00	0.00	0.00
16,400.00	90.50	179.78	11,773.97	-4,928.05	315.28	4,929.22	0.00	0.00	0.00
16,500.00	90.50	179.78	11,773.10	-5,028.04	315.66	5,029.22	0.00	0.00	0.00
16,600.00	90.50	179.78	11,772.23	-5,128.04	316.04	5,129.22	0.00	0.00	0.00
16,700.00	90.50	179.78	11,771.35	-5,228.03	316.42	5,229.21	0.00	0.00	0.00
16,800.00	90.50	179.78	11,770.48	-5,328.03	316.80	5,329.21	0.00	0.00	0.00
16,900.00	90.50	179.78	11,769.61	-5,428.03	317.18	5,429.20	0.00	0.00	0.00
17,000.00	90.50	179.78	11,768.73	-5,528.02	317.56	5,529.20	0.00	0.00	0.00
17,100.00	90.50	179.78	11,767.86	-5,628.02	317.95	5,629.20	0.00	0.00	0.00
17,200.00	90.50	179.78	11,766.99	-5,728.01	318.33	5,729.19	0.00	0.00	0.00
17,300.00	90.50	179.78	11,766.12	-5,828.01	318.71	5,829.19	0.00	0.00	0.00
17,400.00	90.50	179.78	11,765.24	-5,928.00	319.09	5,929.18	0.00	0.00	0.00
17,500.00	90.50	179.78	11,764.37	-6,028.00	319.47	6,029.18	0.00	0.00	0.00
17,600.00	90.50	179.78	11,763.50	-6,127.99	319.85	6,129.18	0.00	0.00	0.00
17,700.00	90.50	179.78	11,762.63	-6,227.99	320.23	6,229.17	0.00	0.00	0.00
17,800.00	90.50	179.78	11,761.75	-6,327.99	320.61	6,329.17	0.00	0.00	0.00
17,900.00	90.50	179.78	11,760.88	-6,427.98	321.00	6,429.17	0.00	0.00	0.00
18,000.00	90.50	179.78	11,760.01	-6,527.98	321.38	6,529.16	0.00	0.00	0.00
18,100.00	90.50	179.78	11,759.14	-6,627.97	321.76	6,629.16	0.00	0.00	0.00
18,200.00	90.50	179.78	11,758.26	-6,727.97	322.14	6,729.15	0.00	0.00	0.00
18,300.00	90.50	179.78	11,757.39	-6,827.96	322.52	6,829.15	0.00	0.00	0.00
18,400.00	90.50	179.78	11,756.52	-6,927.96	322.90	6,929.15	0.00	0.00	0.00
18,500.00	90.50	179.78	11,755.64	-7,027.95	323.28	7,029.14	0.00	0.00	0.00
18,600.00	90.50	179.78	11,754.77	-7,127.95	323.66	7,129.14	0.00	0.00	0.00
18,700.00	90.50	179.78	11,753.90	-7,227.94	324.05	7,229.14	0.00	0.00	0.00
18,800.00	90.50	179.78	11,753.03	-7,327.94	324.43	7,329.13	0.00	0.00	0.00
18,900.00	90.50	179.78	11,752.15	-7,427.94	324.81	7,429.13	0.00	0.00	0.00
19,000.00	90.50	179.78	11,751.28	-7,527.93	325.19	7,529.12	0.00	0.00	0.00
19,100.00	90.50	179.78	11,750.41	-7,627.93	325.57	7,629.12	0.00	0.00	0.00
19,200.00	90.50	179.78	11,749.54	-7,727.92	325.95	7,729.12	0.00	0.00	0.00
19,300.00	90.50	179.78	11,748.66	-7,827.92	326.33	7,829.11	0.00	0.00	0.00
19,400.00	90.50	179.78	11,747.79	-7,927.91	326.71	7,929.11	0.00	0.00	0.00
19,500.00	90.50	179.78	11,746.92	-8,027.91	327.10	8,029.10	0.00	0.00	0.00
19,600.00	90.50	179.78	11,746.05	-8,127.90	327.48	8,129.10	0.00	0.00	0.00
19,700.00	90.50	179.78	11,745.17	-8,227.90	327.86	8,229.10	0.00	0.00	0.00
19,800.00	90.50	179.78	11,744.30	-8,327.89	328.24	8,329.09	0.00	0.00	0.00
19,900.00	90.50	179.78	11,743.43	-8,427.89	328.62	8,429.09	0.00	0.00	0.00
20,000.00	90.50	179.78	11,742.56	-8,527.89	329.00	8,529.09	0.00	0.00	0.00
20,100.00	90.50	179.78	11,741.68	-8,627.88	329.38	8,629.08	0.00	0.00	0.00
20,200.00	90.50	179.78	11,740.81	-8,727.88	329.76	8,729.08	0.00	0.00	0.00
20,300.00	90.50	179.78	11,739.94	-8,827.87	330.15	8,829.07	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
Company:	XTO Energy	**TVD Reference:**	RKB = 27' @ 3364.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 27' @ 3364.00usft
Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**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)
20,400.00	90.50	179.78	11,739.06	-8,927.87	330.53	8,929.07	0.00	0.00	0.00
20,500.00	90.50	179.78	11,738.19	-9,027.86	330.91	9,029.07	0.00	0.00	0.00
20,600.00	90.50	179.78	11,737.32	-9,127.86	331.29	9,129.06	0.00	0.00	0.00
20,700.00	90.50	179.78	11,736.45	-9,227.85	331.67	9,229.06	0.00	0.00	0.00
20,800.00	90.50	179.78	11,735.57	-9,327.85	332.05	9,329.06	0.00	0.00	0.00
20,900.00	90.50	179.78	11,734.70	-9,427.84	332.43	9,429.05	0.00	0.00	0.00
21,000.00	90.50	179.78	11,733.83	-9,527.84	332.81	9,529.05	0.00	0.00	0.00
21,100.00	90.50	179.78	11,732.96	-9,627.84	333.20	9,629.04	0.00	0.00	0.00
21,200.00	90.50	179.78	11,732.08	-9,727.83	333.58	9,729.04	0.00	0.00	0.00
21,300.00	90.50	179.78	11,731.21	-9,827.83	333.96	9,829.04	0.00	0.00	0.00
21,400.00	90.50	179.78	11,730.34	-9,927.82	334.34	9,929.03	0.00	0.00	0.00
21,500.00	90.50	179.78	11,729.47	-10,027.82	334.72	10,029.03	0.00	0.00	0.00
21,600.00	90.50	179.78	11,728.59	-10,127.81	335.10	10,129.02	0.00	0.00	0.00
21,700.00	90.50	179.78	11,727.72	-10,227.81	335.48	10,229.02	0.00	0.00	0.00
21,800.00	90.50	179.78	11,726.85	-10,327.80	335.86	10,329.02	0.00	0.00	0.00
21,900.00	90.50	179.78	11,725.97	-10,427.80	336.25	10,429.01	0.00	0.00	0.00
22,000.00	90.50	179.78	11,725.10	-10,527.79	336.63	10,529.01	0.00	0.00	0.00
22,100.00	90.50	179.78	11,724.23	-10,627.79	337.01	10,629.01	0.00	0.00	0.00
22,200.00	90.50	179.78	11,723.36	-10,727.79	337.39	10,729.00	0.00	0.00	0.00
22,300.00	90.50	179.78	11,722.48	-10,827.78	337.77	10,829.00	0.00	0.00	0.00
22,400.00	90.50	179.78	11,721.61	-10,927.78	338.15	10,928.99	0.00	0.00	0.00
22,500.00	90.50	179.78	11,720.74	-11,027.77	338.53	11,028.99	0.00	0.00	0.00
22,600.00	90.50	179.78	11,719.87	-11,127.77	338.91	11,128.99	0.00	0.00	0.00
22,700.00	90.50	179.78	11,718.99	-11,227.76	339.30	11,228.98	0.00	0.00	0.00
22,800.00	90.50	179.78	11,718.12	-11,327.76	339.68	11,328.98	0.00	0.00	0.00
22,900.00	90.50	179.78	11,717.25	-11,427.75	340.06	11,428.98	0.00	0.00	0.00
23,000.00	90.50	179.78	11,716.38	-11,527.75	340.44	11,528.97	0.00	0.00	0.00
23,100.00	90.50	179.78	11,715.50	-11,627.74	340.82	11,628.97	0.00	0.00	0.00
23,200.00	90.50	179.78	11,714.63	-11,727.74	341.20	11,728.96	0.00	0.00	0.00
23,300.00	90.50	179.78	11,713.76	-11,827.74	341.58	11,828.96	0.00	0.00	0.00
23,400.00	90.50	179.78	11,712.88	-11,927.73	341.96	11,928.96	0.00	0.00	0.00
23,500.00	90.50	179.78	11,712.01	-12,027.73	342.35	12,028.95	0.00	0.00	0.00
23,600.00	90.50	179.78	11,711.14	-12,127.72	342.73	12,128.95	0.00	0.00	0.00
23,700.00	90.50	179.78	11,710.27	-12,227.72	343.11	12,228.94	0.00	0.00	0.00
23,800.00	90.50	179.78	11,709.39	-12,327.71	343.49	12,328.94	0.00	0.00	0.00
23,900.00	90.50	179.78	11,708.52	-12,427.71	343.87	12,428.94	0.00	0.00	0.00
24,000.00	90.50	179.78	11,707.65	-12,527.70	344.25	12,528.93	0.00	0.00	0.00
24,100.00	90.50	179.78	11,706.78	-12,627.70	344.63	12,628.93	0.00	0.00	0.00
24,200.00	90.50	179.78	11,705.90	-12,727.70	345.01	12,728.93	0.00	0.00	0.00
24,300.00	90.50	179.78	11,705.03	-12,827.69	345.40	12,828.92	0.00	0.00	0.00
24,400.00	90.50	179.78	11,704.16	-12,927.69	345.78	12,928.92	0.00	0.00	0.00
24,500.00	90.50	179.78	11,703.29	-13,027.68	346.16	13,028.91	0.00	0.00	0.00
24,600.00	90.50	179.78	11,702.41	-13,127.68	346.54	13,128.91	0.00	0.00	0.00
24,700.00	90.50	179.78	11,701.54	-13,227.67	346.92	13,228.91	0.00	0.00	0.00
24,774.43	90.50	179.78	11,700.89	-13,302.10	347.20	13,303.34	0.00	0.00	0.00
24,800.00	90.50	179.78	11,700.67	-13,327.67	347.30	13,328.90	0.00	0.00	0.00
24,904.44	90.50	179.78	11,699.76	-13,432.10	347.70	13,433.34	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #128H
Company:	XTO Energy	**TVD Reference:**	RKB = 27' @ 3364.00usft
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 27' @ 3364.00usft
Site:	PLU 29 Big Sinks	**North Reference:**	Grid
Well:	#128H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
#128H: SHL (2310' FI - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	401,283.80	667,227.10	32.102094	-103.793286
#128H: PBHL (200' F - plan hits target center - Point	0.00	0.00	11,699.76	-13,432.10	347.70	387,851.70	667,574.80	32.065165	-103.792381
#128H: LTP - plan misses target center by 0.10usft at 24774.43usft MD (11700.89 TVD, -13302.10 N, 347.20 E) - Point	0.00	0.00	11,700.89	-13,302.10	347.10	387,981.70	667,574.20	32.065523	-103.792381
#128H: FTP/ LP - plan hits target center - Point	0.00	0.00	11,811.00	-684.90	299.10	400,598.90	667,526.20	32.100207	-103.792332

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
822.00	822.00	Rustler			
1,198.00	1,198.00	Top Salt			
3,916.00	3,916.00	Base Salt			
4,142.00	4,142.00	Delaware			
5,107.00	5,107.00	Cherry Canyon			
6,636.00	6,636.00	Brushy Canyon			
7,858.00	7,858.00	Basal Brushy Canyon			
8,058.00	8,058.00	Bone Spring			
9,126.65	9,123.00	1st Bone Spring Ss			
9,550.26	9,545.00	2nd Bone Spring Lm			
9,786.16	9,780.00	2nd Bone Spring Ss			
10,312.16	10,304.00	3rd Bone Spring Lm			
11,053.98	11,043.00	3rd Bone Spring Ss			
11,485.95	11,467.00	Wolfcamp			
11,656.89	11,611.00	Wolfcamp A			

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Enlink and will be connected to Enlink low/high pressure gathering system located in Loving County, Texas. It will require 252.19' of pipeline to connect the facility to low/high pressure gathering system. BOPCO provides (periodically) to Enlink a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, BOPCO and Enlink have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enlink Processing Plant located in Block 27, Sec. 4, Loving County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

- Power Generation – On lease
    - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
    - 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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 1/19/18

☒ Original

Operator & OGRID No.: BOPCO, LP [260737]

☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility: Poker Lake Unit 29 BS West CTB

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Poker Lake Unit 29 BS 701H		E-29-25S-31E	2310' FNL & 600' FWL	3100	Flared/Sold	
Poker Lake Unit 29 BS 901H		E-29-25S-31E	2310' FNL & 630' FWL	2700	Flared/Sold	
Poker Lake Unit 29 BS 121H		E-29-25S-31E	2310' FNL & 660' FWL	4700	Flared/Sold	
Poker Lake Unit 29 BS 122H		E-29-25S-31E	2310' FNL & 690' FWL	4700	Flared/Sold	
Poker Lake Unit 29 BS 102H		E-29-25S-31E	2310' FNL & 720' FWL	2900	Flared/Sold	
Poker Lake Unit 29 BS 703H		F-29-25S-31E	2310' FNL & 1920' FWL	3100	Flared/Sold	
Poker Lake Unit 29 BS 903H		F-29-25S-31E	2310' FNL & 1950' FWL	2700	Flared/Sold	
Poker Lake Unit 29 BS 123H		F-29-25S-31E	2310' FNL & 1980' FWL	4700	Flared/Sold	
Poker Lake Unit 29 BS 124H		F-29-25S-31E	2310' FNL & 2010' FWL	4700	Flared/Sold	
Poker Lake Unit 29 BS 104H		F-29-25S-31E	2310' FNL & 2040' FWL	2900	Flared/Sold	
Poker Lake Unit 29 BS 705H		G-29-25S-31E	2310' FNL & 2040' FEL	3100	Flared/Sold	
Poker Lake Unit 29 BS 905H		G-29-25S-31E	2310' FNL & 2010' FEL	2700	Flared/Sold	
Poker Lake Unit 29 BS 125H		G-29-25S-31E	2310' FNL & 1980' FWL	4700	Flared/Sold	
Poker Lake Unit 29 BS 126H		G-29-25S-31E	2310' FNL & 1950' FEL	4700	Flared/Sold	
Poker Lake Unit 29 BS 106H		G-29-25S-31E	2310' FNL & 1920' FEL	2900	Flared/Sold	
Poker Lake Unit 29 BS 707H		H-29-25S-31E	2310' FNL & 720' FEL	3100	Flared/Sold	
Poker Lake Unit 29 BS 907H		H-29-25S-31E	2310' FNL & 690' FEL	2700	Flared/Sold	
Poker Lake Unit 29 BS 127H		H-29-25S-31E	2310' FNL & 660' FEL	4700	Flared/Sold	
Poker Lake Unit 29 BS 128H		H-29-25S-31E	2310' FNL & 630' FEL	4700	Flared/Sold	
Poker Lake Unit 29 BS 108H		H-29-25S-31E	2310' FNL & 600' FWL	2900	Flared/Sold	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Enlink and will be connected to Enlink low/high pressure gathering system located in Loving County, Texas. It will require 233.43' of pipeline to connect the facility to low/high pressure gathering system. BOPCO provides (periodically) to Enlink a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, BOPCO and Enlink have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enlink Processing Plant located in Block 27, Sec. 4, Loving County, Texas. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

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Alternatives to Reduce Flaring

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

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- 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

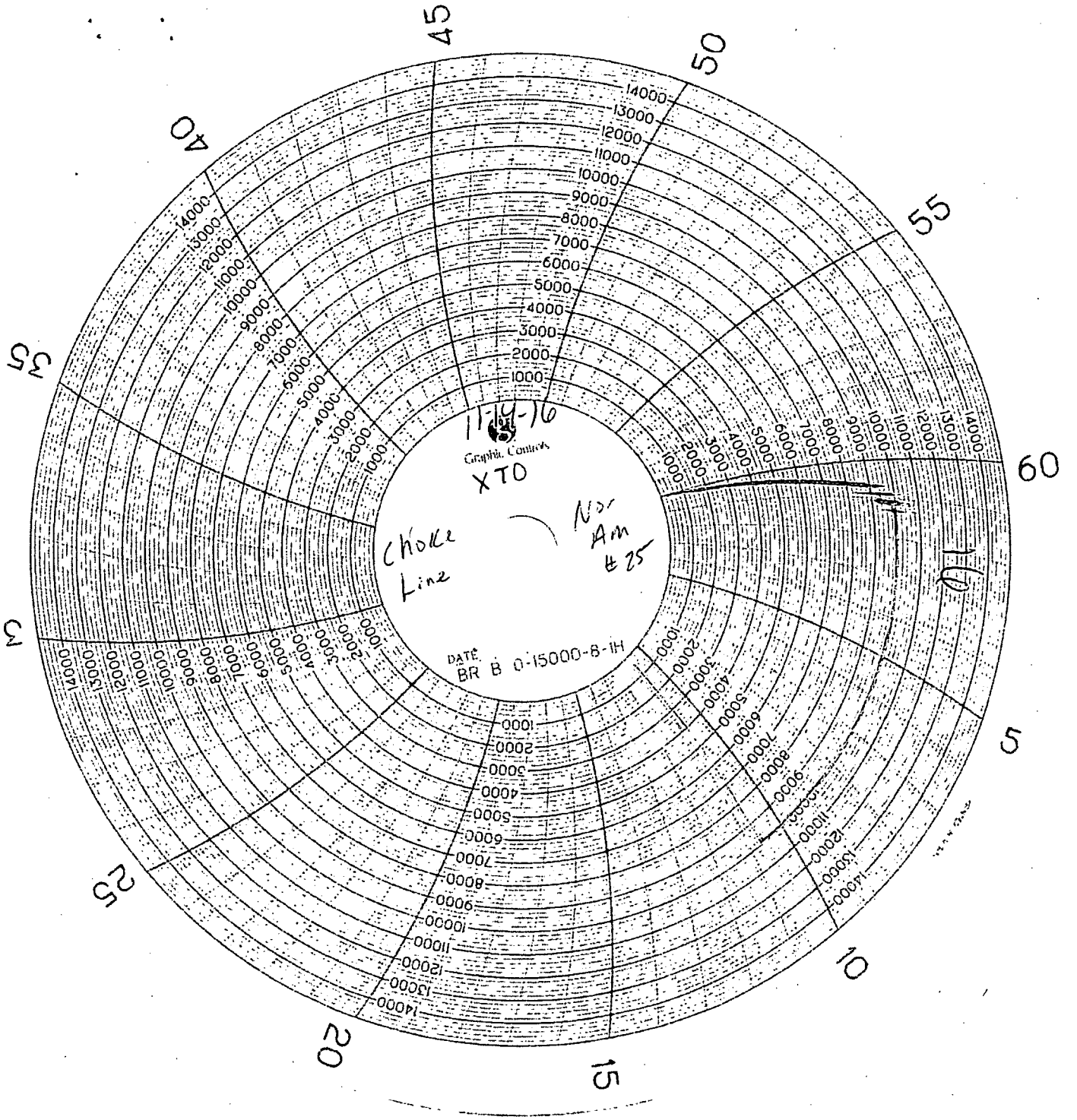
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

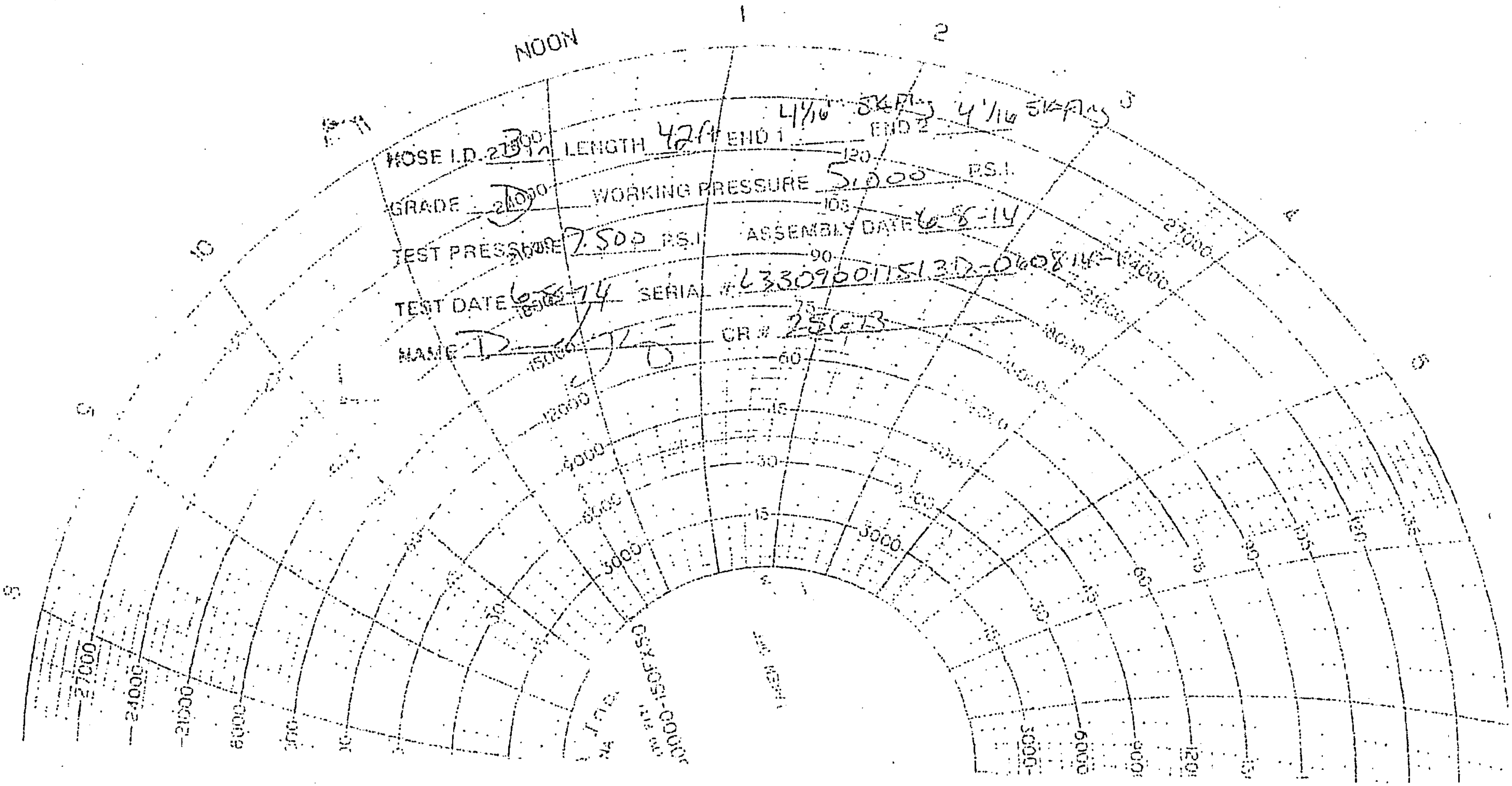
Product Description:	FD3.0-2.0R41/16.5KFLGE/E LE

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

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

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


11-14-16
Graphic Controls
XTO
Choke Line
NOV AM #25
DATE
BR B 0-15000-8-IH


NOON
HOSE I.D. 3"
LENGTH 42ft
END 1 4 1/16" 5K Flg
END 2 4 1/16 5K Flg
GRADE D
WORKING PRESSURE 5,000 P.S.I.
TEST PRESSURE 7,500 P.S.I.
ASSEMBLY DATE 6-5-14
TEST DATE 6-5-14
SERIAL #
CR # 25613
NAME

APD ID: 10400039003 **Submission Date:** 02/11/2019

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

PLU_29_BS_128H_Road_20190211090243.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:

PLU_29_BS_Road_20181206111358.pdf

New road type: RESOURCE

Length: 6234.91 Feet **Width (ft.):** 30

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

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

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:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Surface material will be native caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

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

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

Access miscellaneous information: The Poker Lake Unit 29 Big Sinks area is accessed by existing U.S. Hwy 128 and Buck Jackson Road approximately 4.5 miles to the intersection with Buckthorn Road. Turn left approximately 9 miles. Road heads South, then West to intersection with Buck Jackson Rd. Turn left approximately .5 miles. The proposed road and locations are to the east. 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 no existing access roads to the proposed Poker Lake Unit 29 Big Sinks well locations. All equipment and vehicles will be confined to the routes shown on the Vicinity Map as provided by Frank's Surveying. Maintenance of the access roads will continue until abandonment and reclamation of the well pads is completed. The project is located approximately 27 miles to the town of Loving, New Mexico.

Number of access turnouts: 0 **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

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

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

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

PLU_29_BS_1_Mile_20181206111600.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Two 600' x 600' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB). The pads are located in Section 29-T25S-R31E NMPM, Eddy County, New Mexico. Plats of the proposed facilities are attached. Only the area necessary to maintain facilities will be disturbed. Due to air permitting time frames and anticipated reserves, two facilities are anticipated to be necessary for full area development. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment. In the event the wells are found productive, 20-8" composite flexpipe or steel flowlines with a maximum safety pressure rating of 1400psi (operating pressure: 750 psi) will be buried within proposed lease road corridors from the proposed wells to the PLU 29 BS East CTB and the PLU 29 BS West CTB where the oil, gas, and water will be metered and separated. If XTO decides to run surface lines, 20-4" or less flexpipe or steel flowlines with a max. safety psi rating of 750 (op. psi: 125psi) will be laid within proposed lease road corridors from the proposed wells to the proposed CTBs. An additional 20-22" or less high pressure gas lines will be buried within the proposed lease road corridor with the flowlines for gas lift, fuel gas, and water. The distance of proposed flowlines per well will be approximately 6,165.04' or less per well based on the location of the well pad in conjunction with the facility location. All flowlines will follow proposed lease road corridors. A plat of the proposed flowline route for the lease is attached. A gas purchaser has been identified. Two 110' corridors are requested to connect with the Poker Lake Unit Row 5 pipeline extending from the PLU 29 BS East CTB and the PLU 29 BS West CTB. XTO will be installing the line with anticipated risers located on the CTB. The gas purchaser will be responsible for permitting their own gas lines and compressor station, where applicable, through private, state, and federal lands. PLU 29 BS East GSL Approx. Length: 252.19'. PLU 29 BS West GSL Approx. Length: 233.43'. Produced water will be hauled from location to a commercial disposal facility as needed. Once wells are drilled and completed, a 3160-5 sundry notification will be submitted to BLM in compliance with Onshore Order 7. There will 2 flares associated with the Poker Lake Unit 29 BS project. The flare stacks will be 50'x50'. 1 will be located on the PLU 29 BS East CTB. 1 will be located on the PLU 29 BS West CTB. Both will be sized and rated based on anticipated reserves and recovery of gas throughout the development area with 150' of distance between all facility equipment, road and well pad locations for safety purposes. 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 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. All electrical poles and lines will be placed within existing and proposed lease roads corridors. All lines will be primary 12,740 volt to properly run expected production equipment. Approx. 6652.94' 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.

Production Facilities map:

PLU_29_BS_FL_20181206111740.pdf

PLU_29_BS_GS_20181206111759.pdf

PLU_29_BS_WCTB_20181206111719.pdf

PLU_29_BS_ECTB_20181206111708.pdf

PLU_29_BS_OHE_20181206111820.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Water source use type: INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING
Describe type: Fresh Water; in Section 6, T25S-R29E

Water source type: OTHER

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT,PRIVATE CONTRACT,PRIVATE CONTRACT
Source land ownership: FEDERAL

Water source transport method: TRUCKING,TRUCKING,TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 335000

Source volume (acre-feet): 43.179188

Source volume (gal): 14070000

Water source use type: INTERMEDIATE/PRODUCTION CASING, STIMULATION, SURFACE CASING
Describe type: Fresh Water; Section 27, T25S-R30E

Water source type: OTHER

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT,PRIVATE CONTRACT,PRIVATE CONTRACT,PRIVATE CONTRACT
Source land ownership: FEDERAL

Water source transport method: TRUCKING,TRUCKING,TRUCKING,TRUCKING
Source transportation land ownership: FEDERAL

Water source volume (barrels): 335000

Source volume (acre-feet): 43.179188

Source volume (gal): 14070000

Water source and transportation map:

PLU_29_BS_128H_Wtr_20190211090330.pdf

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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

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: Pit 1: Federal Caliche Pit, Section 17-T25S-R30E Pit 2: Federal Caliche Pit, Section 34-T25S-R29E

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Fluid

Amount of waste: 500 barrels

Waste disposal frequency : One Time Only

Safe containment description: Steel mud pits

Safe containmant attachment:

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

Disposal type description:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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

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: 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:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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:

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Section 9 - Well Site Layout

Well Site Layout Diagram:

PLU_29_BS_128H_Layout_20190211090413.pdf

Comments: This is a multi-well pad.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: POKER LAKE UNIT 29 BS

Multiple Well Pad Number: 4

Recontouring attachment:

PLU_29_BS_Pad_4_Rec_20181206112331.pdf
PLU_29_BS_Pad_2_Rec_20181206112307.pdf
PLU_29_BS_Pad_1_Rec_20181206112255.pdf
PLU_29_BS_Pad_3_Rec_20181206112318.pdf

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

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

Well pad proposed disturbance (acres): 20.16
Road proposed disturbance (acres): 4.29
Powerline proposed disturbance (acres): 0
Pipeline proposed disturbance (acres): 5.48
Other proposed disturbance (acres): 16.53
Total proposed disturbance: 46.46

Well pad interim reclamation (acres): 6.68
Road interim reclamation (acres): 0
Powerline interim reclamation (acres): 0
Pipeline interim reclamation (acres): 5.48
Other interim reclamation (acres): 0
Total interim reclamation: 12.16

Well pad long term disturbance (acres): 13.48
Road long term disturbance (acres): 4.29
Powerline long term disturbance (acres): 0
Pipeline long term disturbance (acres): 0
Other long term disturbance (acres): 16.53
Total long term disturbance: 34.3

Disturbance Comments:

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

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

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

Existing Vegetation at the well pad: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils

snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility.

Existing Vegetation at the well pad attachment:

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

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

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

Seed Management

Seed Table

Seed type: **Seed source:**

Seed name:

Source name: **Source address:**

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre: **Proposed seeding season:**

Seed Summary	
Seed Type	**Pounds/Acre**

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

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

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

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

Existing invasive species treatment description:

Existing invasive species treatment attachment:

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:

Section 11 - Surface Ownership

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Disturbance type: OTHER

Describe: CTB

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:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

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: 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:**

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Disturbance type: OTHER

Describe: Electric

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 29 BS **Well Number:** 128H

Section 12 - Other Information

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

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

ROW Applications

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

Previous Onsite information: Well pad locations have been staked. Surveys of the proposed access roads and well pad locations have been completed by Frank Surveying, a registered professional land surveyor. Center stake surveys with access roads have been completed on State and Federal lands with Fernando Banos, Bureau of Land Management Natural Resource Specialist in attendance.

Other SUPO Attachment

PLU_29_BS_List_20181206113655.pdf

PLU_29_BS_All_Pads_20181206113632.pdf

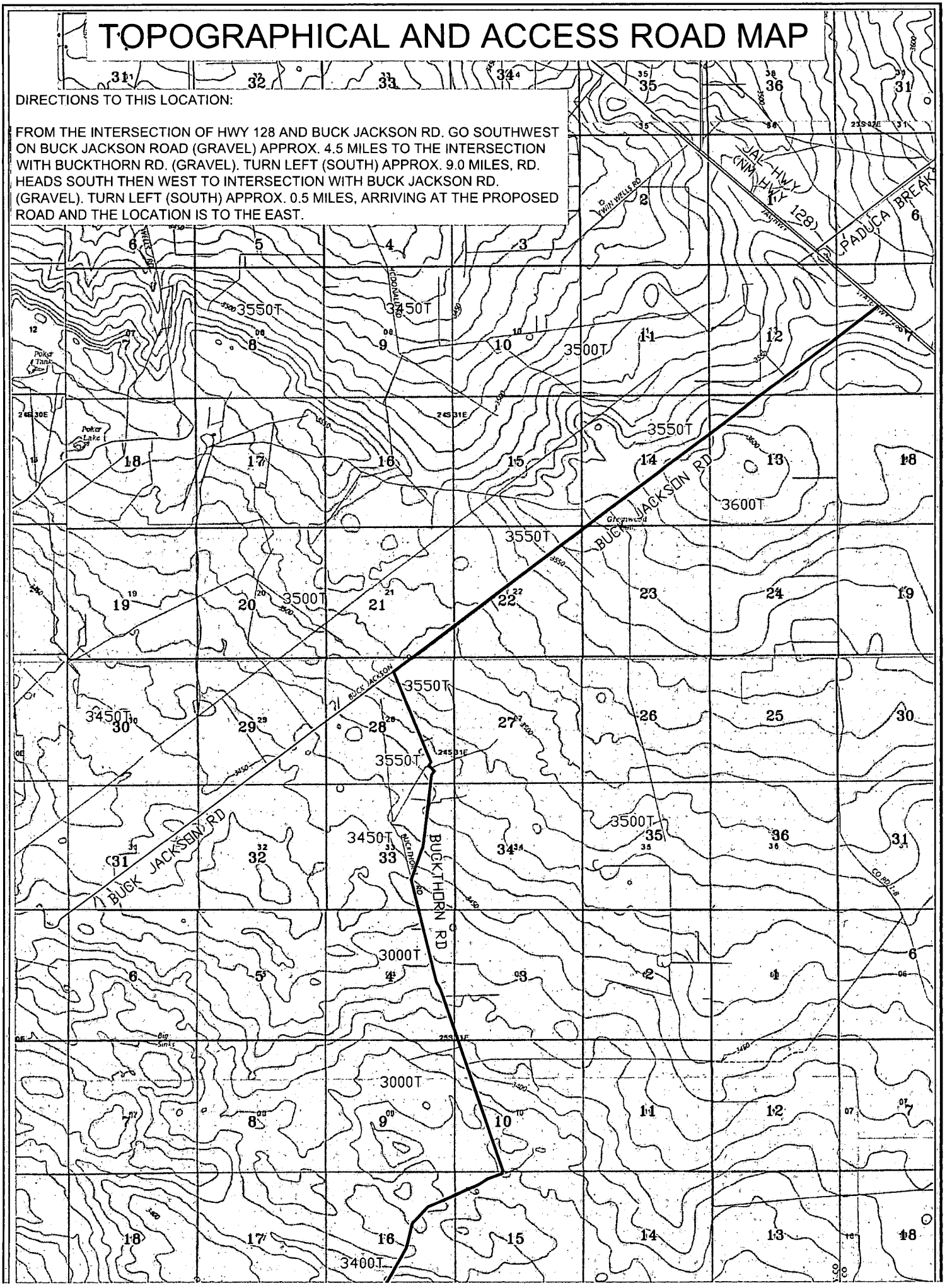
PLU_29_BS_Cultural_Mitigation_20181207115143.pdf

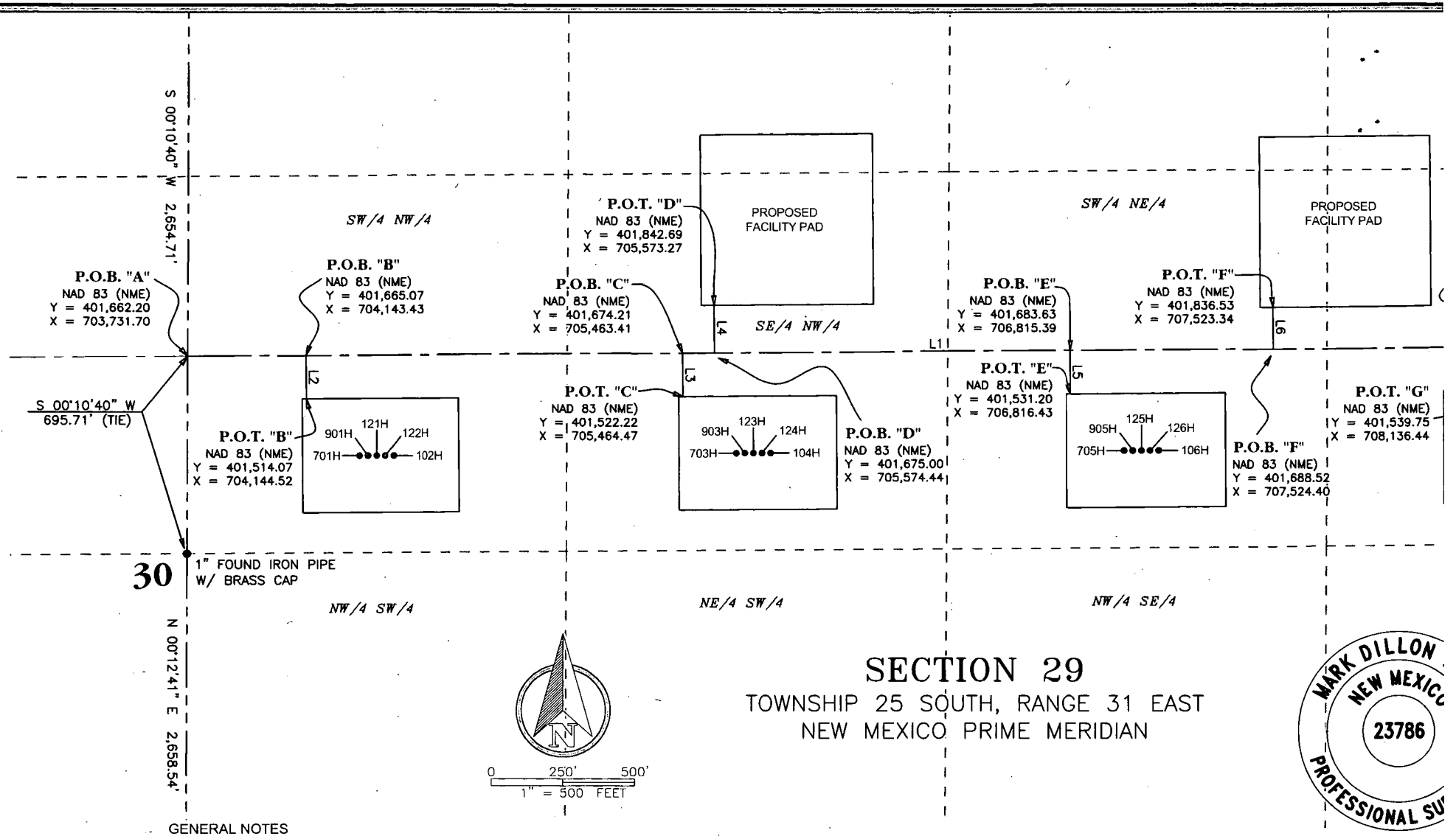
PLU_29_BS_Fed_SUPO_20190131115653.pdf

TOPOGRAPHICAL AND ACCESS ROAD MAP

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON ROAD (GRAVEL) APPROX. 4.5 MILES TO THE INTERSECTION WITH BUCKTHORN RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 9.0 MILES, RD. HEADS SOUTH THEN WEST TO INTERSECTION WITH BUCK JACKSON RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 0.5 MILES, ARRIVING AT THE PROPOSED ROAD AND THE LOCATION IS TO THE EAST.





SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

MARK DILLON
NEW MEXICO
23786
PROFESSIONAL SU

GENERAL NOTES

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

PLAT OF:

PROPOSED CENTERLINE OF ACCESS ROADS FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTION 29,
TOWNSHIP 25 SOUTH, RANGE 31 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED ROAD CENTERLINE
- P.O.B. POINT OF BEGINNING
- P.O.T. POINT OF TERMINUS
- ● FOUND IRON PIPE W/ BRASS DISK

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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:	12-1-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017040533
SCALE:	1" = 500'
SHEET:	1 OF 2
REVISION:	NONE

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 89°36'09" E	5310.74'

LINE TABLE "B"

L2	S 00°24'46" E	151.00'

LINE TABLE "C"

L3	S 00°24'01" E	152.00'

LINE TABLE "D"

L4	N 00°23'58" W	167.69'

LINE TABLE "E"

L5	S 00°23'30" E	152.44'

LINE TABLE "F"

L6	N 00°24'30" W	148.02'

LINE TABLE "G"

L7	S 00°24'41" E	153.02'

TOTAL LENGTH = 6,234.91 FEET
OR 377.87 RODS

POKER LAKE UNIT 29 BIG SINKS PROPOSED ACCESS ROADS

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 6,234.91 FI
OR 1.18 MILES IN LENGTH CROSSING SECTION 29, TOWNSHIP
RANGE 31 EAST N.M.P.M. EDDY COUNTY, NEW MEXICO AND E
RIGHT AND 15.0 FEET LEFT OF THE ABOVE PLATTED CENTER
SURVEY, COMPRISING OF 4.20 ACRES AND DIVIDED IN EACH
QUARTER SECTION AS FOLLOWS:

SW/4 NW/4 SECTION 29 = 1,478.73 FEET = 89.62 RODS =
SE/4 NW/4 SECTION 29 = 1,647.42 FEET = 99.84 RODS = 1
SW/4 NE/4 SECTION 29 = 1,628.10 FEET = 98.67 RODS = 1
SE/4 NE/4 SECTION 29 = 1,480.66 FEET = 89.74 RODS = 1

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

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GENERAL NOTES

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

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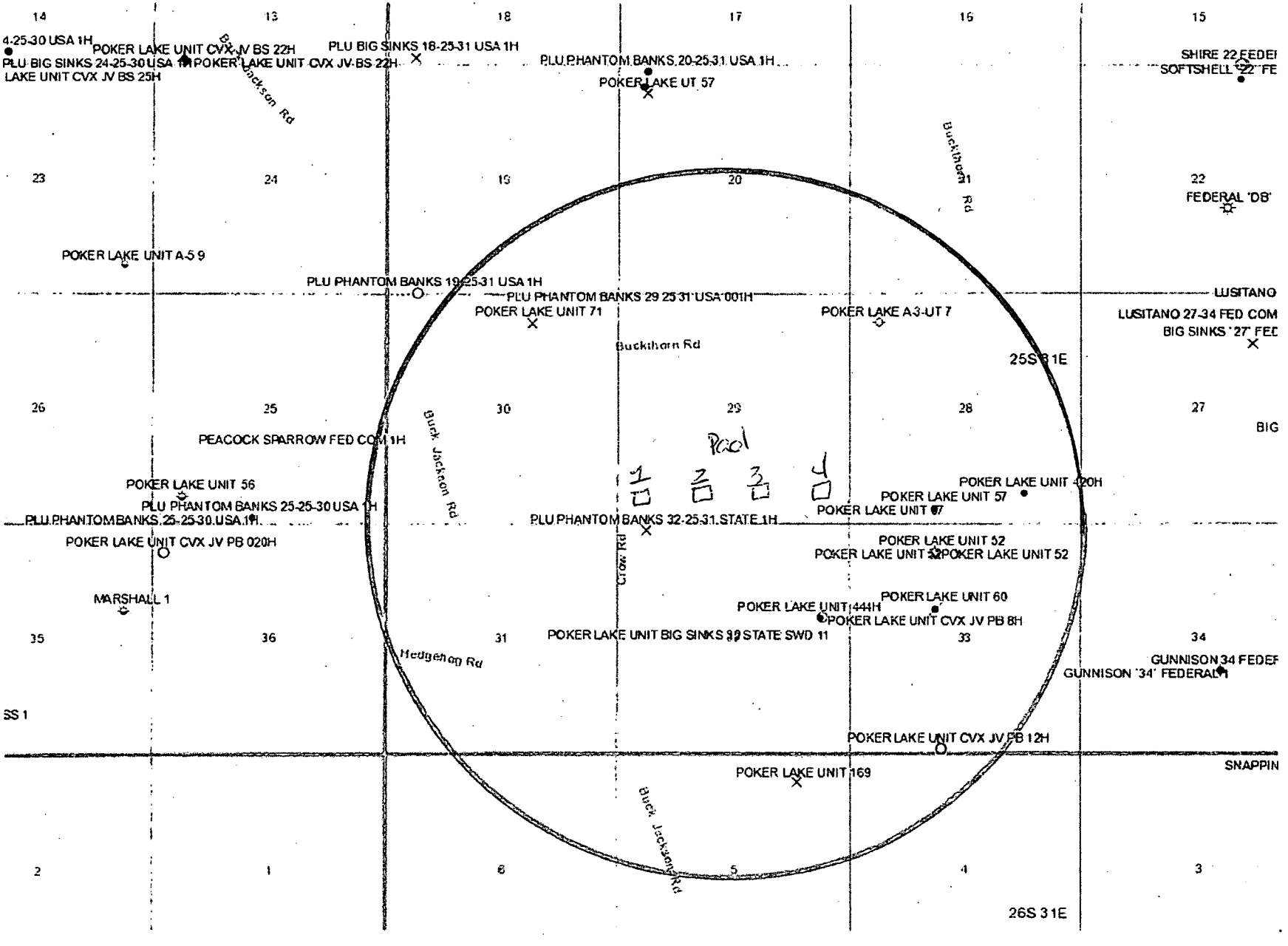
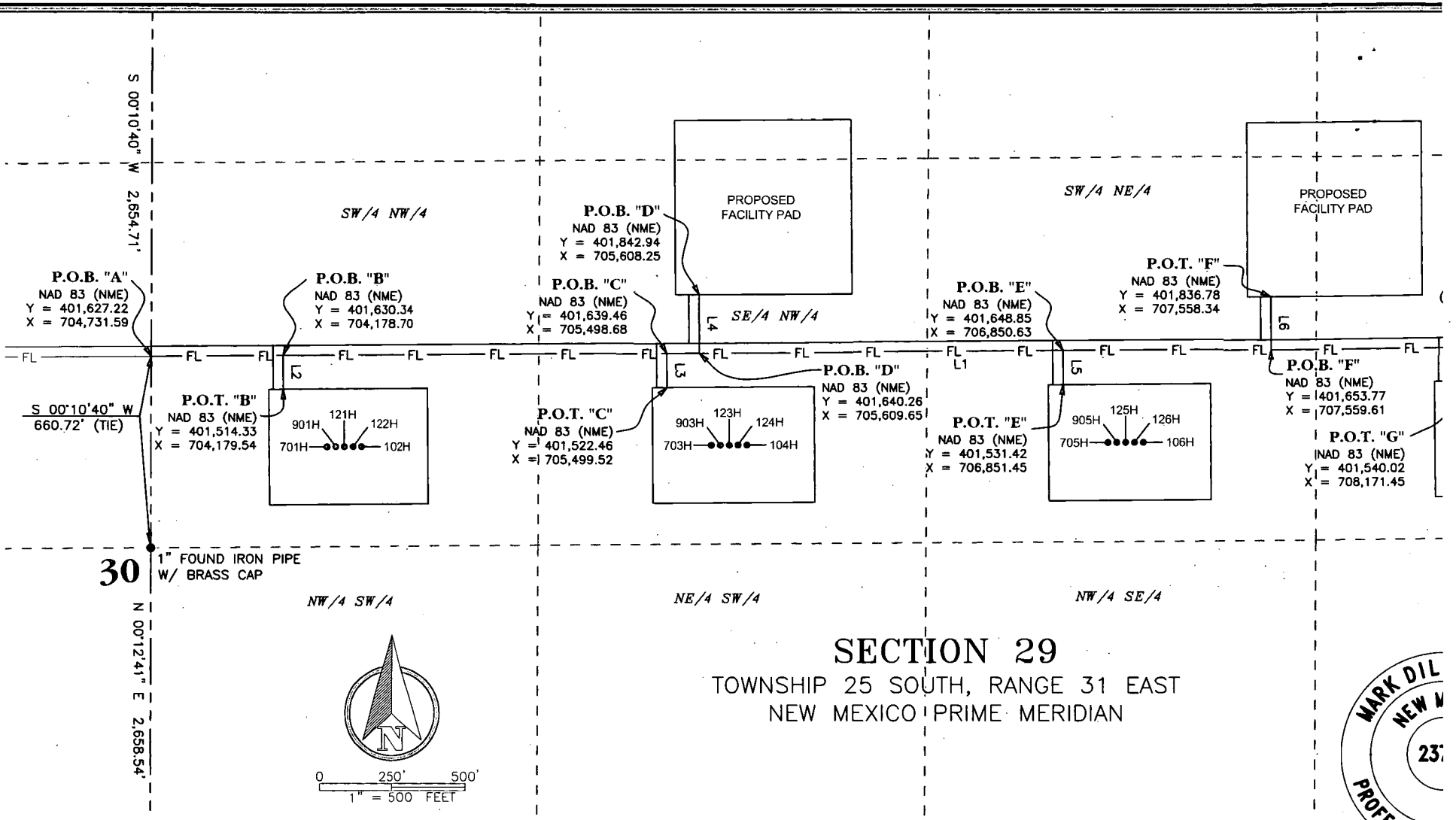
DATE:	12-1-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017040533
SCALE:	1" = 500'
SHEET:	2 OF 2
REVISION:	NONE

PLAT OF:
PROPOSED CENTERLINE OF
ACCESS ROADS FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTION 29,
TOWNSHIP 25 SOUTH, RANGE 31 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

Poker Lake Unit 29 Big Sinks

1-Mile Radius Map





SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

MARK DIL
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GENERAL NOTES

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

PLAT OF:

PROPOSED CENTERLINE OF
BURIED AND SURFACE FLOW LINES
EASEMENT FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTION 29,
TOWNSHIP 25 SOUTH, RANGE 31 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED ROAD
- FL — FL — PROPOSED BURIED AND SURFACE FLOW LINES
- P.O.B. — POINT OF BEGINNING
- P.O.T. — POINT OF TERMINUS
- ● — FOUND IRON PIPE W/ BRASS CAP

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DATE:	12-1-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017040533
SCALE:	1" = 500'
SHEET:	1 OF 2
REVISION:	NONE

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 89°36'09" E	5310.89'

LINE TABLE "B"

L2	S 00°24'55" E	116.01'

LINE TABLE "C"

L3	S 00°24'53" E	117.00'

LINE TABLE "D"

L4	N 00°23'45" W	202.69'

LINE TABLE "E"

L5	S 00°24'02" E	117.43'

LINE TABLE "F"

L6	N 00°23'57" W	183.01'

LINE TABLE "G"

L7	S 00°25'01" E	118.01'

TOTAL LENGTH = 6,165.04 FEET
OR 373.64 RODS

POKER LAKE UNIT 29 BIG SINKS PROPOSED BURIED AND SURFACE F
LINES DESCRIPTION:

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 6,165.04 FEET, 373.
OR 1.17 MILES IN LENGTH CROSSING SECTION 29, TOWNSHIP 25 SOUT
RANGE 31 EAST N.M.P.M. EDDY COUNTY, NEW MEXICO AND BEING 15.
RIGHT AND 15.0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE OF
LINE SURVEY, COMPRISING OF 4.17 ACRES AND DIVIDED IN EACH QUA
QUARTER SECTION AS FOLLOWS:

SW/4 NW/4 SECTION 29 = 1,443.69 FEET = 87.50 RODS = 0.98 OF A
SE/4 NW/4 SECTION 29 = 1,647.38 FEET = 99.84 RODS = 1.11 ACRE
SW/4 NE/4 SECTION 29 = 1,628.20 FEET = 98.68 RODS = 1.10 ACRE
SE/4 NE/4 SECTION 29 = 1,445.77 FEET = 87.62 RODS = 0.98 OF AN

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

GENERAL NOTES

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

PLAT OF:
PROPOSED CENTERLINE OF BURIED AND SURFACE FLOW LINES EASEMENT FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTION 29,
TOWNSHIP 25 SOUTH, RANGE 31 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

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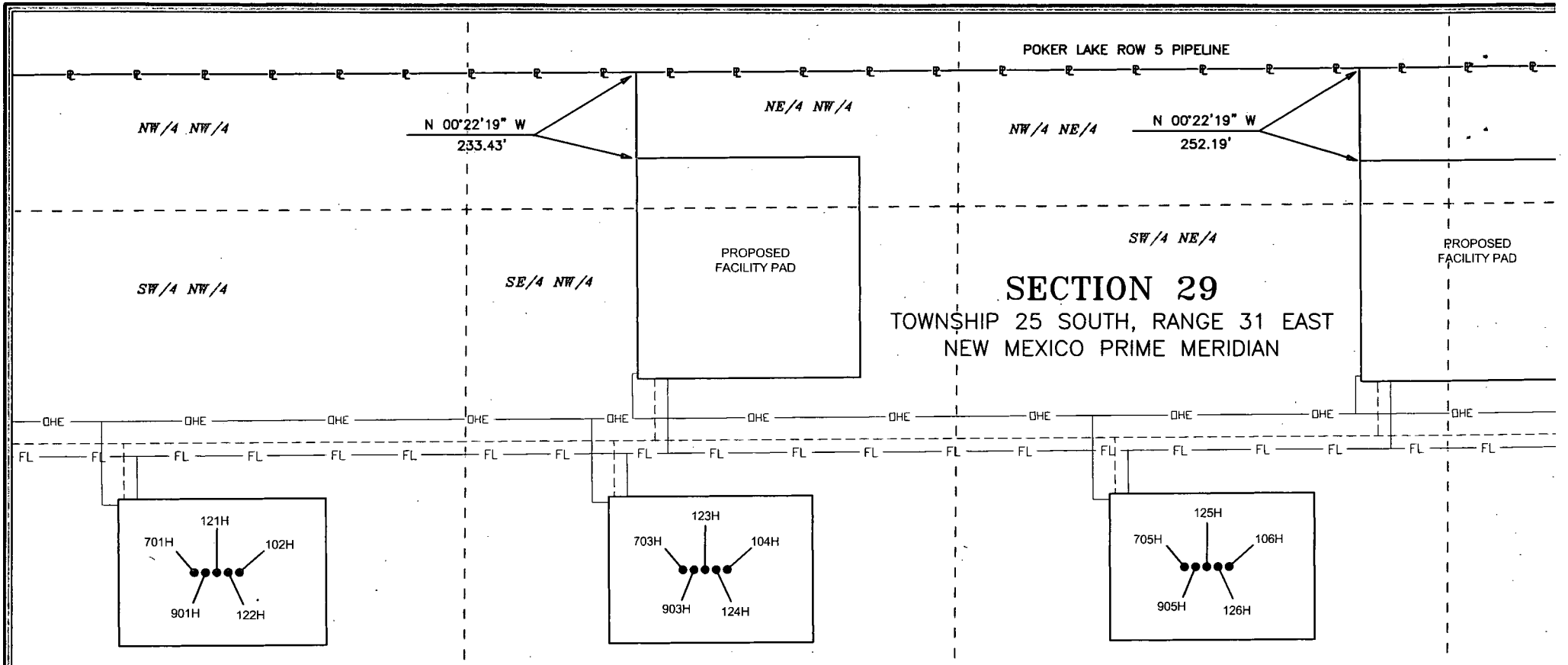
DATE:	12-1-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017040533
SCALE:	1" = 500'
SHEET:	2 OF 2
REVISION:	NONE



LEGEND

- SECTION LINE
- G — CENTERLINE PROPOSED GAS SALES LINE (110' WIDE)
- PROPOSED PAD
- PROPOSED ROAD
- FL — FL — PROPOSED BURIED AND SURFACE FLOW LINES
- OHE — PROPOSED OVERHEAD ELECTRIC
- P.O.B. — POINT OF BEGINNING
- P.O.T. — POINT OF TERMINUS
- ● — FOUND IRON PIPE W/ BRASS CAP

0 200' 400'
1" = 400 FEET

PROPOSED GAS SALES LINES SECTION 29:

TOTAL LENGTH = 485.62 FEET = 29.43 RODS = 0.09 MILES

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DATE:	10-27-2017
DRAWN BY:	AI
CHECKED BY:	DH
FIELD CREW:	N/A
PROJECT NO:	2017040533
SCALE:	1" = 400'
SHEET:	1 OF 1
REVISION:	NONE

PLAT OF:
GAS SALES LINE FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31 EAST, NEW MEXICO PRIME MERIDIAN, EDDY COUNTY, NEW MEXICO

POKER LAKE UNIT 29 BIG SINKS PROPOSED FACILITY PAD DESCRIPTION:

Description of a proposed facility pad totaling 8.26 acres and being situated in Section 29, Township 25 South, Range 31 East, New Mexico Prime Meridian, Eddy County, New Mexico and being more particularly described as follows:

BEGINNING at the northeast corner of the proposed facility pad which lies N 12°56'07" E 1,223.21 feet, from a found 1" iron pipe w/ brass cap being the north quarter corner of said Section 29;

THENCE over and across said Section 29, the following courses and distances:

S 00°22'40" E, a distance of 600.09 feet to a point;

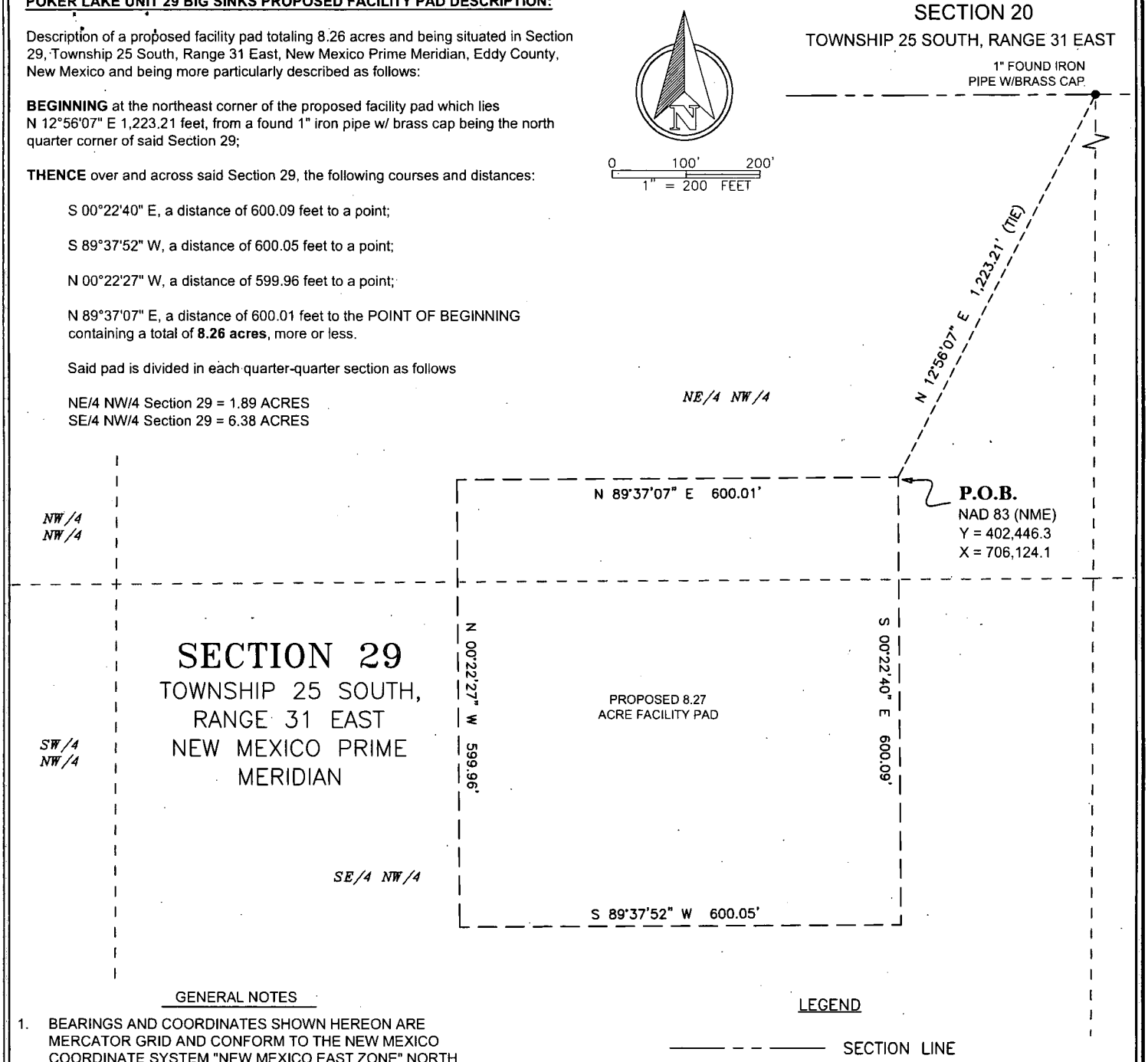
S 89°37'52" W, a distance of 600.05 feet to a point;

N 00°22'27" W, a distance of 599.96 feet to a point;

N 89°37'07" E, a distance of 600.01 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

NE/4 NW/4 Section 29 = 1.89 ACRES
SE/4 NW/4 Section 29 = 6.38 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. DISTANCES ARE SURFACE VALUES.
2. LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATUM (NAD83).

LEGEND

——— - - ——— SECTION LINE
— — — — — — PROPOSED FACILITY PAD
P.O.B. POINT OF BEGINNING
● FOUND BRASS CAP MONUMENT

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

BOPCO, L.P.

PROPOSED FACILITY PAD POKER LAKE UNIT 29

SURVEY FOR A PROPOSED FACILITY PAD SITUATED IN THE NW/4 OF SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

DATE:	10-09-2017	PROJECT NO:	2017040533
DRAWN BY:	AI	SCALE:	1" = 200'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	NO

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

POKER LAKE UNIT 29 BIG SINKS PROPOSED FACILITY PAD DESCRIPTION:

Description of a proposed facility pad totaling 8.26 acres and being situated in Section 29, Township 25 South, Range 31 East, New Mexico Prime Meridian, Eddy County, New Mexico and being more particularly described as follows:

BEGINNING at the northeast corner of the proposed facility pad which lies N 38°27'52" E 1,552.78 feet, from a found 2" iron pipe w/ brass cap being the northeast corner of said Section 29;

THENCE over and across said Section 29, the following courses and distances:

S 00°22'38" E, a distance of 599.95 feet to a point;

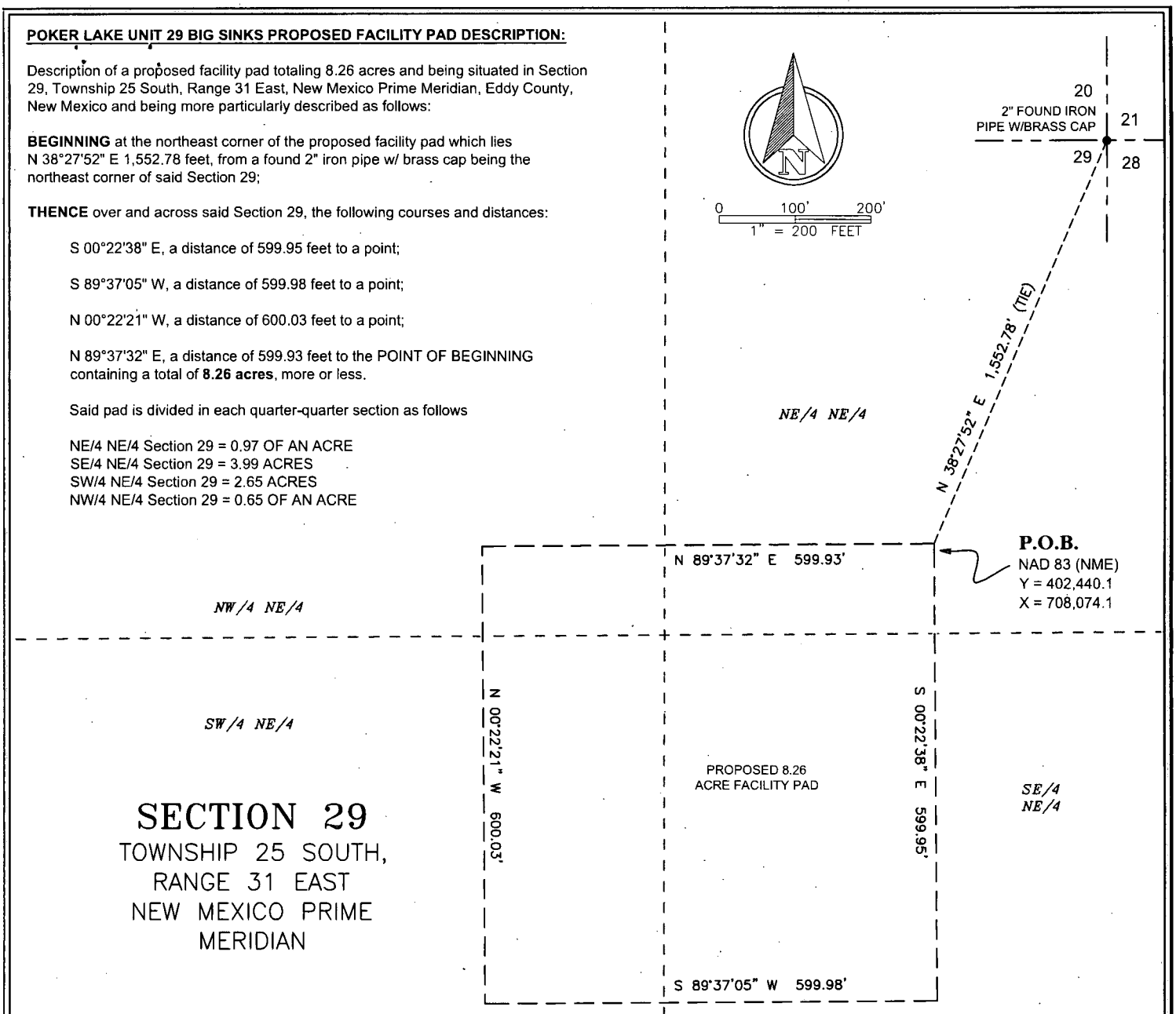
S 89°37'05" W, a distance of 599.98 feet to a point;

N 00°22'21" W, a distance of 600.03 feet to a point;

N 89°37'32" E, a distance of 599.93 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

NE/4 NE/4 Section 29 = 0.97 OF AN ACRE
SE/4 NE/4 Section 29 = 3.99 ACRES
SW/4 NE/4 Section 29 = 2.65 ACRES
NW/4 NE/4 Section 29 = 0.65 OF AN ACRE



GENERAL NOTES

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

LEGEND

——— - - ——— SECTION LINE
— — — — — — PROPOSED FACILITY PAD
P.O.B. POINT OF BEGINNING
● FOUND BRASS CAP MONUMENT

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

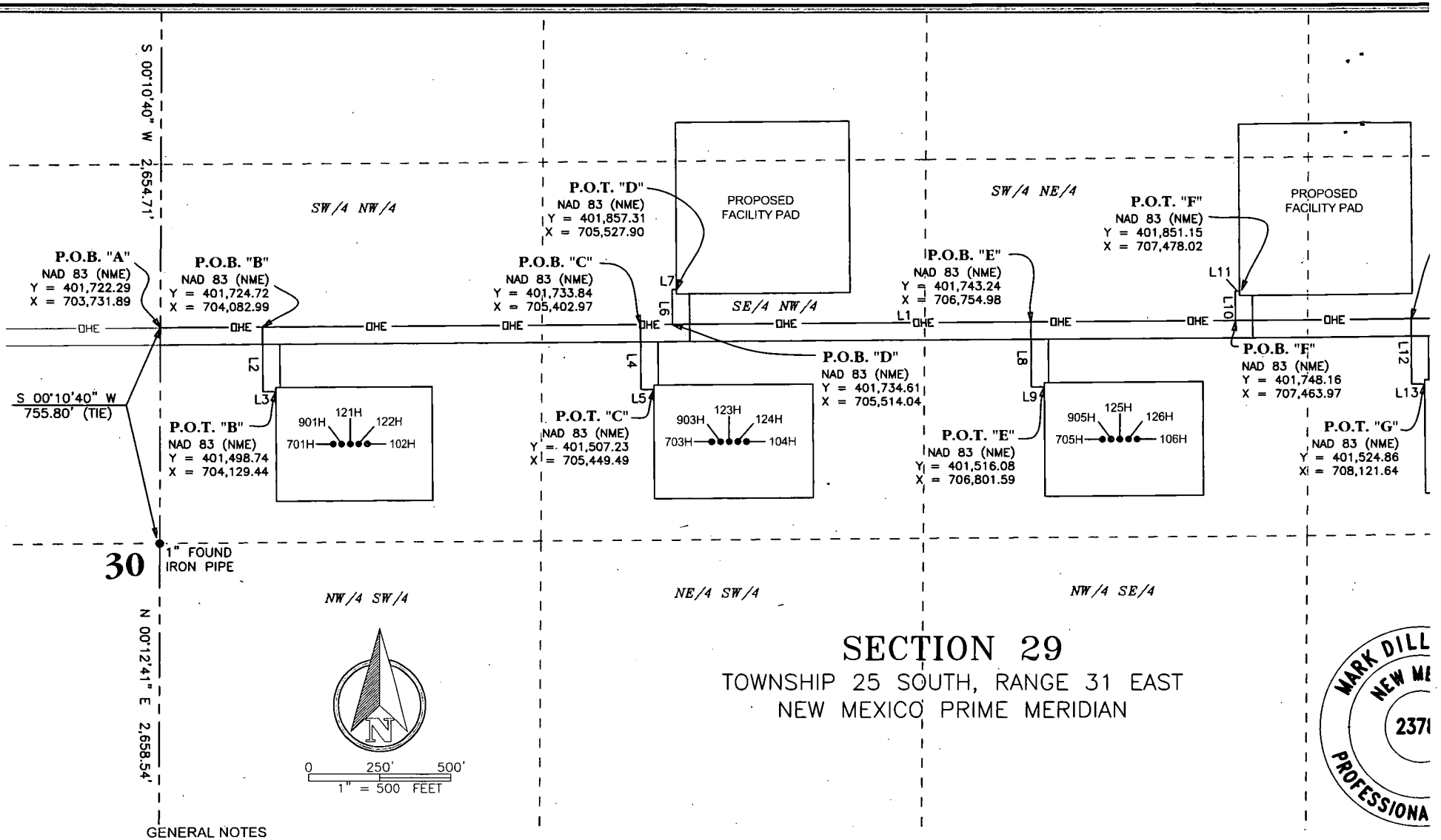
BOPCO, L.P.

PROPOSED FACILITY PAD POKER LAKE UNIT 29

SURVEY FOR A PROPOSED FACILITY PAD SITUATED IN THE NE/4 OF SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO

DATE:	10-09-2017	PROJECT NO:	2017040533
DRAWN BY:	AI	SCALE:	1" = 200'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	NO

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



SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

MARK DILL
NEW ME
2371
PROFESSIONA

GENERAL NOTES

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

LEGEND

——— - - ———	SECTION LINE
———	PROPOSED PAD
———	PROPOSED ROAD
———OHE———	PROPOSED OVERHEAD ELECTRIC
P.O.B.	POINT OF BEGINNING
P.O.T.	POINT OF TERMINUS
●	FOUND IRON PIPE W/ BRASS CAP

PLAT OF:

PROPOSED CENTERLINE OF
ELECTRIC LINE EASEMENT FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTION 29,
TOWNSHIP 25 SOUTH, RANGE 31 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

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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:	12-1-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017040533
SCALE:	1" = 500'
SHEET:	1 OF 2
REVISION:	NONE

LINE TABLE "A"

LINE	BEARING	DISTANCE
L1	N 89°36'10" E	5310.49'

LINE TABLE "B"

L2	S 00°24'55" E	226.02'
L3	N 89°57'02" E	44.81'

LINE TABLE "C"

L4	S 00°24'20" E	226.62'
L5	N 90°00'00" E	44.91'

LINE TABLE "D"

L6	N 00°24'21" W	122.73'
L7	S 89°53'46" E	14.73'

LINE TABLE "E"

L8	S 00°23'30" E	227.16'
L9	S 89°59'38" E	45.06'

LINE TABLE "F"

L10	N 00°24'30" W	103.00'
L11	N 90°00'00" E	14.79'

LINE TABLE "G"

L12	S 00°24'38" E	227.52'
L13	S 89°58'24" E	45.10'

TOTAL LENGTH = 6,652.94 FEET
OR 403.21 RODS

POKER LAKE UNIT 29 BIG SINKS PROPOSED ELECTRIC LINE DESC

SURVEY OF A STRIP OF LAND 30.0 FEET WIDE AND 6,652.94 FEET,
MILES IN LENGTH CROSSING SECTIONS 29, TOWNSHIP 25 SOUTH,
EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET RIGHT AND 15
ABOVE PLATTED CENTERLINE OF ELECTRIC LINE SURVEY, COMPI
DIVIDED IN EACH QUARTER QUARTER SECTION AS FOLLOWS:

SW/4 NW/4 SECTION 29 = 1,598.63 FEET = 96.89 RODS = 1.09 A
SE/4 NW/4 SECTION 29 = 1,736.79 FEET = 105.26 RODS = 1.17
SW/4 NE/4 SECTION 29 = 1,717.46 FEET = 104.09 RODS = 1.16
SE/4 NE/4 SECTION 29 = 1,600.06 FEET = 96.97 RODS = 1.09 A

GENERAL NOTES

1. BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

2. LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATUM (NAD83).

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

DATE:	12-1-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RD
PROJECT NO:	2017040533
SCALE:	1" = 500'
SHEET:	2 OF 2
REVISION:	NONE

PLAT OF:

PROPOSED CENTERLINE OF
ELECTRIC LINE EASEMENT FOR:
BOPCO, L.P.
POKER LAKE UNIT 29 BIG SINKS
SITUATED IN SECTIONS 29,
TOWNSHIP 25 SOUTH, RANGE 31 EAST,
NEW MEXICO PRIME MERIDIAN,
EDDY COUNTY, NEW MEXICO

I, MARK
NO. 237
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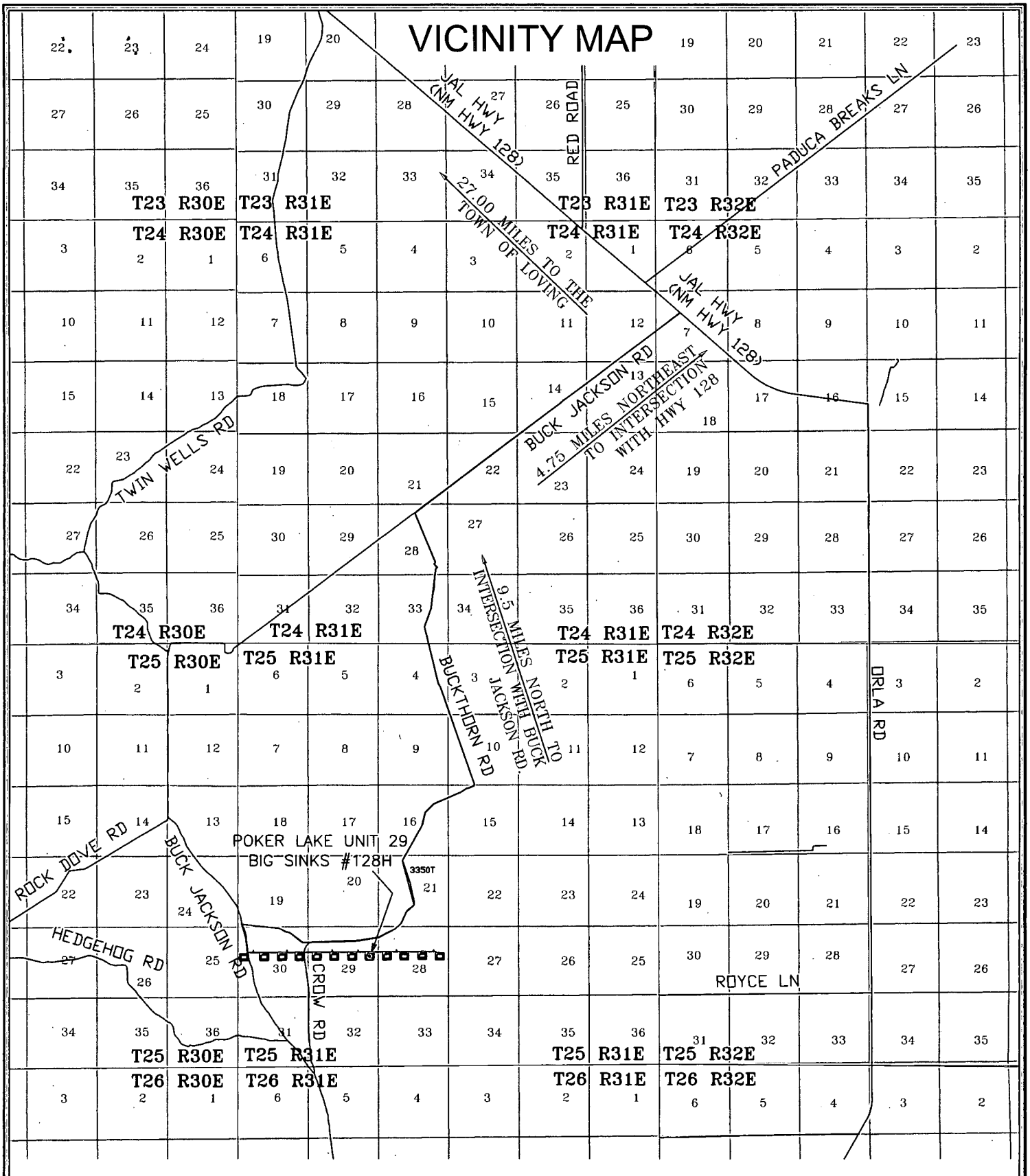
VICINITY MAP



POKER LAKE UNIT 29 BIG SINKS #128H
LOCATED 630 FEET FROM THE EAST LINE AND 2,310 FEET FROM THE NORTH LINE OF SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

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

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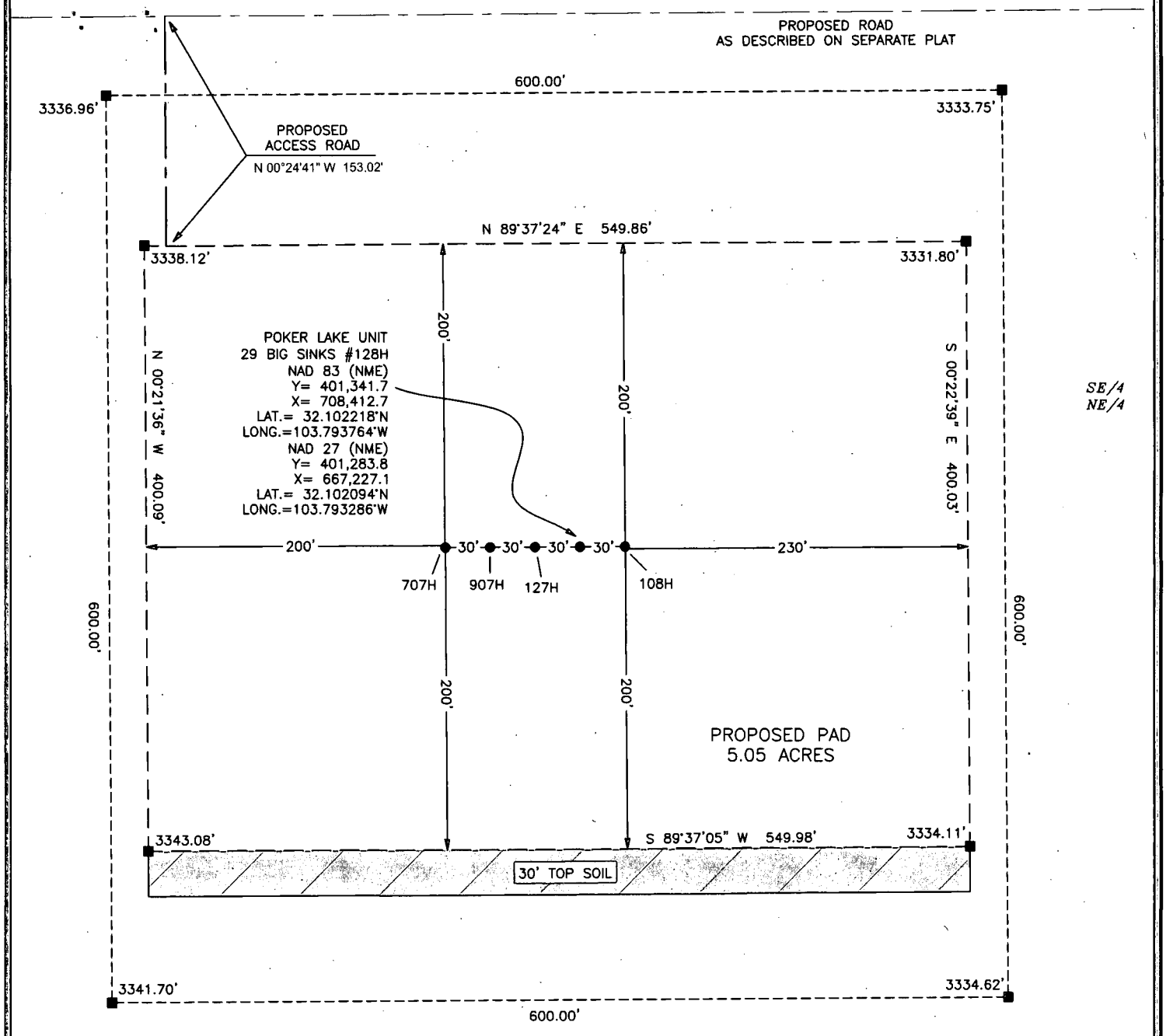
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

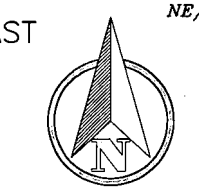
DATE:	11-29-2017
DRAWN BY:	AW
CHECKED BY:	DH
FIELD CREW:	RE/RR
PROJECT NO:	2017071020
SCALE:	1"= 10,000'
SHEET:	1 OF 1
REVISION:	1



SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

NE/4 SE/4



LEGEND

PROPOSED ACCESS RD.

PROPOSED PAD

NOTE:

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

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON ROAD (GRAVEL) APPROX. 4.5 MILES TO THE INTERSECTION WITH BUCKTHORN RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 9.0 MILES, RD. HEADS SOUTH THEN WEST TO INTERSECTION WITH BUCK JACKSON RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 0.5 MILES, ARRIVING AT THE PROPOSED ROAD AND THE LOCATION IS TO THE EAST.

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BOPCO, L.P.

WELL SITE PLAN

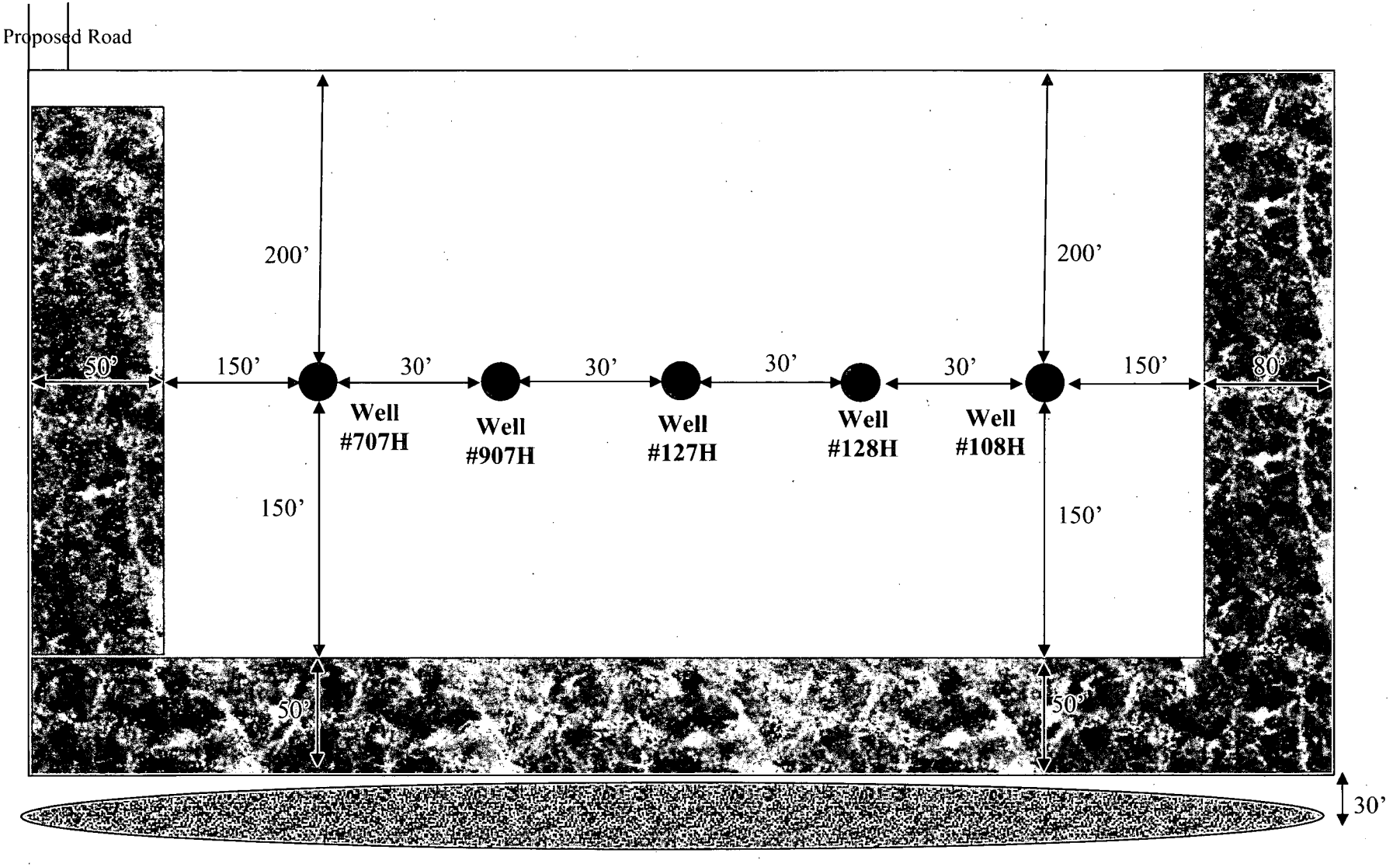
POKER LAKE UNIT 29 BIG SINKS #128H
LOCATED 630 FEET FROM THE EAST LINE
AND 2,310 FEET FROM THE NORTH LINE OF
SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	11-29-2017	PROJECT NO:	2017071020
DRAWN BY:	AI	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	1

Interim Reclamation Diagram

Poker Lake Unit 29 BS #707H, 907H, 127H, 128H, 108H

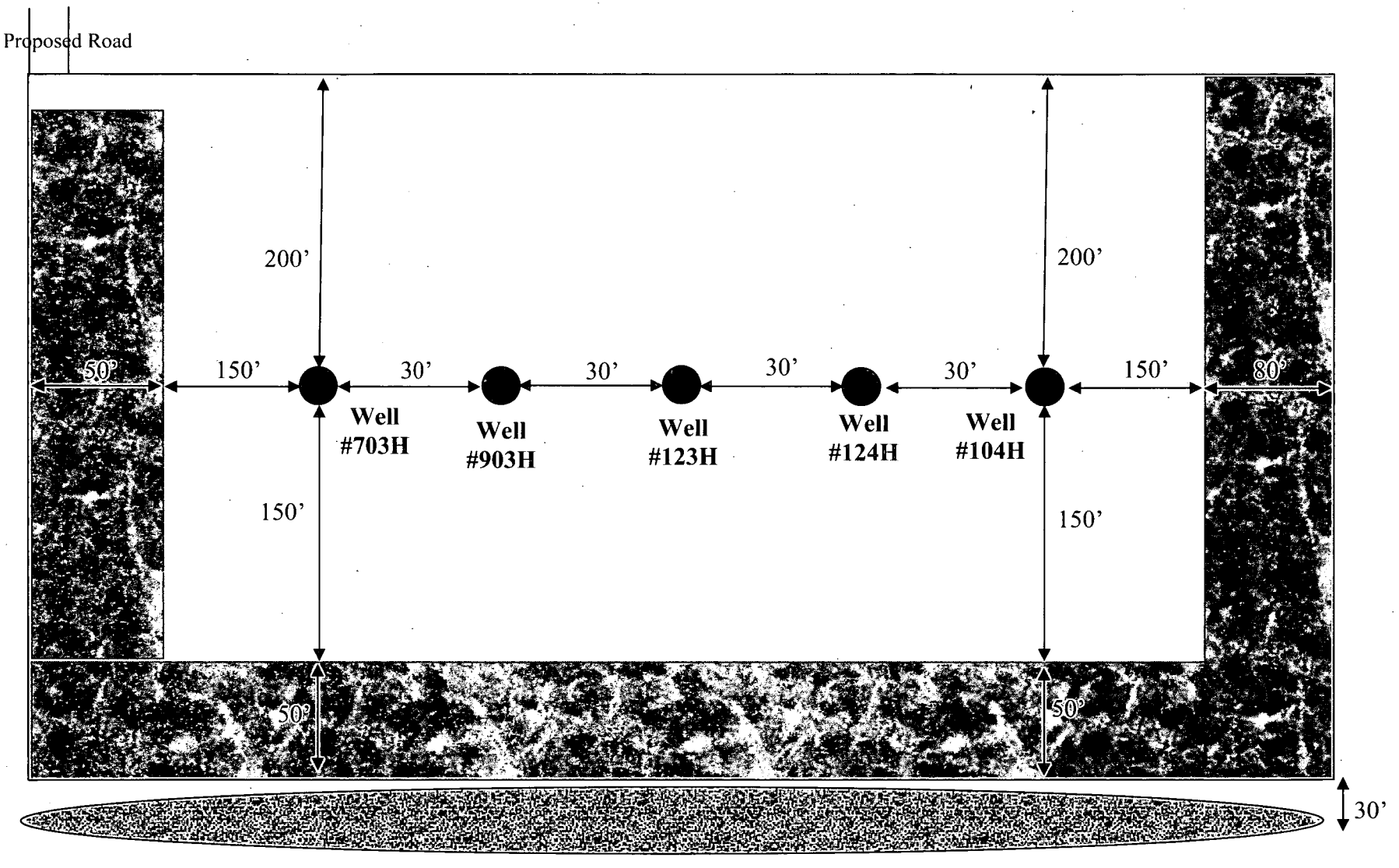
V-Door West (All Wells)



Interim Reclamation Diagram

Poker Lake Unit 29 BS #703H, 903H, 123H, 124H, 104H

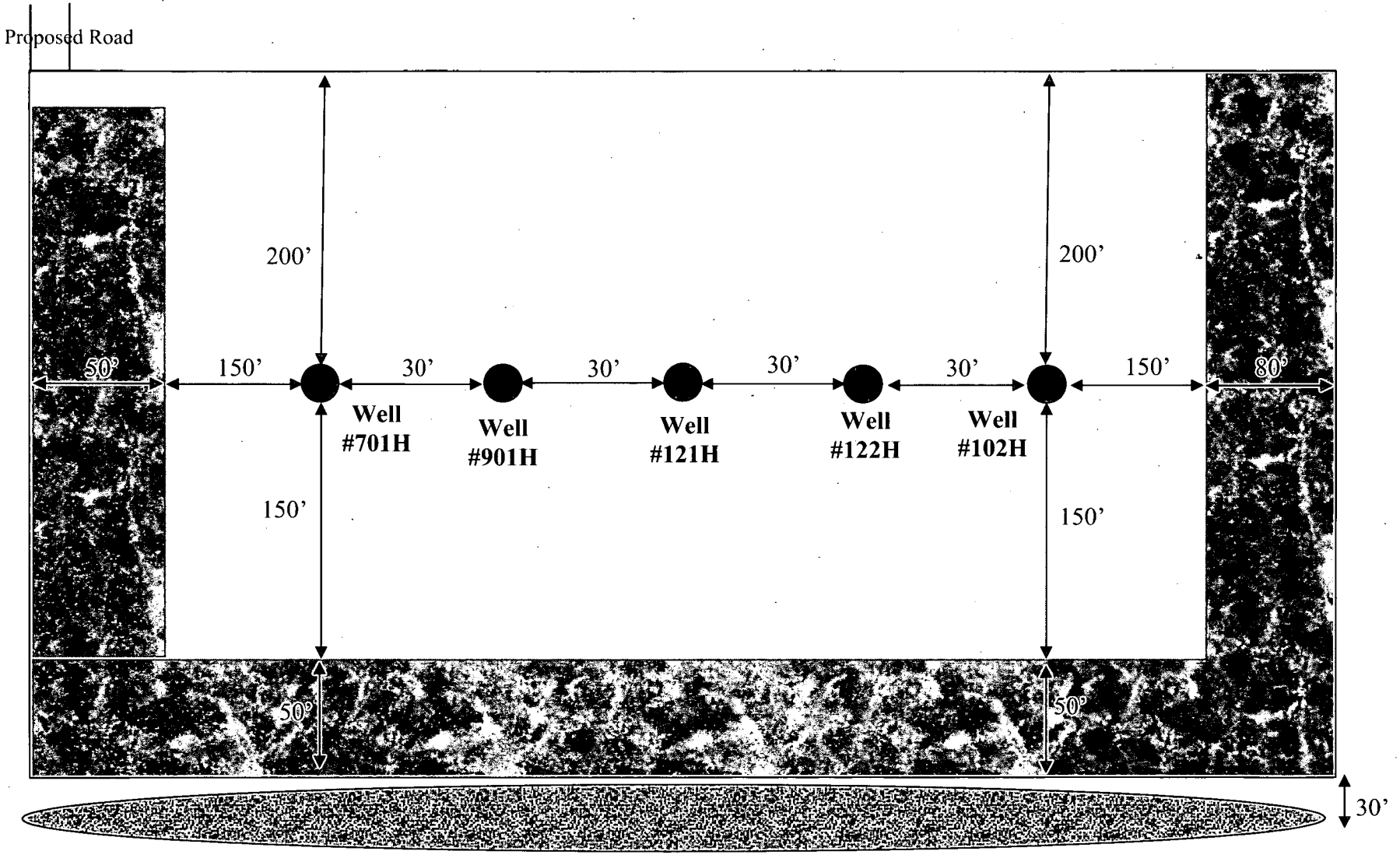
V-Door West (All Wells)



Interim Reclamation Diagram

Poker Lake Unit 29 BS #701H, 901H, 121H, 122H, 102H

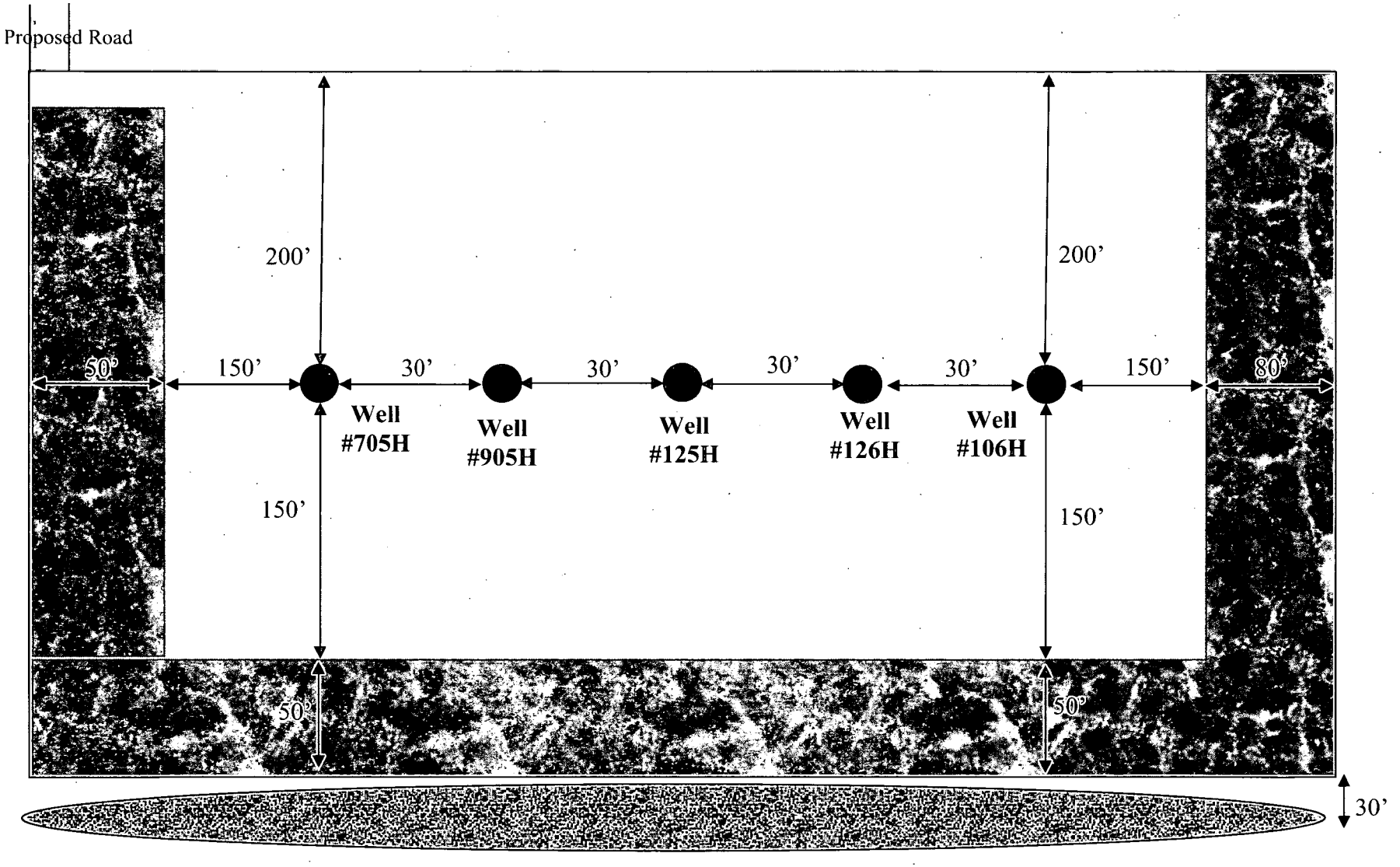
V-Door West (All Wells)



Interim Reclamation Diagram

Poker Lake Unit 29 BS #705H, 905H, 125H, 126H, 106H

V-Door West (All Wells)



N

LEGEND

Wellbore

Interim Reclamation

Ditch & Berm

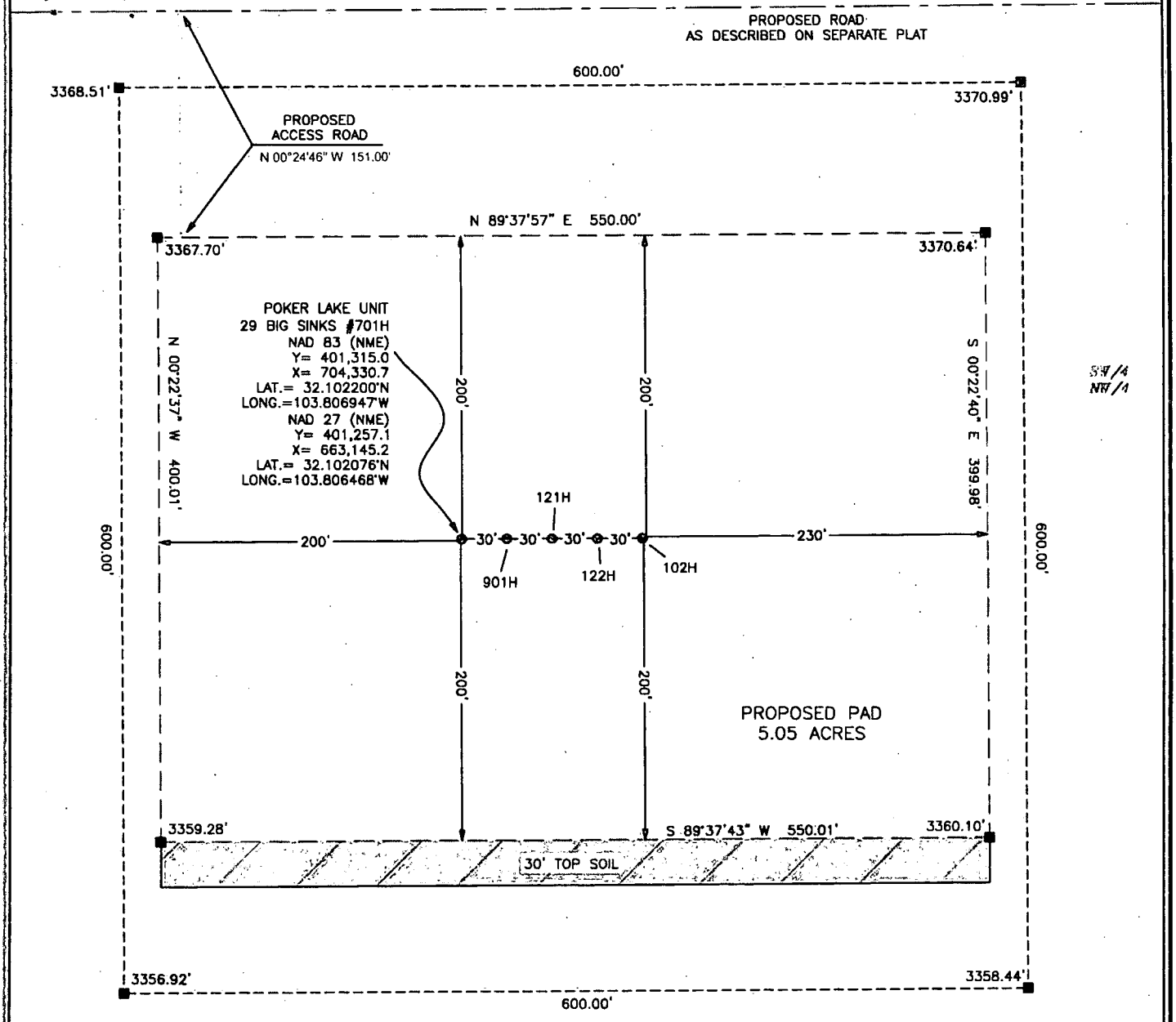
Topsoil

Poker Lake Unit 29 BS List
List of Proposed Wells; Changes from Notice of Staking
BOPCO, L.P.

Pad Number	New Well Name & Number	Original Number	Section	Township	Range	Surface Owner	V-Door
1	Poker Lake Unit 29 BS 701H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 901H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 102H	1002H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 121H	1201H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 122H	1202H	29	25S	31E	Bureau of Land Mgmt	West
2	Poker Lake Unit 29 BS 703H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 903H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 104H	1004H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 123H	1203H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 124H	1204H	29	25S	31E	Bureau of Land Mgmt	West
3	Poker Lake Unit 29 BS 705H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 905H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 106H	1006H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 125H	1205H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 126H	1206H	29	25S	31E	Bureau of Land Mgmt	West
4	Poker Lake Unit 29 BS 707H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 907H		29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 108H	1008H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 127H	1207H	29	25S	31E	Bureau of Land Mgmt	West
	Poker Lake Unit 29 BS 128H	1208H	29	25S	31E	Bureau of Land Mgmt	West

* Bold Indicates Portion Changed

Pad 1



SECTION 29

NW/4 SW/4

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

NOTE:

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

0 50' 100'
1" = 100 FEET

LEGEND

PROPOSED ACCESS RD.
PROPOSED PAD

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON ROAD (GRAVEL) APPROX. 4.5 MILES TO THE INTERSECTION WITH BUCKTHORN RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 9.0 MILES, RD. HEADS SOUTH THEN WEST TO INTERSECTION WITH BUCK JACKSON RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 0.5 MILES, ARRIVING AT THE PROPOSED ROAD AND THE LOCATION IS TO THE EAST.

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

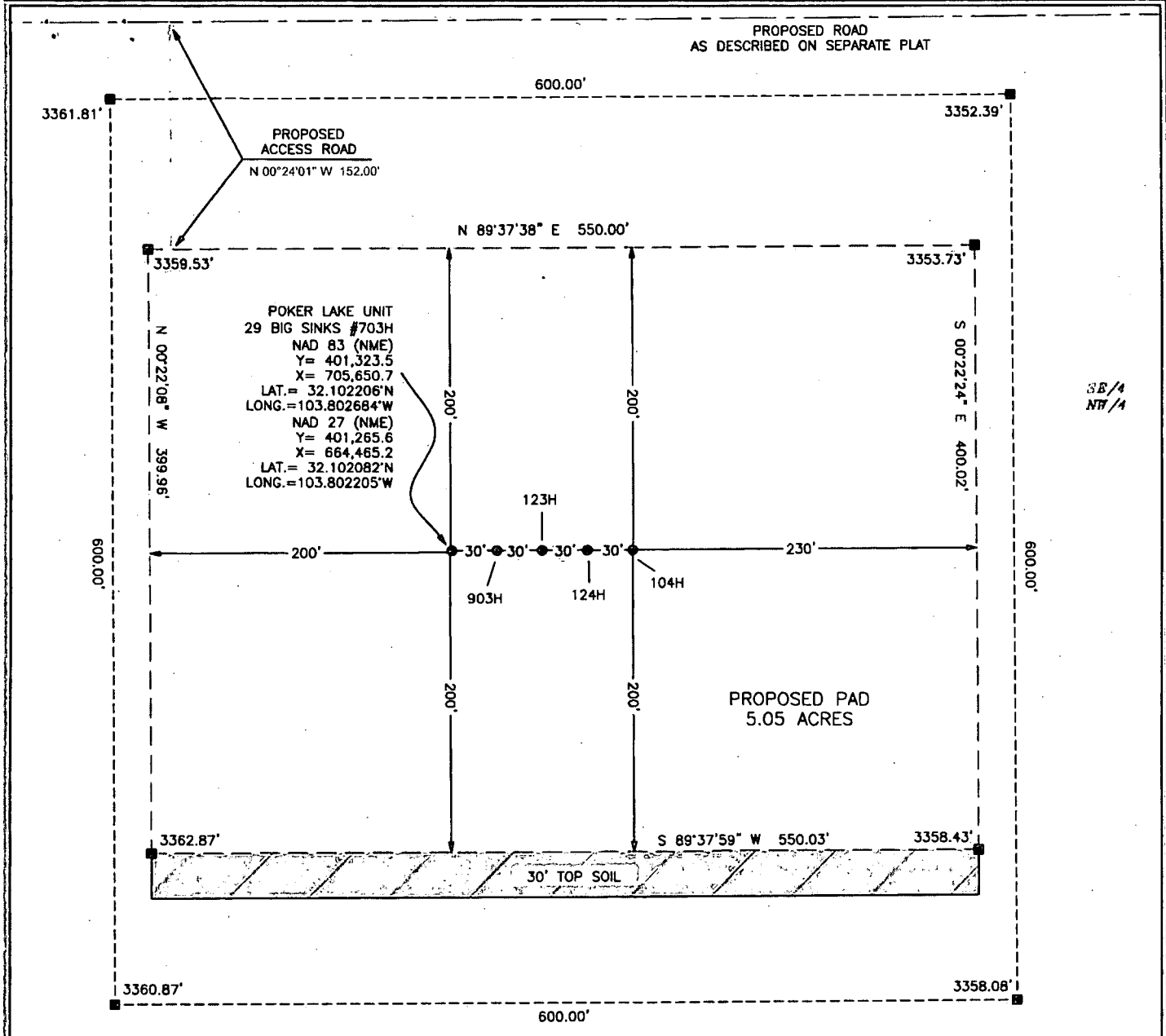
BOPCO, L.P.

WELL SITE PLAN

POKER LAKE UNIT 29 BIG SINKS #701H
LOCATED 600 FEET FROM THE WEST LINE
AND 2,310 FEET FROM THE NORTH LINE OF
SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	11-29-2017	PROJECT NO:	2017071006
DRAWN BY:	AI	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	1

Pad 2



LEGEND

PROPOSED ACCESS RD.

PROPOSED PAD

SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

NE/4 SW/4

NOTE:

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

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON ROAD (GRAVEL) APPROX. 4.5 MILES TO THE INTERSECTION WITH BUCKTHORN RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 9.0 MILES, RD. HEADS SOUTH THEN WEST TO INTERSECTION WITH BUCK JACKSON RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 0.5 MILES, ARRIVING AT THE PROPOSED ROAD AND THE LOCATION IS TO THE EAST.

BOPCO, L.P.

WELL SITE PLAN

POKER LAKE UNIT 29 BIG SINKS #703H
LOCATED 1,920 FEET FROM THE WEST LINE
AND 2,310 FEET FROM THE NORTH LINE OF
SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31
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
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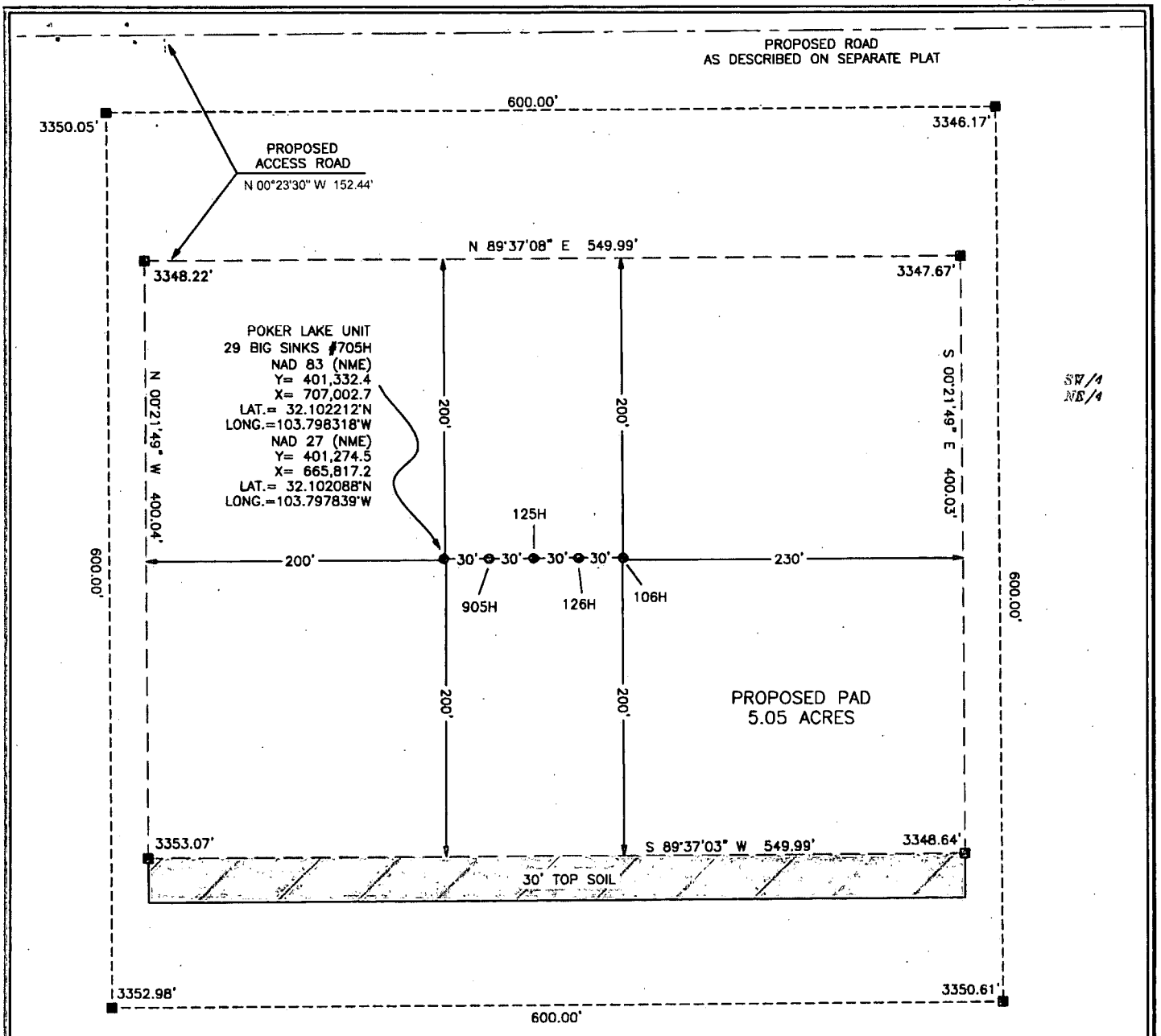
DATE:	11-29-2017	PROJECT NO:	2017071011
DRAWN BY:	AI	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	1

Pad 3



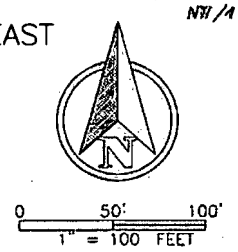
SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

NW/4 SE/4

NOTE:

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



LEGEND

PROPOSED ACCESS RD.
PROPOSED PAD

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON ROAD (GRAVEL) APPROX. 4.5 MILES TO THE INTERSECTION WITH BUCKTHORN RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 9.0 MILES, RD. HEADS SOUTH THEN WEST TO INTERSECTION WITH BUCK JACKSON RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 0.5 MILES, ARRIVING AT THE PROPOSED ROAD AND THE LOCATION IS TO THE EAST.

BOPCO, L.P.

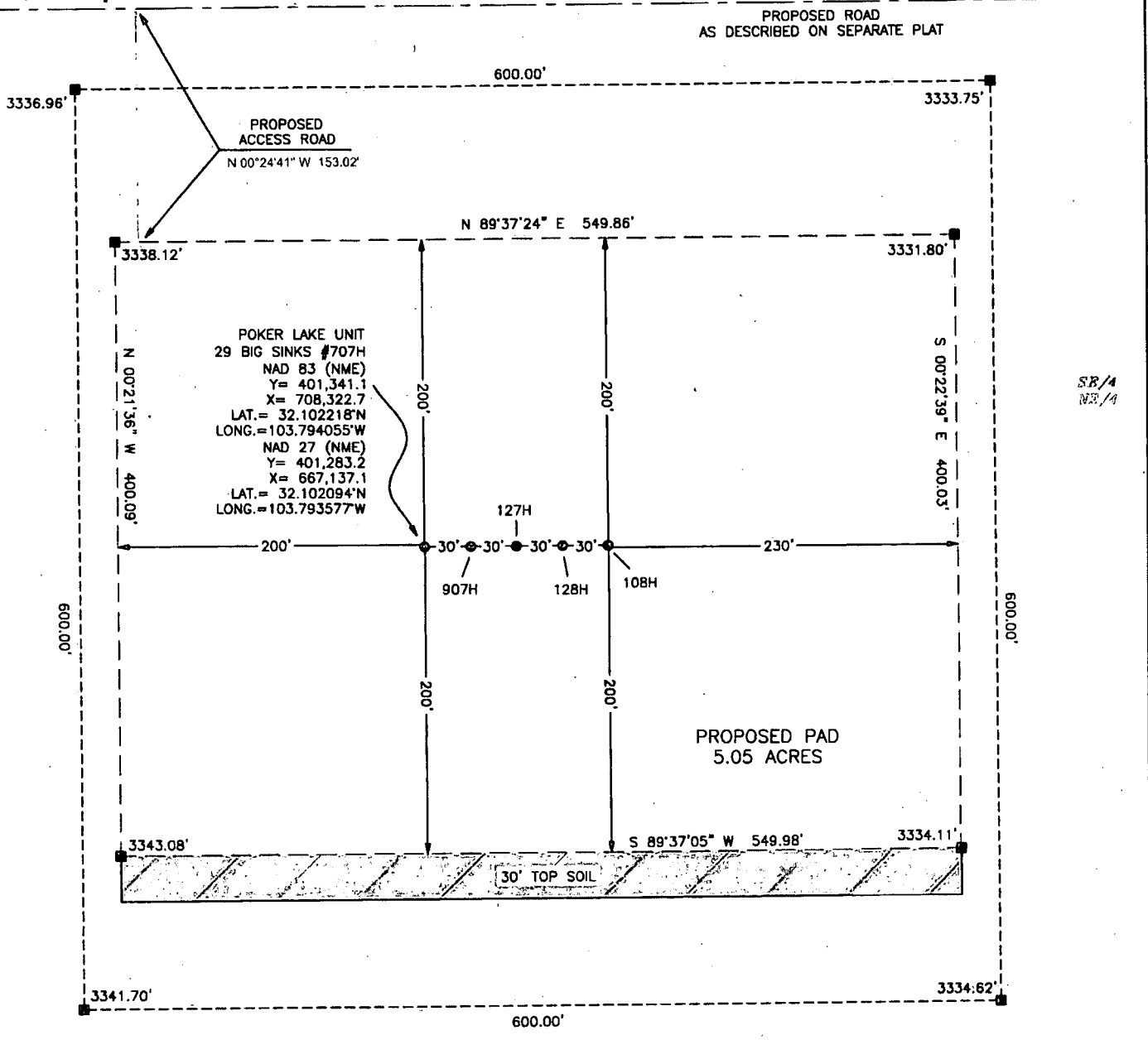
WELL SITE PLAN

POKER LAKE UNIT 29 BIG SINKS #705H
LOCATED 2,040 FEET FROM THE EAST LINE
AND 2,310 FEET FROM THE NORTH LINE OF
SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31
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:	11-29-2017	PROJECT NO:	2017071016
DRAWN BY:	AI	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	1

Pad 4



LEGEND

PROPOSED ACCESS RD.

PROPOSED PAD

SECTION 29

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN

NE/4 SE/4

NOTE:

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

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HWY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON ROAD (GRAVEL) APPROX. 4.5 MILES TO THE INTERSECTION WITH BUCKTHORN RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 9.0 MILES, RD. HEADS SOUTH THEN WEST TO INTERSECTION WITH BUCK JACKSON RD. (GRAVEL). TURN LEFT (SOUTH) APPROX. 0.5 MILES, ARRIVING AT THE PROPOSED ROAD AND THE LOCATION IS TO THE EAST.

FSC INC
SURVEYORS+ENGINEERS
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Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

BOPCO, L.P.

WELL SITE PLAN

POKER LAKE UNIT 29 BIG SINKS #707H
LOCATED 720 FEET FROM THE EAST LINE
AND 2,310 FEET FROM THE NORTH LINE OF
SECTION 29, TOWNSHIP 25 SOUTH, RANGE 31
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	11-29-2017	PROJECT NO:	2017071021
DRAWN BY:	AI	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	1

Confirmation of Payment

Form NM 8140-9
(March 2008)
United States Department of the Interior
Bureau of Land Management
New Mexico State Office

Permian Basin Cultural Resource Mitigation Fund

The company shown below has agreed to contribute funding to the Permian Basin Cultural Resource Fund in lieu of being required to conduct a Class III survey for cultural resources associated with their project. This form verifies that the company has elected to have the Bureau of Land Management (BLM) follow the procedures specified within the Programmatic Agreement (PA) concerning improved strategies for managing historic properties within the Permian Basin, New Mexico, for the undertaking rather than the Protocol to meet the agency's Section 106 obligations.

Company Name: XTO Permian Operating, LLC

Address: 6401 Holiday Hill Rd

Midland, TX 79707

Project description:

POKER LAKE UNIT 29 BS APDs & ASSOCIATED FACILITIES

T. 25S , R. 31E, Section 29 NMPM, Eddy County, New Mexico

Amount of contribution: $12,128.87

4 Well Pads: 20.2 acres x $197 = $3979.4
2 CTBs: 16.53 acres x $197 = $3256.41
Gas Sales Line: 485.62' x $0.28 = $135.97
Flowline: 6165.04' x $0.28 = $2079.91
Road: 6234.91' x $0.28 = $1745.77
OHE: 6652.94' x $0.14 = $931.41

Confirmation of Payment Page 2

Provisions of the PA:

A. No new Class III inventories are required of industry within the project area for those projects where industry elects to contribute to the mitigation fund.

B. The amount of funds contributed was derived from the rate schedule established within Appendix B of the PA. The amount of the funding contribution acknowledged on this form reflects those rates.

C. The BLM will utilize the funding to carry out a program of mitigation at high-priority sites whose study is needed to answer key questions identified within the Regional Research Design.

D. Donating to the fund is voluntary. Industry acknowledges that it is aware it has the right to pay for a Class III survey rather than contributing to the mitigation fund. Industry must avoid or fund data recovery at those sites already recorded that are eligible for nomination to the National Register or whose eligibility is unknown. Any such payments are independent of the mitigation funds established by this PA.

E. Previously recorded archaeological sites determined eligible for nomination to the National Register, or whose eligibility remains undetermined, must be avoided or mitigated.

F. If any skeletal remains that might be human or funerary objects are discovered by any activities, the land-use applicant will cease activities in the area of discovery, protect the remains, and notify the BLM within 24 hours. The BLM will determine the appropriate treatment of the remains in consultation with culturally-affiliated Indian Tribe(s) and lineal descendants. Applicants will be required to pay for treatment of the cultural items, independent and outside of the mitigation fund.

Company-Authorized Officer

12/15/17
Date

BLM-Authorized Officer

Date

United States Department of the Interior
Bureau of Land Management
CARLSBAD FIELD OFFICE
620 E. GREENE
CARLSBAD, NM 88220 -6292
Phone: (575) 234-5972

Receipt No: 4328021

Transaction #: 4444652 **Date of Transaction:** 12/07/2018
CUSTOMER:
XTO PERMIAN OPERATING LLC 6401 HOLIDAY HILL RD MIDLAND,TX 79707-2156 US

LINE #	QTY	DESCRIPTION	REMARKS	UNIT PRICE	TOTAL
1	1.00	CONTRIBUTED FUNDS-ALL OTHER / 7122 FLPMA / ALL OTHER RES DEV, PROTECT & MGMT **PROJECT:** LVTFG09G6180	MOA: XTO PERMIAN OPERATING LLC POKER LAKE UNIT 29 BS & ASSOCIATED FACILITIES	12128.87	12128.87
				TOTAL:	**$12,128.87**

PAYMENT INFORMATION				
NOTE: Items will appear on credit card statement as "Bureau of Land Mgmt CO".				
1	AMOUNT:	12128.87	POSTMARKED:	N/A
	TYPE:	CREDIT CARD	RECEIVED:	12/07/2018
	NAME:	XTO PERMIAN OPERATING LLC 6401 HOLIDAY HILL RD MIDLAND TX 79707-2156 US		
	CARD NO:	XXXXXXXXXXXX4200	AUTH CODE:	074784
	NAME ON CARD:	STEPHANIE RABADUE		
	SIGNATURE:			

REMARKS

This receipt was generated by the automated BLM Collections and Billing System and is a paper representation of a portion of the official electronic record contained therein.

PAID
TRAN # 4444652
12/07/18

Well Site Locations

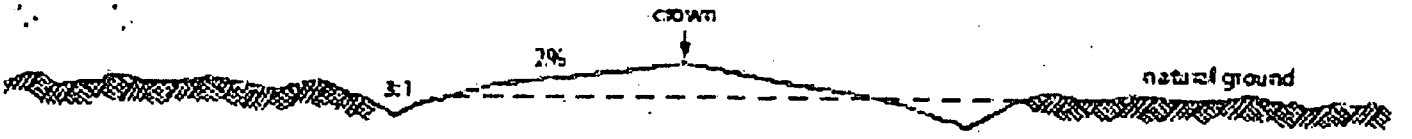
The results of the Poker Lake Unit 29 Big Sinks Development Program will develop economic quantities of oil and gas in the 'Poker Lake Unit 29 Big Sinks' area with multiple primary formations targeted. Well locations are determined based on cross-section variations and details. Locations will be selected to minimize the likelihood of encountering faults and/or drilling hazards while still targeting suitably productive zones.

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

Surface Use Plan

1. **Existing Roads**
   A. The Poker Lake Unit 29 Big Sinks area is accessed by existing U.S. Hwy 128 and Buck Jackson Road approximately 4.5 miles to the intersection with Buckthorn Road. Turn left approximately 9 miles. Road heads South, then West to intersection with Buck Jackson Rd. Turn left approximately .5 miles. The proposed road and locations are to the east. 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 no existing access roads to the proposed Poker Lake Unit 29 Big Sinks well locations. All equipment and vehicles will be confined to the routes shown on the Vicinity Map as provided by Frank's Surveying. Maintenance of the access roads will continue until abandonment and reclamation of the well pads is completed.
   C. The project is located approximately 27 miles to the town of Loving, New Mexico.

2. **New or Upgraded Access Roads**
   A. **New Roads**. There is a total of approximately 6234.91 or 1.18 miles of proposed and staked access roads in the Poker Lake Unit 29 Big Sinks lease area.
   B. **Well Pads**. The well pads selected for development will determine which existing roads will be upgraded and which new roads will be built. The lease flow diagram shows the location of proposed roads that will need to be constructed to access the well pads.
   C. **Anticipated Traffic**. After well completion, travel to each well site will included one lease operator truck and two oil trucks per day until the Central Tank Battery is completed. Upon completion of the Central Tank Battery, one lease operator truck will continue to travel to each well site to monitor the working order of the wells and to check well equipment for proper operation. Two oil trucks will continue to travel to the Central Tank Battery only for oil hauling. Additional traffic will include one maintenance truck periodically throughout the year for pad upkeep and weed removal. Well service trips will include only the traffic necessary to work on the wells or provide chemical treatments periodically and as needed throughout the year.
   D. **Routing**. All equipment and vehicles will be confined to the travel routes laid out in the vicinity map provided by FSC, Inc unless otherwise approved by the BLM and applied for by XTO Permian Operating, LLC.
   E. **Road Dimensions**. The maximum width of the driving surface of new roads will be 14 feet. The roads will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1 foot deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.



Level Ground Section

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

3. Location of Existing Wells

A. See attached 1-mile radius well map.

4. Ancillary Facilities

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

5. Location of Proposed Production Facilities

A. **Production Facilities**. Two 600' x 600' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB). The pads are located in Section 29-T25S-R31E NMPM, Eddy County, New Mexico. Plats of the proposed facilities are attached. Only the area necessary to maintain facilities will be disturbed. Due to air permitting timeframes and anticipated reserves, two facilities are anticipated to be necessary for full area development. A 3160-5 sundry notification will be submitted after construction with a site-security diagram and layout of the facility with associated equipment.
B. **Flowlines**. In the event the wells are found productive, 20-8" composite flexpipe or steel flowlines with a maximum safety pressure rating of 1400psi (operating pressure: 750 psi) will be buried within proposed lease road corridors from the proposed wells to the PLU 29 BS East CTB and the PLU 29 BS West CTB where the oil, gas, and water will be metered and separated. If XTO Permian Operating, LLC. decides to run surface lines, 20-4" or less flexpipe or steel flowlines with a max. safety psi rating of 750 (op. psi: 125psi) will be laid within proposed lease road corridors from the proposed wells to the proposed CTBs. An additional 20-22" or less high pressure gas lines will be buried within the proposed lease road corridor with the flowlines for gas lift, fuel gas, and water. The distance of proposed

flowlines per well will be approximately 6,165.04' or less per well based on the location of the well pad in conjunction with the facility location. All flowlines will follow proposed lease road corridors. A plat of the proposed flowline route for the lease is attached.

C. **Gas Pipeline**. A gas purchaser has been identified. Two 110' corridors are requested to connect with the Poker Lake Unit Row 5 pipeline extending from the PLU 29 BS East CTB and the PLU 29 BS West CTB. XTO Permian Operating, LLC. will be installing the line with anticipated risers located on the CTB. The gas purchaser will be responsible for permitting their own gas lines and compressor station, where applicable, through private, state, and federal lands. PLU 29 BS East GSL Approx. Length: 252.19'. PLU 29 BS West GSL Approx. Length: 233.43'.

D. **Disposal Facilities**. Produced water will be hauled from location to a commercial disposal facility as needed. Once wells are drilled and completed, a 3160-5 sundry notification will be submitted to BLM in compliance with Onshore Order 7.

E. **Flare**. There will 2 flares associated with the Poker Lake Unit 29 BS project. The flare stacks will be 50'x50'. 1 will be located on the PLU 29 BS East CTB. 1 will be located on the PLU 29 BS West CTB. Both will be sized and rated based on anticipated reserves and recovery of gas throughout the development area with 150' of distance between all facility equipment, road and well pad locations for safety purposes.

F. **Aboveground Structures**. All permanent (on site six months or longer) aboveground structures constructed or installed on location and not subject to safety requirements will be painted earth-tone colors such as 'shale green' that reduce the visual impacts of the built environment.

G. **Containment Berms**. Containment berms will be constructed completely around any production facilities designed to hold fluids. The containment berms will be constructed of compacted subsoil, be sufficiently impervious, hold 1 ½ times the capacity of the largest tank and away from cut or fill areas.

H. **Electrical**. All electrical poles and lines will be placed within existing and proposed lease roads corridors. All lines will be primary 12,740 volt to properly run expected production equipment. Approx. 6652.94' 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.

Location and Types of Water Supply

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

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

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

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

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

6. Construction Activities

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

B. Any construction material that may be required for surfacing of the drill pad and access road will be from a contractor having a permitted source of materials within the general area. No construction materials will be removed from federal lands without prior approval from the appropriate surface management agency. All roads and well pads will be constructed of 6" rolled and compacted caliche.

C. Anticipated Caliche Locations:

a. Pit 1: Federal Caliche Pit, Section 17-T25S-R30E

b. Pit 2: Federal Caliche Pit, Section 34-T25S-R29E

7. 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.

8. Well Site Layout

A. **Rig Plat Diagrams**: There are 5 multi-well pads in the Poker Lake Unit 29 Big Sinks lease anticipated. This will allow enough space for cuts and fills, topsoil storage, and storm water control. Interim reclamation of these pads is anticipated after the drilling and completion of all wells on the pad. Well site layouts for all pads are attached. From West to East:

1. Pad 1 is a 5-well pad expected to be 550'x400'.
2. Pad 2 is a 5-well pad expected to be 550'x400'.
3. Pad 3 is a 5-well pad expected to be 550'x400'.
4. Pad 4 is a 4-well pad expected to be 550'x400'.

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.

B. **V-Door Orientation**: These wells were staked with multiple v-door orientations. The following list is from West to East in accordance to the staked section and as agreed upon with Fernando Banos, BLM Natural Resource Specialist, present at on-site inspection.

1. Pad 1 has a V-Door Orientation of West.
2. Pad 2 has a V-Door Orientation of West.
3. Pad 3 has a V-Door Orientation of West.
4. Pad 4 has a V-Door Orientation of West.

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

D. 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).

9. Plans for Surface Reclamation:

XTO Permian Operating, LLC. requests a variance from interim reclamation until all drilling and completion activities have been finished on the pads as these are multi-well pads where drilling and completion will be consecutive with the other wells on the pad. Once activities are completed, XTO Permian Operating, LLC. will coordinate interim reclamation with the appropriate BLM personnel or use the following plan:

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

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

Reclamation Standards:

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

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

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

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

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

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

Seeding:

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

10. Surface Ownership

A. Within the Poker Lake Unit 29 Big Sinks project area: 100% of the surface is under the administrative jurisdiction of the Bureau of Land Management.
B. The surface is multiple-use with the primary uses of the region for grazing and for the production of oil and gas.

12. Other Information

Changes from Notice of Staking / Onsite

- **Well Numbers**. The 1000 and 1200 series well numbers have changed from 4-digit to 3-digit due to NMOCD requirements from the original Notice of Staking. This was done by dropping the 3rd '0' out of the well number. The 700 and 900 wells, being originally 3-digits, remain unchanged.

See reference table for appropriate well number changes.

Notice of Staking Well Number	APD Well Number
1002H	102H

1004H	104H
1006H	106H
1008H	108H
1201H	121H
1202H	122H
1203H	123H
1204H	124H
1205H	121H
1206H	124H
1207H	127H
1208H	128H

Surveying

- **Well Sites**. Well pad locations have been staked. Surveys of the proposed access roads and well pad locations have been completed by Frank Surveying, a registered professional land surveyor. Center stake surveys with access roads have been completed on State and Federal lands with Fernando Banos, Bureau of Land Management Natural Resource Specialist in attendance.
- **Cultural Resources – Archaeology**: The proposed project is within the PA. A MOA payment has been submitted to the Bureau of Land Management.
- **Dwellings and Structures**. There are no dwellings or structures within 2 miles of this location.

Soils and Vegetation

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

- **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
6401 Holiday Hill Road, Bldg 5
Midland, Texas 79707
432-488-9955
james_scott@xtoenergy.com

Jeff Raines
Construction Superintendent
XTO Energy, Incorporated
6401 Holiday Hill Road, Bldg 5
Midland, Texas 79707
432-620-4349
jeff_raines@xtoenergy.com

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:

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:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

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

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule 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?

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 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):

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

04/09/2019

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: