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DISTRICT II-ARTESIA O.C.D.

Form 3160 3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No 1004-0137
Expires October 31 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work: ☑ DRILL ☐ REENTER	5 Lease Serial No. NMNM120898
	6. If Indian, Allotee or Tribe Name
	7 If Unit or CA Agreement, Name and No POKER LAKE / NMNM071016X
1b Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8 Lease Name and Well No 321273 POKER LAKE UNIT 18 BRUSH 122H
2 Name of Operator BOPCO LP 260737	9 API Well No. 30 015-44894
3a Address 810 Houston Street Fort Worth TX 76102 / 3b Phone No (include area code) (817)885-8200	10 Field and Pool, or Exploratory PURPLE-SAGE WOLFCAMP GAS
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface LOT 2 / 2310 FNL / 1305 FWL / LAT 32 131096 / LONG -103 925192 At proposed prod zone LOT 4 / 200 FSL / 990 FWL / LAT 32 108759 / LONG -103 926147	11 Sec , T R M or Blk and Survey or Area SEC 18 / T25S / R30E / 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 161 16	17 Spacing Unit dedicated to this well 480
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 30 feet	19 Proposed Depth 10824 feet / 18760 feet	20 BLM/BIA Bond No on file FED COB000050
21 Elevations (Show whether DF, KDB, RT, GL, etc) 3168 feet	22 Approximate date work will start* 05/01/2018	23 Estimated duration 90 days

24 Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form

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 required by the BLM

25 Signature (Electronic Submission)	Name (Printed/Typed) Stephanie Rabadue / Ph (432)620-6714	Date 11/10/2017
Title Regulatory Compliance Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph (575)234-5959	Date 04/18/2018
Title Supervisor Multiple Resources	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

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

Approval Date: 04/18/2018

NSP

RWP 4-24-18

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

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

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

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

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

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2 48(d) provide that you be furnished the following information in connection with information required by this application
AUTHORITY 30 U S C 181 et seq , 25 U S C 396, 43 CFR 3160
PRINCIPAL PURPOSES The information will be used to (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well, and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered, (b) reviewing procedures and equipment and the projected impact on the land involved, and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts
ROUTINE USE Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities
EFFECT OF NOT PROVIDING INFORMATION Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease

The Paperwork Reduction Act of 1995 requires us to inform you that
The BLM collects this information to allow 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 Collection 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 LOT 2 / 2310 FNL / 1305 FWL / TWSP 25S / RANGE 30E / SECTION 18 / LAT 32 131096 / LONG -103 925192 (TVD 0 feet, MD 0 feet)

PPP LOT 3 / 2310 FSL / 990 FWL / TWSP 25S / RANGE 30E / SECTION 18 / LAT 32 129174 / LONG -103 926205 (TVD 10824 feet, MD 11400 feet)

BHL LOT 4 / 200 FSL / 990 FWL / TWSP 25S / RANGE 30E / SECTION 19 / LAT 32 108759 / LONG -103 926147 (TVD 10824 feet, MD 18760 feet)

BLM Point of Contact

Name Priscilla Perez

Title Legal Instruments Examiner

Phone 5752345934

Email pperez@blm gov

Approval Date: 04/18/2018

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 OPERATIONS
CONDITIONS OF APPROVAL

OPERATOR'S NAME	BOPCO LP
LEASE NO	NM120898
WELL NAME & NO	122H – Poker Lake Unit 18 Brushy Draw
SURFACE HOLE FOOTAGE	2310'/N & 1305'/W
BOTTOM HOLE FOOTAGE	200'/S & 990'/W, sec 19
LOCATION	Sec 18, T 25 S, R 30 E
COUNTY	Eddy County

H2S	Yes	No	
Potash	None	Secretary	R-111-P
Cave/Karst Potential	Low	Medium	High
Variance	None	Flex Hose	Other
Wellhead	Conventional	Multibowl	Both
Other	4 String Area	Capitan Reef	WIPP

Commercial Well Determination
If the well is not in an established Wolfcamp participating area A commercial well determination must be submitted to the BLM Carlsbad Office, 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 **Hydrogen Sulfide**

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Delaware formation As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM

Possibility of water flows in the Castile and Salado.
Possibility of lost circulation in the Red Beds, Rustler and Delaware.
Abnormal pressures may be encountered penetrating the 3rd Bone Spring and all subsequent formations.

Approval Date: 04/18/2018

B CASING

1 The **13-3/8** inch surface casing shall be set at approximately **820 feet** (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface

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

b Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater (This is to include the lead cement)

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

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

e

2 9-5/8" Intermediate is to be kept 2/3rds liquid filled while running in hole to meet BLM minimum collapse safety factor

3 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

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

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

C PRESSURE CONTROL

1 Variance approved to use flex line from BOP to choke manifold Manufacturer's specification to be readily available No external damage to flex line Flex line to be installed as straight as possible (no hard bends)

2 Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi

GENERAL REQUIREMENTS

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

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

☐ Eddy County

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

1 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval

a In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s)

b When the operator proposes to set surface casing with Spudder Rig

- Notify the BLM when moving in and removing the Spudder Rig
- Notify the BLM when moving in the 2nd Rig Rig to be moved in within 90 days of notification that Spudder Rig has left the location
- BOP/BOPE test to be conducted per Onshore Oil and Gas Order No 2 as soon as 2nd Rig is rigged up on well

2 Floor controls are required for 3M or Greater systems These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities Rig floor is defined as the area immediately around the rotary table, the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area

3 The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion If available, a digital copy of the logs is to be submitted in addition to the paper copies The Rustler top and top and bottom of Salt are to be recorded on the Completion Report

A CASING

1 Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API The Operator can exchange the components of the proposal with that of superior strength (i e changing from J-55 to N-80, or from 36# to 40#) Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i e Multistage tool, ECP, etc) The initial wellhead installed on the well will remain on the well with spools used as needed

2 Wait on cement (WOC) for Potash Areas. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours WOC time will be recorded in the driller's log The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug

3 **Wait on cement (WOC) for Water Basin** After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours WOC time will be recorded in the driller's log See individual casing strings for details regarding lead cement slurry requirements The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug

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

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

6 On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well This test shall be performed before drilling more than 20 feet of new hole

7 If hardband drill pipe is rotated inside casing, returns will be monitored for metal If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations

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

B PRESSURE CONTROL

1 All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No 2 and API RP 53 Sec 17

2 **If a variance** is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply The flex line must meet the requirements of API 16C Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review These documents shall be posted in the company man's trailer and on the rig floor

3 **5M or higher system requires an HCR valve**, remote kill line and annular to match The remote kill line is to be installed prior to testing the system and tested to stack pressure

4 If the operator has proposed a **multi-bowl wellhead** assembly in the APD The following requirements must be met
   a Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry
   b If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal
   c Manufacturer representative shall install the test plug for the initial BOP test
   d If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed
   e Whenever any seal subject to test pressure is broken, all the tests in OOGO2 III A 2 i must be followed

5 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 In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs)

b The tests shall be done by an independent service company utilizing a test plug The results of the test shall be reported to the appropriate BLM office

c The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE If a linear chart is used, it shall be a one hour chart A circular chart shall have a maximum 2 hour clock If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock

d 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 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

C DRILLING MUD

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

D WASTE MATERIAL AND FLUIDS

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

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

Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date

EGF 032118

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME	BOPCO LP
LEASE NO	NM120898
WELL NAME & NO	122H – Poker Lake Unit 18 Brushy Draw
SURFACE HOLE FOOTAGE	2310'/N & 1305'/W
BOTTOM HOLE FOOTAGE	200'/S & 990'/W, sec 19
LOCATION	Section 18, T 25 S , R 30 E
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

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)

Watershed

- The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad 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 berm shall be maintained through the life of the well and 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
- 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

Surface Pipeline:

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

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

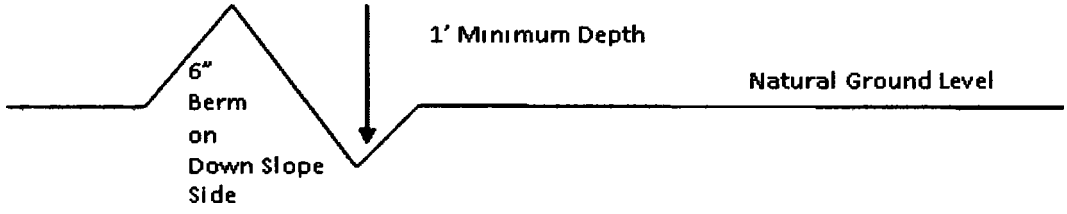
Turnouts
Vehicle turnouts shall be constructed on the road Turnouts shall be intervisible with interval spacing distance less than 1000 feet Turnouts shall conform to Figure 1, cross section and plans for typical road construction

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

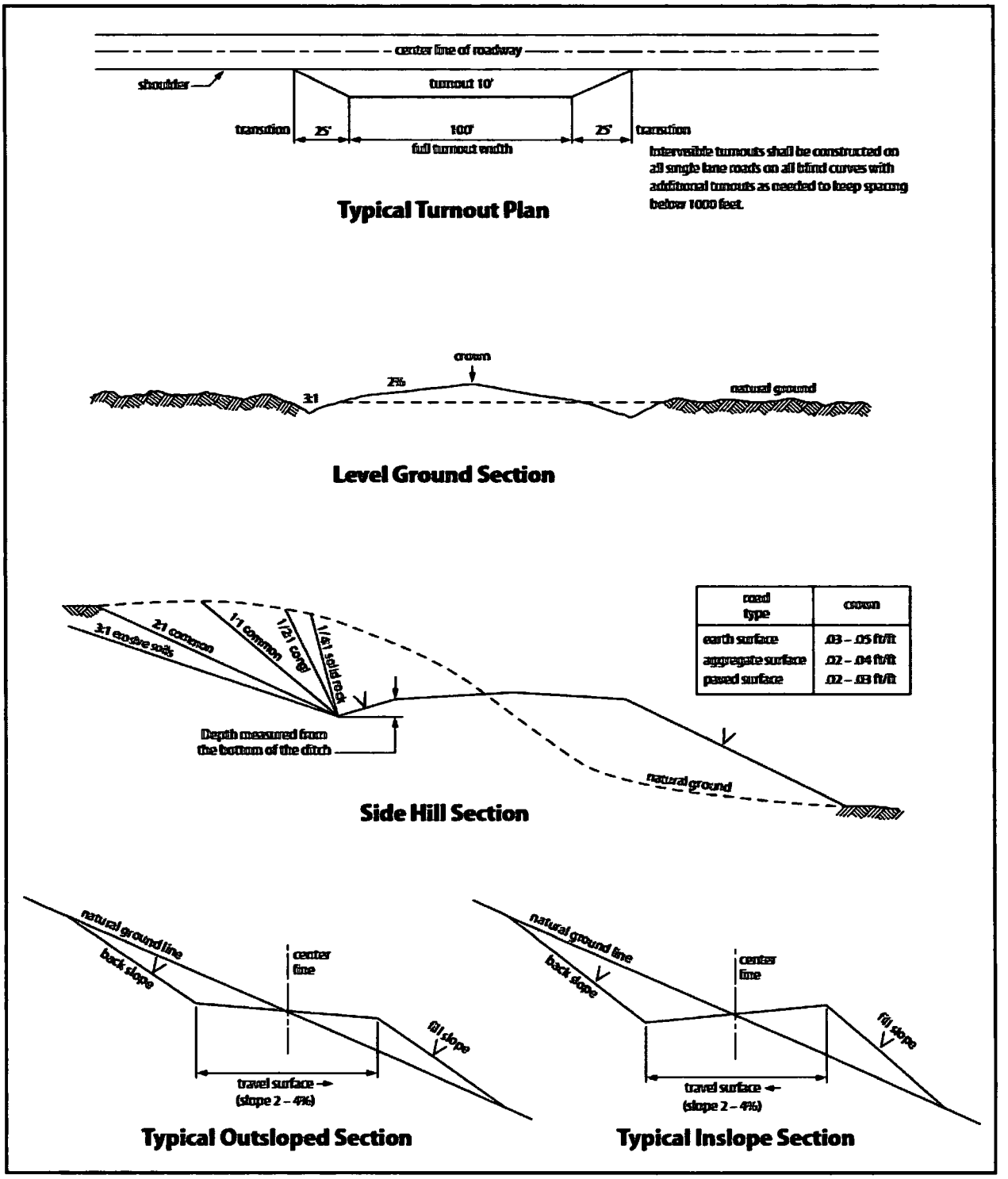


Figure 1 Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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

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

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

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

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

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

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

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

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

a Any trench left open for eight (8) hours or less is not required to have escape ramps, however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench

b For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

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

2 The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761 1-761 193) Additionally, any release of toxic substances (leaks, spills, etc) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government

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

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

5 Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines The State of the Art in 2006"

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

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

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

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

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

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

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

11 Special Stipulations

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

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

Seed Mixture 1 for Loamy Sites

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

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

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

Species	lb/acre
Plains lovegrass (Eragrostis intermedia)	0 5
Sand dropseed (Sporobolus cryptandrus)	1 0
Sideoats grama (Bouteloua curtipendula)	5 0
Plains bristlegrass (Setaria macrostachya)	2 0

*Pounds of pure live seed

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

AFMSS

U.S Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

04/20/2018

Operator Certification

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

NAME Stephanie Rabadue **Signed on** 11/04/2017

Title Regulatory Compliance Analyst

Street Address 500 W Illinois St, Ste 100

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

Phone (432)620-6714

Email address stephanie_rabadue@xtoenergy com

Field Representative

Representative Name

Street Address

City **State** **Zip**

Phone

Email address

AFMSS

U.S Department of the Interior
BUREAU OF LAND MANAGEMENT

Application Data Report

04/20/2018

APD ID 10400024296 **Submission Date** 11/10/2017

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Well Type OIL WELL **Well Work Type** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID 10400024296 **Tie to previous NOS?** 10400013153 **Submission Date** 11/10/2017

BLM Office CARLSBAD **User** Stephanie Rabadue **Title** Regulatory Compliance Analyst

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

Lease number NMNM120898 **Lease Acres** 161 16

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** BOPCO LP

Operator letter of designation PLU_18_BD_Op_Rights_20180104054947.pdf

Operator Info

Operator Organization Name BOPCO LP

Operator Address 810 Houston Street **Zip** 76102

Operator PO Box

Operator City Fort Worth **State** TX

Operator Phone (817)885-8200

Operator Internet Address

Section 2 - Well Information

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

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

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

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H **Well API Number**

Field/Pool or Exploratory? Field and Pool **Field Name** PURPLE-SAGE WOLFCAMP GAS **Pool Name**

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

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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** PLU 18 BRUSHY DRAW **Number** 1

Well Class HORIZONTAL **Number of Legs** 1

Well Work Type Drill

Well Type OIL WELL

Describe Well Type

Well sub-Type DELINEATION

Describe sub-type

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

Reservoir well spacing assigned acres Measurement 480 Acres

Well plat PLU_18_BD_122H_C1021_20180104054923 pdf

Well work start Date 05/01/2018 **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	1305	FWL	25S	30E	18	Lot 2	32.1310936	-103.925192	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 120898	3168	0	0
KOP Leg #1	2310	FNL	1305	FWL	25S	30E	18	Lot 2	32.1310936	-103.925192	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 120898	-7082	10250	10250
PPP Leg #1	2310	FSL	990	FWL	25S	30E	18	Lot 3	32.1291774	-103.926205	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC0065705B	-7656	11400	10824

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	330	FSL	990	FWL	25S	30E	19	Lot 4	32 10911 7	- 103 9261 48	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMLC0 070341	- 765 6	187 00	108 24
BHL Leg #1	200	FSL	990	FWL	25S	30E	19	Lot 4	32 10875 9	- 103 9261 47	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMLC0 070341	- 765 6	187 60	108 24

Stephanie Rabadue
Regulatory Analyst
XTO Energy Inc
500 W Illinois St Ste 100
Midland, Texas 79701
(432) 620-6714
stephanie_rabadue@xtoenergy com

July 01, 2017

Bureau of Land Management
Carlsbad Field Office
620 E Greene Street
Carlsbad, NM 88220

RE Operating Agreement/Rights for Poker Lake Unit 18 Brushy Draw

To Whom It May Concern

This is to hereby certify that XTO Energy, Inc is has operating rights over leases NMNM120898, NMLC0065705B and NMLC0070341 through acreage trades and acquisitions

Sincerely,

Stephanie Rabadue
Regulatory Analyst
XTO Energy, Inc

AFMSS

U.S Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

04/20/2018

APD ID 10400024296 **Submission Date** 11/10/2017

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Well Type OIL WELL **Well Work Type** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3168	0	0	ALLUVIUM OTHER Quaternary	NONE	No
2	RUSTLER	2412	752	752	SANDSTONE	USEABLE WATER	No
3	TOP SALT	2333	831	831	SALT	NONE	No
4	BASE OF SALT	-75	3239	3239	SALT	NONE	No
5	DELAWARE	-292	3456	3456	SANDSTONE	NATURAL GAS OIL OTHER Produced Water	No
6	CHERRY CANYON	-1223	4387	4387	SANDSTONE	NATURAL GAS OIL OTHER Produced Water	No
7	BRUSHY CANYON	-2874	6038	6038	SANDSTONE	NATURAL GAS OIL OTHER Produced Water	No
8	BONE SPRING 1ST	-5049	8213	8213	SANDSTONE	NATURAL GAS POTASH OTHER Produced Water	No
9	BONE SPRING 2ND	-5883	9047	9047	SANDSTONE	NATURAL GAS OIL OTHER Produced Water	No
10	BONE SPRING 3RD	-6113	9277	9277	SANDSTONE	NATURAL GAS OIL OTHER Produced Water	No
11	WOLFCAMP	-7301	10465	10465	SHALE	NATURAL GAS OIL OTHER Produced Water	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI) 5M **Rating Depth** 10824

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 Max bottom hole pressure should not exceed 3945 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

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

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Choke Diagram Attachment

PLU_18_BD_122H_5MCM_20171109114128 pdf

BOP Diagram Attachment

PLU_18_BD_122H_5MBOP_20171109114136 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	820	0	820			820	H-40	48	STC	3 88	4 61	DRY	6 44	DRY	6 44
2	INTERMEDIATE	12 2 5	9 625	NEW	API	N	0	3450	0	3450			3450	J-55	36	LTC	1 86	3 24	DRY	4 09	DRY	4 09
3	PRODUCTION	8 75	5 5	NEW	API	N	0	18760	0	10824			18760	P-110	17	BUTT	1 27	1 12	DRY	2 5	DRY	2 5

Casing Attachments

Casing ID 1 **String Type** SURFACE

Inspection Document

Spec Document

Tapered String Spec

Casing Design Assumptions and Worksheet(s)

PLU_18_BD_122H_Csg_20171109114148 pdf

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Casing Attachments

Casing ID 2 **String Type** INTERMEDIATE

Inspection Document

Spec Document

Tapered String Spec

Casing Design Assumptions and Worksheet(s)

PLU_18_BD_122H_Csg_20171109114155 pdf

Casing ID 3 **String Type** PRODUCTION

Inspection Document

Spec Document

Tapered String Spec

Casing Design Assumptions and Worksheet(s)

PLU_18_BD_122H_Csg_20171109114201 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	820	440	1 68	12 8	739 2	100	ExtendaCem-CZ	None
SURFACE	Tail				350	1 35	14 8	472 5	100	HalCem-C	2% CaCl
INTERMEDIATE	Lead		0	3450	870	1 92	12 8	1670 4	100	EconoCem-HLC	5% Salt + 5% Kol-Seal
INTERMEDIATE	Tail				250	1 33	14 8	332 5	100	Halcem-C	None
PRODUCTION	Lead		2950	1022 8	970	2 81	11	2723 76	50	NeoCem	None

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		10228	18760	2100	1 4	13 2	2940	50	HalCem-H	5% LAP-1 + 025% CFR-3 + 5pps Kol-Seal + 25 pps D-air 5000

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
3450	18760	OIL-BASED MUD	8 8	10 5							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	820	OTHER FW/Native	8 5	8 8							A mud test will be performed every 24 hours to determine density, viscosity, strength, filtration and pH as necessary Use available solids controls equipment to help keep mud weight down after mud up Rig up solids control equipment to operate

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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
											as a closed loop system
820	3450	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

Mud Logger Mud Logging Unit (2 man) on @ 3450'
Catch 100' samples from 3450' to TD

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 5910 **Anticipated Surface Pressure** 3528 72

Anticipated Bottom Hole Temperature(F) 160

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

Describe

Potential loss of circulation through the Capitan Reef

Contingency Plans geoharzards description

The necessary mud products for weight addition and fluid loss control will be on location at all times A Pason or Totco will be used to detect changes in loss or gain of mud volume A mud test will be performed every 24 hours to determine density, viscosity, strength, filtration and pH as necessary Use available solids controls equipment to help keep mud weight down after mud up Rig up solids control equipment to operate as a closed loop system Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Contingency Plans geohazards attachment

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan

PLU_18_BD_H2S_Plan_20171109114256 pdf

PLU_18_BD_Pad_2_H2S_Dia_20171110084608 pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission

PLU_18_BD_122H_DD_20171109114309 pdf

Other proposed operations facets description

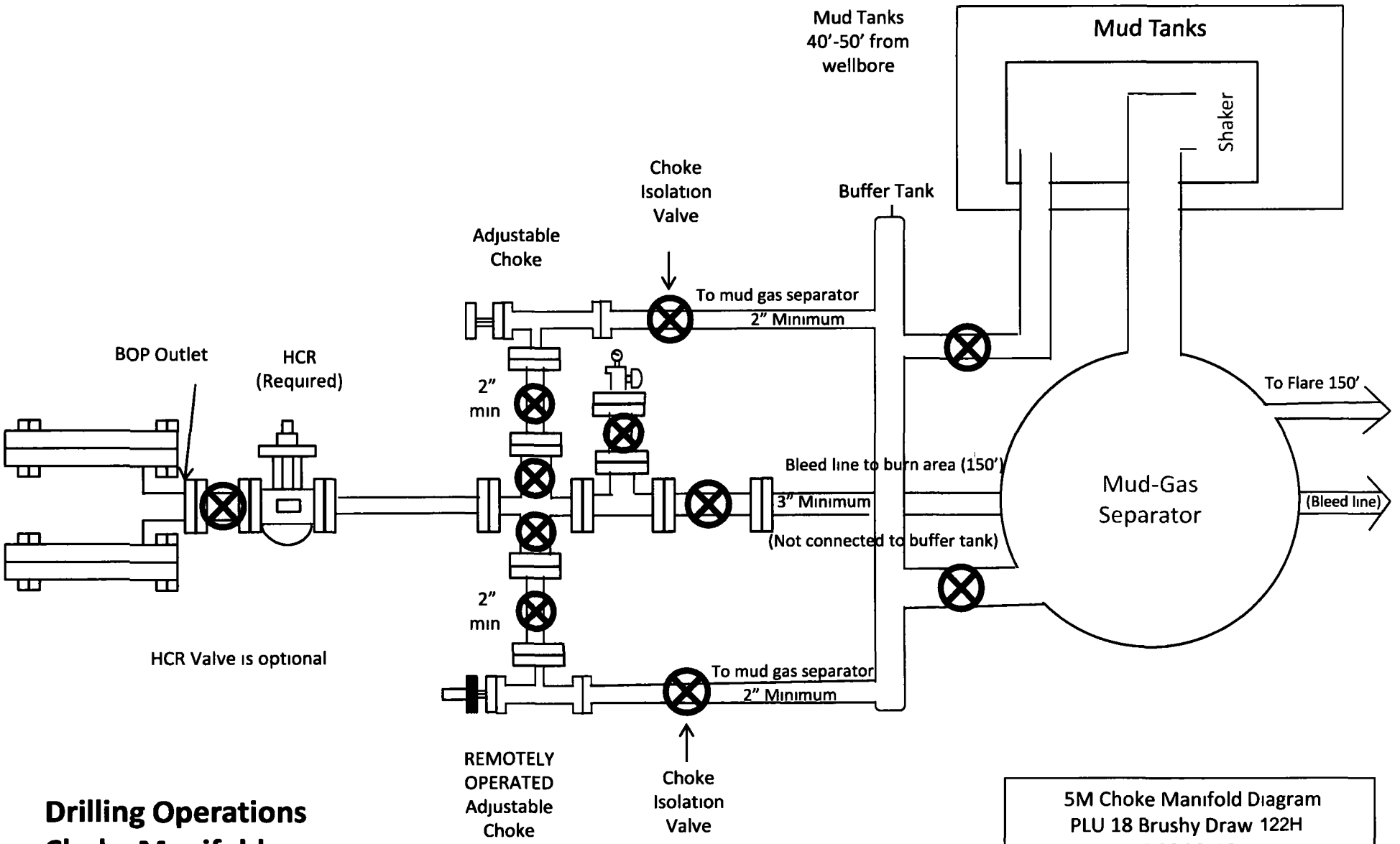
Other proposed operations facets attachment

PLU_18_BD_122H_GCPE_20171109114317 pdf

PLU_18_BD_122H_GCPW_20171109114323 pdf

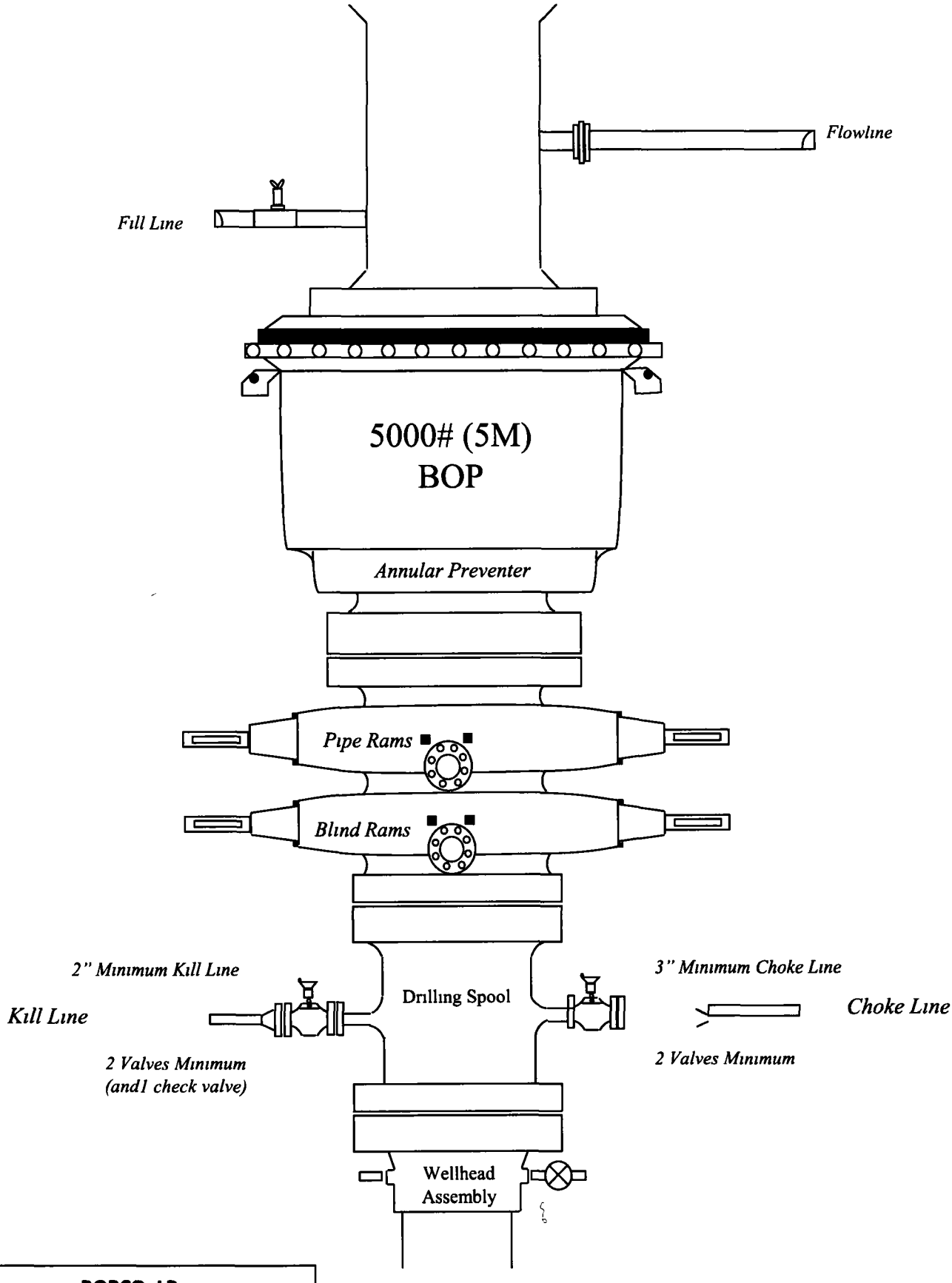
Other Variance attachment

PLU_18_BD_FH_20171109114332 pdf



Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
PLU 18 Brushy Draw 122H
BOPCO, LP



BOPCO, LP
PLU 18 Brushy Draw122H
5000# BOP

BOPCO, LP
PLU 18 Brushy Draw 122H
Projected TD 18760' MD / 10824' TVD
SHL 2310' FNL & 1305' FWL, SECTION 18, T25S, R30E
BHL 200' FSL & 990' FWL, SECTION 19, T25S, R30E
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' – 820'	13-3/8"	48#	STC	H-40	New	4 61	3 88	6 44
12-1/4"	0' – 3450'	9-5/8"	36#	LTC	J-55	New	3 24	1 86	4 09
8-3/4" x 8-1/2"	0' – 18760'	5-1/2"	17#	BTC	P-110	New	1 12	1 27	2 5

BOPCO, LP
PLU 18 Brushy Draw 122H
Projected TD 18760' MD / 10824' TVD
SHL 2310' FNL & 1305' FWL, SECTION 18, T25S, R30E
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GENERAL OFFICES – MIDLAND TEXAS

BOPCO, L.P.

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

HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE
- Evacuate any public places encompassed by the 100 ppm ROE
- Be equipped with H_2S monitors and air packs in order to control the release
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation
- Contact operator and/or local officials to aid in operation See list of phone numbers attached
- Have received training in the
  - Detection of H_2S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2) Intentional ignition must be coordinated with the NMOCD and local officials Additionally, the NM State Police may become involved NM State Police shall be the Incident Command on scene of any major release Take care to protect downwind whenever this is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1 189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2 21 Air = I	2 ppm	N/A	1000 ppm

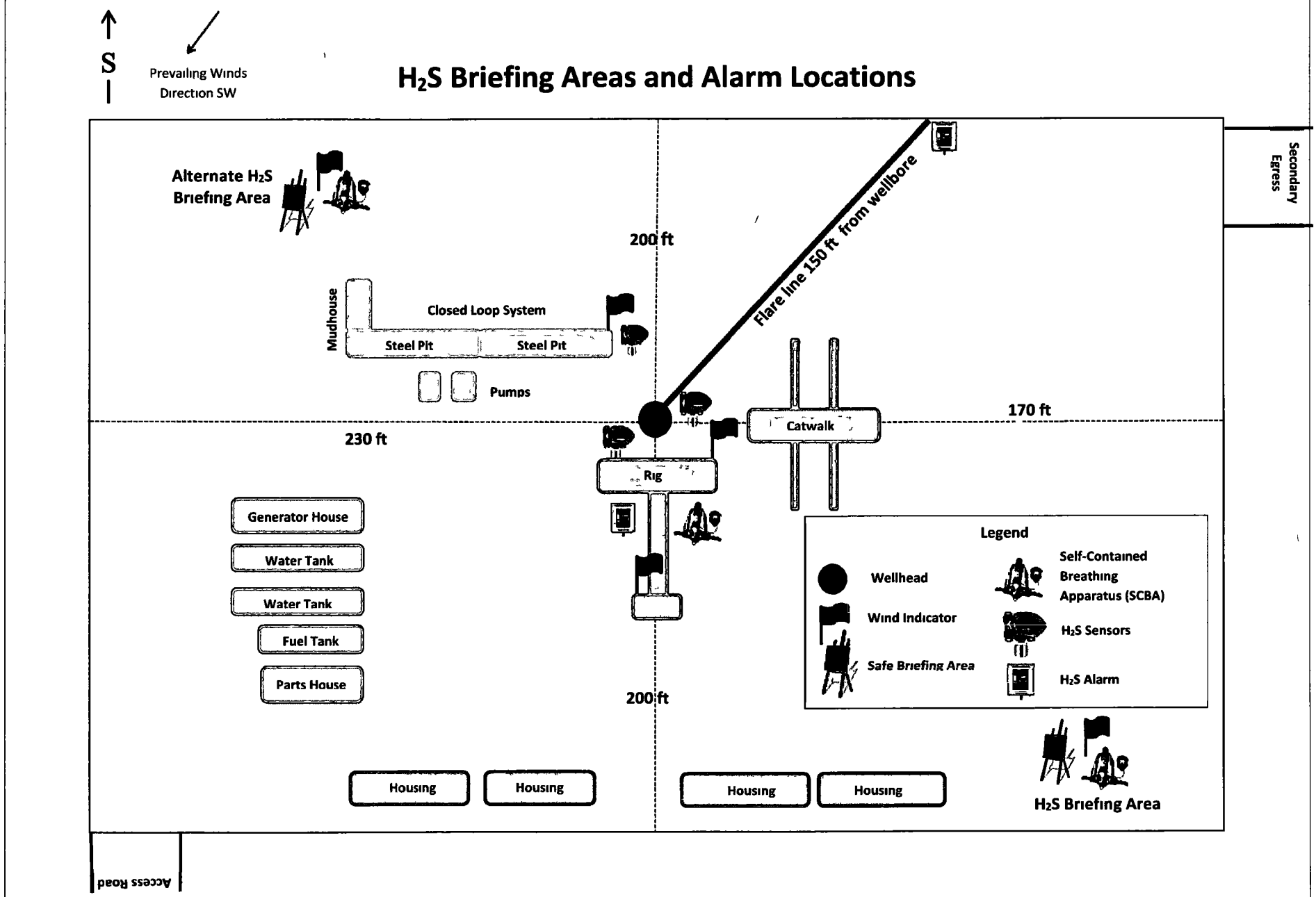
Contacting Authorities

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

CARLSBAD OFFICE – EDDY & LEA COUNTIES

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

H_2S Briefing Areas and Alarm Locations



XTO ENERGY, INC.

Eddy County, NM
Sec 18, T25S, R30E
Poker Lake Unit 18 Brushy Draw 1202H

Wellbore #1

Plan: Design #1

QES Well Planning Report

20 June, 2017

QES
DIRECTIONAL DRILLING

Database:	EDM5002	**Local Co-ordinate Reference:**	Well Poker Lake Unit 18 Brushy Draw 1202H
Company:	XTO ENERGY INC	**TVD Reference:**	RKB @ 3189 0usft
Project:	Eddy County NM	**MD Reference:**	RKB @ 3189 0usft
Site:	Sec 18, T25S, R30E	**North Reference:**	Grid
Well:	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project Eddy County, NM

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 Sec 18 T25S R30E

Site Position		**Northing**	411,610 00 usft	**Latitude**	32° 7' 51 500 N
From	Map	**Easting**	626,551 90 usft	**Longitude**	103° 55' 28 249 W
Position Uncertainty	0 0 usft	**Slot Radius**	13-3/16 "	**Grid Convergence**	0 22 °

Well Poker Lake Unit 18 Brushy Draw 1202H

Well Position	**+N/-S**	-0 3 usft	**Northing**	411 609 70 usft	**Latitude**	32° 7' 51 500 N
	+E/-W	-60 1 usft	**Easting**	626,491 80 usft	**Longitude**	103° 55' 28 948 W
Position Uncertainty		0 0 usft	**Wellhead Elevation**	0 0 usft	**Ground Level**	3,164 0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/19/2017	7 11	59 92	47,846

Design Design #1

Audit Notes

Version		**Phase**	PROTOTYPE	**Tie On Depth**	0 0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 0	0 0	0 0	181 87

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 00	0 00	
10,228 0	0 00	0 00	10 228 0	0 0	0 0	0 00	0 00	0 00	0 00	
11,004 6	77 65	210 42	10,787 8	-388 4	-228 1	10 00	10 00	0 00	210 42	
11 334 0	90 00	179 65	10 824 0	-700 5	-310 8	10 00	3 75	-9 34	-70 24	FTP Poker Lake Ur
18 760 3	90 00	179 65	10 824 0	-8,126 7	-264 8	0 00	0 00	0 00	0 00	PBHL Poker Lake L

Database	EDM5002	**Local Co-ordinate Reference**	Well Poker Lake Unit 18 Brushy Draw 1202H
Company	XTO ENERGY INC	**TVD Reference**	RKB @ 3189 0usft
Project	Eddy County NM	**MD Reference**	RKB @ 3189 0usft
Site	Sec 18, T25S, R30E	**North Reference**	Grid
Well	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method**	Minimum Curvature
Wellbore	Wellbore #1		
Design	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0 0	0 00	0 00	0 0	0 0	0 0	0 0	0 00	0 00	0 00
100 0	0 00	0 00	100 0	0 0	0 0	0 0	0 00	0 00	0 00
200 0	0 00	0 00	200 0	0 0	0 0	0 0	0 00	0 00	0 00
300 0	0 00	0 00	300 0	0 0	0 0	0 0	0 00	0 00	0 00
400 0	0 00	0 00	400 0	0 0	0 0	0 0	0 00	0 00	0 00
500 0	0 00	0 00	500 0	0 0	0 0	0 0	0 00	0 00	0 00
600 0	0 00	0 00	600 0	0 0	0 0	0 0	0 00	0 00	0 00
700 0	0 00	0 00	700 0	0 0	0 0	0 0	0 00	0 00	0 00
Rustler									
752 0	0 00	0 00	752 0	0 0	0 0	0 0	0 00	0 00	0 00
800 0	0 00	0 00	800 0	0 0	0 0	0 0	0 00	0 00	0 00
Top Salt									
831 0	0 00	0 00	831 0	0 0	0 0	0 0	0 00	0 00	0 00
900 0	0 00	0 00	900 0	0 0	0 0	0 0	0 00	0 00	0 00
1 000 0	0 00	0 00	1 000 0	0 0	0 0	0 0	0 00	0 00	0 00
1 100 0	0 00	0 00	1 100 0	0 0	0 0	0 0	0 00	0 00	0 00
1 200 0	0 00	0 00	1 200 0	0 0	0 0	0 0	0 00	0 00	0 00
1 300 0	0 00	0 00	1 300 0	0 0	0 0	0 0	0 00	0 00	0 00
1 400 0	0 00	0 00	1,400 0	0 0	0 0	0 0	0 00	0 00	0 00
1 500 0	0 00	0 00	1 500 0	0 0	0 0	0 0	0 00	0 00	0 00
1 600 0	0 00	0 00	1,600 0	0 0	0 0	0 0	0 00	0 00	0 00
1,700 0	0 00	0 00	1 700 0	0 0	0 0	0 0	0 00	0 00	0 00
1,800 0	0 00	0 00	1 800 0	0 0	0 0	0 0	0 00	0 00	0 00
1 900 0	0 00	0 00	1 900 0	0 0	0 0	0 0	0 00	0 00	0 00
2 000 0	0 00	0 00	2 000 0	0 0	0 0	0 0	0 00	0 00	0 00
2,100 0	0 00	0 00	2,100 0	0 0	0 0	0 0	0 00	0 00	0 00
2 200 0	0 00	0 00	2 200 0	0 0	0 0	0 0	0 00	0 00	0 00
2 300 0	0 00	0 00	2 300 0	0 0	0 0	0 0	0 00	0 00	0 00
2 400 0	0 00	0 00	2,400 0	0 0	0 0	0 0	0 00	0 00	0 00
2 500 0	0 00	0 00	2 500 0	0 0	0 0	0 0	0 00	0 00	0 00
2 600 0	0 00	0 00	2,600 0	0 0	0 0	0 0	0 00	0 00	0 00
2,700 0	0 00	0 00	2,700 0	0 0	0 0	0 0	0 00	0 00	0 00
2 800 0	0 00	0 00	2 800 0	0 0	0 0	0 0	0 00	0 00	0 00
2,900 0	0 00	0 00	2 900 0	0 0	0 0	0 0	0 00	0 00	0 00
3 000 0	0 00	0 00	3 000 0	0 0	0 0	0 0	0 00	0 00	0 00
3 100 0	0 00	0 00	3 100 0	0 0	0 0	0 0	0 00	0 00	0 00
3 200 0	0 00	0 00	3,200 0	0 0	0 0	0 0	0 00	0 00	0 00
Base Salt									
3,239 0	0 00	0 00	3,239 0	0 0	0 0	0 0	0 00	0 00	0 00
3 300 0	0 00	0 00	3,300 0	0 0	0 0	0 0	0 00	0 00	0 00
3 400 0	0 00	0 00	3,400 0	0 0	0 0	0 0	0 00	0 00	0 00
Delaware									
3 456 0	0 00	0 00	3,456 0	0 0	0 0	0 0	0 00	0 00	0 00
3 500 0	0 00	0 00	3 500 0	0 0	0 0	0 0	0 00	0 00	0 00
3 600 0	0 00	0 00	3,600 0	0 0	0 0	0 0	0 00	0 00	0 00
3 700 0	0 00	0 00	3,700 0	0 0	0 0	0 0	0 00	0 00	0 00
3 800 0	0 00	0 00	3 800 0	0 0	0 0	0 0	0 00	0 00	0 00
3,900 0	0 00	0 00	3,900 0	0 0	0 0	0 0	0 00	0 00	0 00
4 000 0	0 00	0 00	4 000 0	0 0	0 0	0 0	0 00	0 00	0 00
4 100 0	0 00	0 00	4,100 0	0 0	0 0	0 0	0 00	0 00	0 00
4,200 0	0 00	0 00	4,200 0	0 0	0 0	0 0	0 00	0 00	0 00
4 300 0	0 00	0 00	4,300 0	0 0	0 0	0 0	0 00	0 00	0 00
Cherry Canyon									
4,387 0	0 00	0 00	4,387 0	0 0	0 0	0 0	0 00	0 00	0 00

Database	EDM5002	**Local Co-ordinate Reference**	Well Poker Lake Unit 18 Brushy Draw 1202H
Company	XTO ENERGY INC	**TVD Reference**	RKB @ 3189 0usft
Project	Eddy County NM	**MD Reference**	RKB @ 3189 0usft
Site	Sec 18, T25S, R30E	**North Reference**	Grid
Well	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method**	Minimum Curvature
Wellbore	Wellbore #1		
Design	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400 0	0 00	0 00	4,400 0	0 0	0 0	0 0	0 00	0 00	0 00
4,500 0	0 00	0 00	4,500 0	0 0	0 0	0 0	0 00	0 00	0 00
4 600 0	0 00	0 00	4 600 0	0 0	0 0	0 0	0 00	0 00	0 00
4,700 0	0 00	0 00	4,700 0	0 0	0 0	0 0	0 00	0 00	0 00
4 800 0	0 00	0 00	4 800 0	0 0	0 0	0 0	0 00	0 00	0 00
4,900 0	0 00	0 00	4,900 0	0 0	0 0	0 0	0 00	0 00	0 00
5,000 0	0 00	0 00	5,000 0	0 0	0 0	0 0	0 00	0 00	0 00
5 100 0	0 00	0 00	5,100 0	0 0	0 0	0 0	0 00	0 00	0 00
5,200 0	0 00	0 00	5,200 0	0 0	0 0	0 0	0 00	0 00	0 00
5,300 0	0 00	0 00	5,300 0	0 0	0 0	0 0	0 00	0 00	0 00
5,400 0	0 00	0 00	5,400 0	0 0	0 0	0 0	0 00	0 00	0 00
5,500 0	0 00	0 00	5,500 0	0 0	0 0	0 0	0 00	0 00	0 00
5 600 0	0 00	0 00	5 600 0	0 0	0 0	0 0	0 00	0 00	0 00
5,700 0	0 00	0 00	5 700 0	0 0	0 0	0 0	0 00	0 00	0 00
5 800 0	0 00	0 00	5 800 0	0 0	0 0	0 0	0 00	0 00	0 00
5,900 0	0 00	0 00	5 900 0	0 0	0 0	0 0	0 00	0 00	0 00
6,000 0	0 00	0 00	6 000 0	0 0	0 0	0 0	0 00	0 00	0 00
Brushy Canyon									
6 038 0	0 00	0 00	6,038 0	0 0	0 0	0 0	0 00	0 00	0 00
6 100 0	0 00	0 00	6 100 0	0 0	0 0	0 0	0 00	0 00	0 00
6,200 0	0 00	0 00	6,200 0	0 0	0 0	0 0	0 00	0 00	0 00
6,300 0	0 00	0 00	6 300 0	0 0	0 0	0 0	0 00	0 00	0 00
6,400 0	0 00	0 00	6 400 0	0 0	0 0	0 0	0 00	0 00	0 00
6,500 0	0 00	0 00	6 500 0	0 0	0 0	0 0	0 00	0 00	0 00
6,600 0	0 00	0 00	6 600 0	0 0	0 0	0 0	0 00	0 00	0 00
6,700 0	0 00	0 00	6 700 0	0 0	0 0	0 0	0 00	0 00	0 00
6 800 0	0 00	0 00	6 800 0	0 0	0 0	0 0	0 00	0 00	0 00
6 900 0	0 00	0 00	6 900 0	0 0	0 0	0 0	0 00	0 00	0 00
7,000 0	0 00	0 00	7,000 0	0 0	0 0	0 0	0 00	0 00	0 00
7,100 0	0 00	0 00	7 100 0	0 0	0 0	0 0	0 00	0 00	0 00
7,200 0	0 00	0 00	7,200 0	0 0	0 0	0 0	0 00	0 00	0 00
Bone Spring									
7 214 0	0 00	0 00	7 214 0	0 0	0 0	0 0	0 00	0 00	0 00
7,300 0	0 00	0 00	7 300 0	0 0	0 0	0 0	0 00	0 00	0 00
7 400 0	0 00	0 00	7 400 0	0 0	0 0	0 0	0 00	0 00	0 00
7,500 0	0 00	0 00	7,500 0	0 0	0 0	0 0	0 00	0 00	0 00
7 600 0	0 00	0 00	7,600 0	0 0	0 0	0 0	0 00	0 00	0 00
7 700 0	0 00	0 00	7 700 0	0 0	0 0	0 0	0 00	0 00	0 00
7,800 0	0 00	0 00	7,800 0	0 0	0 0	0 0	0 00	0 00	0 00
7 900 0	0 00	0 00	7 900 0	0 0	0 0	0 0	0 00	0 00	0 00
8 000 0	0 00	0 00	8,000 0	0 0	0 0	0 0	0 00	0 00	0 00
8 100 0	0 00	0 00	8 100 0	0 0	0 0	0 0	0 00	0 00	0 00
8,200 0	0 00	0 00	8 200 0	0 0	0 0	0 0	0 00	0 00	0 00
1st Bone Spring Ss									
8 213 0	0 00	0 00	8 213 0	0 0	0 0	0 0	0 00	0 00	0 00
8,300 0	0 00	0 00	8,300 0	0 0	0 0	0 0	0 00	0 00	0 00
8,400 0	0 00	0 00	8,400 0	0 0	0 0	0 0	0 00	0 00	0 00
8,500 0	0 00	0 00	8 500 0	0 0	0 0	0 0	0 00	0 00	0 00
8,600 0	0 00	0 00	8,600 0	0 0	0 0	0 0	0 00	0 00	0 00
8,700 0	0 00	0 00	8,700 0	0 0	0 0	0 0	0 00	0 00	0 00
8,800 0	0 00	0 00	8 800 0	0 0	0 0	0 0	0 00	0 00	0 00
8,900 0	0 00	0 00	8 900 0	0 0	0 0	0 0	0 00	0 00	0 00
9 000 0	0 00	0 00	9 000 0	0 0	0 0	0 0	0 00	0 00	0 00

Database	EDM5002	**Local Co-ordinate Reference**	Well Poker Lake Unit 18 Brushy Draw 1202H
Company	XTO ENERGY, INC	**TVD Reference**	RKB @ 3189 0usft
Project	Eddy County NM	**MD Reference**	RKB @ 3189 0usft
Site	Sec 18, T25S, R30E	**North Reference**	Grid
Well	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method**	Minimum Curvature
Wellbore	Wellbore #1		
Design	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2nd Bone Spring Ss									
9 047 0	0 00	0 00	9,047 0	0 0	0 0	0 0	0 00	0 00	0 00
9 100 0	0 00	0 00	9 100 0	0 0	0 0	0 0	0 00	0 00	0 00
9 200 0	0 00	0 00	9 200 0	0 0	0 0	0 0	0 00	0 00	0 00
3rd Bone Spring Lm									
9 277 0	0 00	0 00	9,277 0	0 0	0 0	0 0	0 00	0 00	0 00
9 300 0	0 00	0 00	9,300 0	0 0	0 0	0 0	0 00	0 00	0 00
9 400 0	0 00	0 00	9,400 0	0 0	0 0	0 0	0 00	0 00	0 00
9 500 0	0 00	0 00	9,500 0	0 0	0 0	0 0	0 00	0 00	0 00
9 600 0	0 00	0 00	9 600 0	0 0	0 0	0 0	0 00	0 00	0 00
9,700 0	0 00	0 00	9,700 0	0 0	0 0	0 0	0 00	0 00	0 00
9,800 0	0 00	0 00	9,800 0	0 0	0 0	0 0	0 00	0 00	0 00
9 900 0	0 00	0 00	9 900 0	0 0	0 0	0 0	0 00	0 00	0 00
10 000 0	0 00	0 00	10,000 0	0 0	0 0	0 0	0 00	0 00	0 00
10 100 0	0 00	0 00	10 100 0	0 0	0 0	0 0	0 00	0 00	0 00
3rd Bone Spring Ss									
10,117 0	0 00	0 00	10,117 0	0 0	0 0	0 0	0 00	0 00	0 00
10,200 0	0 00	0 00	10,200 0	0 0	0 0	0 0	0 00	0 00	0 00
Build 10 00°/100'									
10,228 0	0 00	0 00	10 228 0	0 0	0 0	0 0	0 00	0 00	0 00
10,250 0	2 20	210 42	10 250 0	-0 4	-0 2	0 4	10 00	10 00	0 00
10,300 0	7 20	210 42	10 299 8	-3 9	-2 3	4 0	10 00	10 00	0 00
10 350 0	12 20	210 42	10 349 1	-11 2	-6 6	11 4	10 00	10 00	0 00
10 400 0	17 20	210 42	10,397 4	-22 1	-13 0	22 5	10 00	10 00	0 00
10,450 0	22 20	210 42	10 444 5	-36 6	-21 5	37 3	10 00	10 00	0 00
Wolfcamp									
10 472 3	24 43	210 42	10 465 0	-44 2	-26 0	45 1	10 00	10 00	0 00
10 500 0	27 20	210 42	10 489 9	-54 6	-32 1	55 6	10 00	10 00	0 00
10 550 0	32 20	210 42	10,533 3	-76 0	-44 6	77 4	10 00	10 00	0 00
10 600 0	37 20	210 42	10 574 4	-100 5	-59 0	102 4	10 00	10 00	0 00
Wolfcamp A									
10,638 1	41 01	210 42	10 604 0	-121 3	-71 2	123 5	10 00	10 00	0 00
10,650 0	42 19	210 42	10,612 9	-128 0	-75 2	130 4	10 00	10 00	0 00
10 700 0	47 19	210 42	10 648 4	-158 4	-93 0	161 3	10 00	10 00	0 00
10 750 0	52 19	210 42	10,680 7	-191 2	-112 3	194 8	10 00	10 00	0 00
10 800 0	57 19	210 42	10 709 6	-226 4	-132 9	230 6	10 00	10 00	0 00
10,850 0	62 19	210 42	10 734 9	-263 6	-154 8	268 5	10 00	10 00	0 00
10 900 0	67 19	210 42	10,756 2	-302 6	-177 7	308 2	10 00	10 00	0 00
10,950 0	72 19	210 42	10 773 6	-343 0	-201 4	349 4	10 00	10 00	0 00
Build/Turn 10 00°/100'									
11,004 6	77 65	210 42	10,787 8	-388 4	-228 1	395 7	10 00	10 00	0 00
11 050 0	79 22	206 07	10 796 9	-427 6	-249 1	435 5	10 00	3 45	-9 58
11,100 0	81 01	201 33	10 805 5	-472 7	-268 9	481 2	10 00	3 59	-9 47
11 150 0	82 87	196 64	10 812 5	-519 5	-285 0	528 5	10 00	3 71	-9 38
11 200 0	84 77	191 99	10 817 9	-567 7	-297 3	577 1	10 00	3 80	-9 30
11 250 0	86 71	187 37	10 821 6	-616 8	-305 7	626 4	10 00	3 87	-9 24
11,300 0	88 66	182 77	10,823 6	-666 6	-310 1	676 3	10 00	3 92	-9 21
EOC @ 90 00° Inc / 179 65° Azm / 10824 0' TVD									
11,334 0	90 00	179 65	10,824 0	-700 5	-310 8	710 3	10 00	3 93	-9 19
11 400 0	90 00	179 65	10,824 0	-766 5	-310 4	776 2	0 00	0 00	0 00
11,500 0	90 00	179 65	10,824 0	-866 5	-309 8	876 2	0 00	0 00	0 00
11 600 0	90 00	179 65	10 824 0	-966 5	-309 2	976 1	0 00	0 00	0 00
11 700 0	90 00	179 65	10 824 0	-1 066 5	-308 5	1 076 0	0 00	0 00	0 00

Database	EDM5002	**Local Co-ordinate Reference**	Well Poker Lake Unit 18 Brushy Draw 1202H
Company	XTO ENERGY, INC	**TVD Reference**	RKB @ 3189 0usft
Project	Eddy County NM	**MD Reference**	RKB @ 3189 0usft
Site	Sec 18, T25S, R30E	**North Reference**	Grid
Well	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method**	Minimum Curvature
Wellbore	Wellbore #1		
Design	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,800 0	90 00	179 65	10 824 0	-1,166 5	-307 9	1 175 9	0 00	0 00	0 00
11,900 0	90 00	179 65	10,824 0	-1 266 5	-307 3	1 275 9	0 00	0 00	0 00
12 000 0	90 00	179 65	10 824 0	-1 366 5	-306 7	1 375 8	0 00	0 00	0 00
12 100 0	90 00	179 65	10 824 0	-1 466 5	-306 1	1 475 7	0 00	0 00	0 00
12 200 0	90 00	179 65	10 824 0	-1,566 5	-305 4	1 575 6	0 00	0 00	0 00
12,300 0	90 00	179 65	10,824 0	-1,666 5	-304 8	1 675 6	0 00	0 00	0 00
12,400 0	90 00	179 65	10,824 0	-1,766 5	-304 2	1 775 5	0 00	0 00	0 00
12,500 0	90 00	179 65	10,824 0	-1 866 5	-303 6	1 875 4	0 00	0 00	0 00
12,600 0	90 00	179 65	10,824 0	-1 966 5	-303 0	1 975 3	0 00	0 00	0 00
12 700 0	90 00	179 65	10,824 0	-2 066 5	-302 3	2 075 3	0 00	0 00	0 00
12,800 0	90 00	179 65	10,824 0	-2,166 5	-301 7	2 175 2	0 00	0 00	0 00
12,900 0	90 00	179 65	10,824 0	-2,266 5	-301 1	2 275 1	0 00	0 00	0 00
13 000 0	90 00	179 65	10 824 0	-2 366 5	-300 5	2 375 0	0 00	0 00	0 00
13,100 0	90 00	179 65	10,824 0	-2 466 5	-299 9	2 475 0	0 00	0 00	0 00
13 200 0	90 00	179 65	10 824 0	-2 566 5	-299 2	2 574 9	0 00	0 00	0 00
13 300 0	90 00	179 65	10,824 0	-2 666 5	-298 6	2,674 8	0 00	0 00	0 00
13,400 0	90 00	179 65	10,824 0	-2 766 5	-298 0	2 774 7	0 00	0 00	0 00
13 500 0	90 00	179 65	10,824 0	-2 866 5	-297 4	2,874 7	0 00	0 00	0 00
13,600 0	90 00	179 65	10,824 0	-2,966 5	-296 8	2,974 6	0 00	0 00	0 00
13 700 0	90 00	179 65	10,824 0	-3 066 5	-296 1	3,074 5	0 00	0 00	0 00
13,800 0	90 00	179 65	10 824 0	-3,166 5	-295 5	3,174 4	0 00	0 00	0 00
13,900 0	90 00	179 65	10,824 0	-3,266 5	-294 9	3,274 4	0 00	0 00	0 00
14 000 0	90 00	179 65	10 824 0	-3 366 5	-294 3	3 374 3	0 00	0 00	0 00
14 100 0	90 00	179 65	10,824 0	-3 466 5	-293 7	3,474 2	0 00	0 00	0 00
14,200 0	90 00	179 65	10,824 0	-3,566 5	-293 0	3 574 1	0 00	0 00	0 00
14 300 0	90 00	179 65	10,824 0	-3 666 5	-292 4	3 674 1	0 00	0 00	0 00
14 400 0	90 00	179 65	10,824 0	-3,766 5	-291 8	3,774 0	0 00	0 00	0 00
14 500 0	90 00	179 65	10 824 0	-3 866 5	-291 2	3 873 9	0 00	0 00	0 00
14,600 0	90 00	179 65	10,824 0	-3,966 5	-290 6	3,973 8	0 00	0 00	0 00
14 700 0	90 00	179 65	10,824 0	-4,066 5	-290 0	4,073 8	0 00	0 00	0 00
14,800 0	90 00	179 65	10,824 0	-4,166 5	-289 3	4,173 7	0 00	0 00	0 00
14 900 0	90 00	179 65	10,824 0	-4,266 5	-288 7	4,273 6	0 00	0 00	0 00
15 000 0	90 00	179 65	10 824 0	-4 366 5	-288 1	4 373 5	0 00	0 00	0 00
15,100 0	90 00	179 65	10 824 0	-4 466 5	-287 5	4 473 5	0 00	0 00	0 00
15 200 0	90 00	179 65	10 824 0	-4 566 5	-286 9	4 573 4	0 00	0 00	0 00
15,300 0	90 00	179 65	10,824 0	-4 666 5	-286 2	4,673 3	0 00	0 00	0 00
15,400 0	90 00	179 65	10,824 0	-4 766 5	-285 6	4 773 2	0 00	0 00	0 00
15 500 0	90 00	179 65	10,824 0	-4,866 5	-285 0	4 873 2	0 00	0 00	0 00
15,600 0	90 00	179 65	10,824 0	-4,966 5	-284 4	4,973 1	0 00	0 00	0 00
15 700 0	90 00	179 65	10 824 0	-5 066 5	-283 8	5 073 0	0 00	0 00	0 00
15,800 0	90 00	179 65	10 824 0	-5,166 5	-283 1	5,172 9	0 00	0 00	0 00
15,900 0	90 00	179 65	10 824 0	-5 266 5	-282 5	5,272 9	0 00	0 00	0 00
16,000 0	90 00	179 65	10 824 0	-5 366 5	-281 9	5 372 8	0 00	0 00	0 00
16 100 0	90 00	179 65	10,824 0	-5 466 4	-281 3	5,472 7	0 00	0 00	0 00
16 200 0	90 00	179 65	10,824 0	-5 566 4	-280 7	5 572 6	0 00	0 00	0 00
16,300 0	90 00	179 65	10 824 0	-5 666 4	-280 0	5,672 6	0 00	0 00	0 00
16,400 0	90 00	179 65	10,824 0	-5,766 4	-279 4	5,772 5	0 00	0 00	0 00
16 500 0	90 00	179 65	10,824 0	-5,866 4	-278 8	5,872 4	0 00	0 00	0 00
16,600 0	90 00	179 65	10,824 0	-5 966 4	-278 2	5,972 3	0 00	0 00	0 00
16 700 0	90 00	179 65	10,824 0	-6 066 4	-277 6	6,072 3	0 00	0 00	0 00
16,800 0	90 00	179 65	10,824 0	-6,166 4	-276 9	6,172 2	0 00	0 00	0 00
16 900 0	90 00	179 65	10,824 0	-6,266 4	-276 3	6 272 1	0 00	0 00	0 00
17,000 0	90 00	179 65	10 824 0	-6 366 4	-275 7	6 372 0	0 00	0 00	0 00
17,100 0	90 00	179 65	10 824 0	-6 466 4	-275 1	6,472 0	0 00	0 00	0 00

Database	EDM5002	**Local Co-ordinate Reference**	Well Poker Lake Unit 18 Brushy Draw 1202H
Company	XTO ENERGY, INC	**TVD Reference**	RKB @ 3189 0usft
Project	Eddy County NM	**MD Reference**	RKB @ 3189 0usft
Site	Sec 18, T25S, R30E	**North Reference**	Grid
Well	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method**	Minimum Curvature
Wellbore	Wellbore #1		
Design	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,200 0	90 00	179 65	10,824 0	-6,566 4	-274 5	6,571 9	0 00	0 00	0 00
17 300 0	90 00	179 65	10 824 0	-6 666 4	-273 8	6 671 8	0 00	0 00	0 00
17 400 0	90 00	179 65	10 824 0	-6 766 4	-273 2	6 771 7	0 00	0 00	0 00
17 500 0	90 00	179 65	10 824 0	-6 866 4	-272 6	6 871 7	0 00	0 00	0 00
17 600 0	90 00	179 65	10 824 0	-6 966 4	-272 0	6 971 6	0 00	0 00	0 00
17,700 0	90 00	179 65	10,824 0	-7,066 4	-271 4	7,071 5	0 00	0 00	0 00
17,800 0	90 00	179 65	10,824 0	-7,166 4	-270 7	7 171 4	0 00	0 00	0 00
17,900 0	90 00	179 65	10,824 0	-7,266 4	-270 1	7,271 4	0 00	0 00	0 00
18,000 0	90 00	179 65	10 824 0	-7,366 4	-269 5	7,371 3	0 00	0 00	0 00
18 100 0	90 00	179 65	10 824 0	-7 466 4	-268 9	7,471 2	0 00	0 00	0 00
18 200 0	90 00	179 65	10 824 0	-7 566 4	-268 3	7,571 1	0 00	0 00	0 00
18 300 0	90 00	179 65	10 824 0	-7 666 4	-267 7	7 671 1	0 00	0 00	0 00
18 400 0	90 00	179 65	10 824 0	-7 766 4	-267 0	7 771 0	0 00	0 00	0 00
18,500 0	90 00	179 65	10,824 0	-7 866 4	-266 4	7,870 9	0 00	0 00	0 00
18,600 0	90 00	179 65	10,824 0	-7 966 4	-265 8	7 970 8	0 00	0 00	0 00
18,700 0	90 00	179 65	10 824 0	-8,066 4	-265 2	8,070 8	0 00	0 00	0 00
TD @ 18760 3' MD, 10824 0' TVD									
18,760 3	90 00	179 65	10,824 0	-8,126 7	-264 8	8,131 0	0 00	0 00	0 00

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
LTP Poker Lake Unit - plan misses target center by 0 1usft at 18630 3usft MD (10824 0 TVD, -7996 7 N -265 6 E) - Point	0 00	0 00	10,824 0	-7,996 7	-265 7	403,613 00	626,226 10	32° 6' 32 372 N	103° 55' 32 390 W
PBHL Poker Lake Uni - plan hits target center - Point	0 00	0 00	10,824 0	-8,126 7	-264 8	403,483 00	626,227 00	32° 6' 31 085 N	103° 55' 32 385 W
FTP Poker Lake Unit - plan hits target center - Point	0 00	0 00	10,824 0	-700 5	-310 8	410,909 20	626,181 00	32° 7' 44 579 N	103° 55' 32 594 W

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Site	Sec 18, T25S, R30E	**North Reference**	Grid
Well	Poker Lake Unit 18 Brushy Draw 1202H	**Survey Calculation Method**	Minimum Curvature
Wellbore	Wellbore #1		
Design	Design #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
752 0	752 0	Rustler			
831 0	831 0	Top Salt			
3 239 0	3 239 0	Base Salt			
3 456 0	3 456 0	Delaware			
4,387 0	4 387 0	Cherry Canyon			
6,038 0	6 038 0	Brushy Canyon			
7,214 0	7 214 0	Bone Spring			
8 213 0	8 213 0	1st Bone Spring Ss			
9,047 0	9,047 0	2nd Bone Spring Ss			
9 277 0	9 277 0	3rd Bone Spring Lm			
10,117 0	10,117 0	3rd Bone Spring Ss			
10 472 3	10 465 0	Wolfcamp			
10 638 1	10,604 0	Wolfcamp A			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,228 0	10,228 0	0 0	0 0	Build 10 00°/100'
11 004 6	10 787 8	-388 4	-228 1	Build/Turn 10 00°/100'
11 334 0	10,824 0	-700 5	-310 8	EOC @ 90 00° Inc / 179 65° Azm / 10824 0' TVD
18 760 3	10 824 0	-8 126 7	-264 8	TD @ 18760 3 MD 10824 0' TVD

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

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

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

GRADE D PRESSURE TEST CERTIFICATE

Customer	AUSTIN DISTRIBUTING	Test Date	6/8/2011
Customer Ref	PENDING	Hose Serial No	D 060814 1
Invoice No	201709	Created By	NORMA

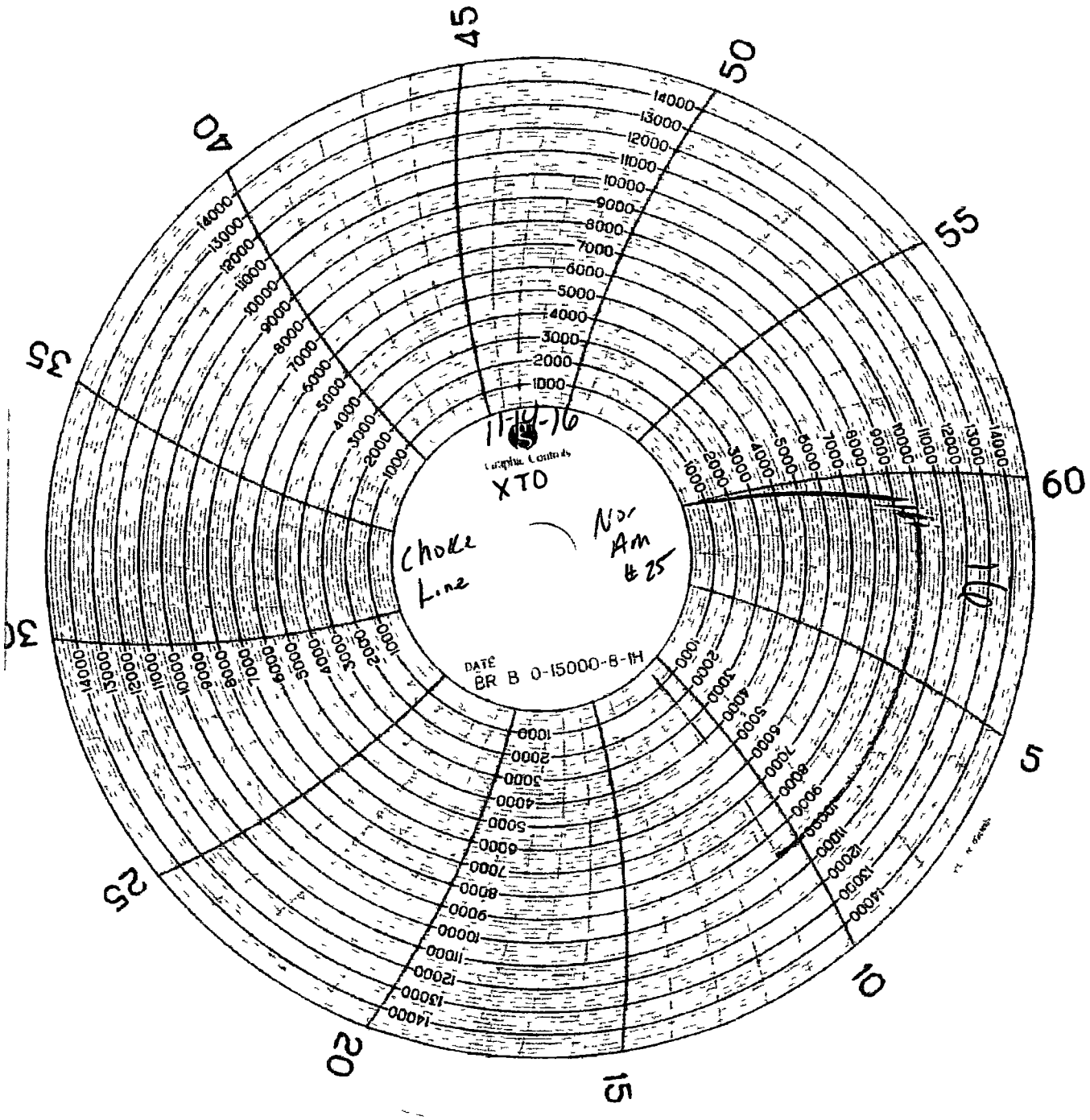
Product Description	FD3 042 0R41/16.5KFLGE/E LE

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

Gates E & S North America, Inc certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9 6 7 and per Table 9 to 7,500 psi in accordance with this product number Hose burst pressure 9 6 7 2 exceeds the minimum of 2 5 times the working pressure per Table 9

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

Form PTC 01 Rev 0 2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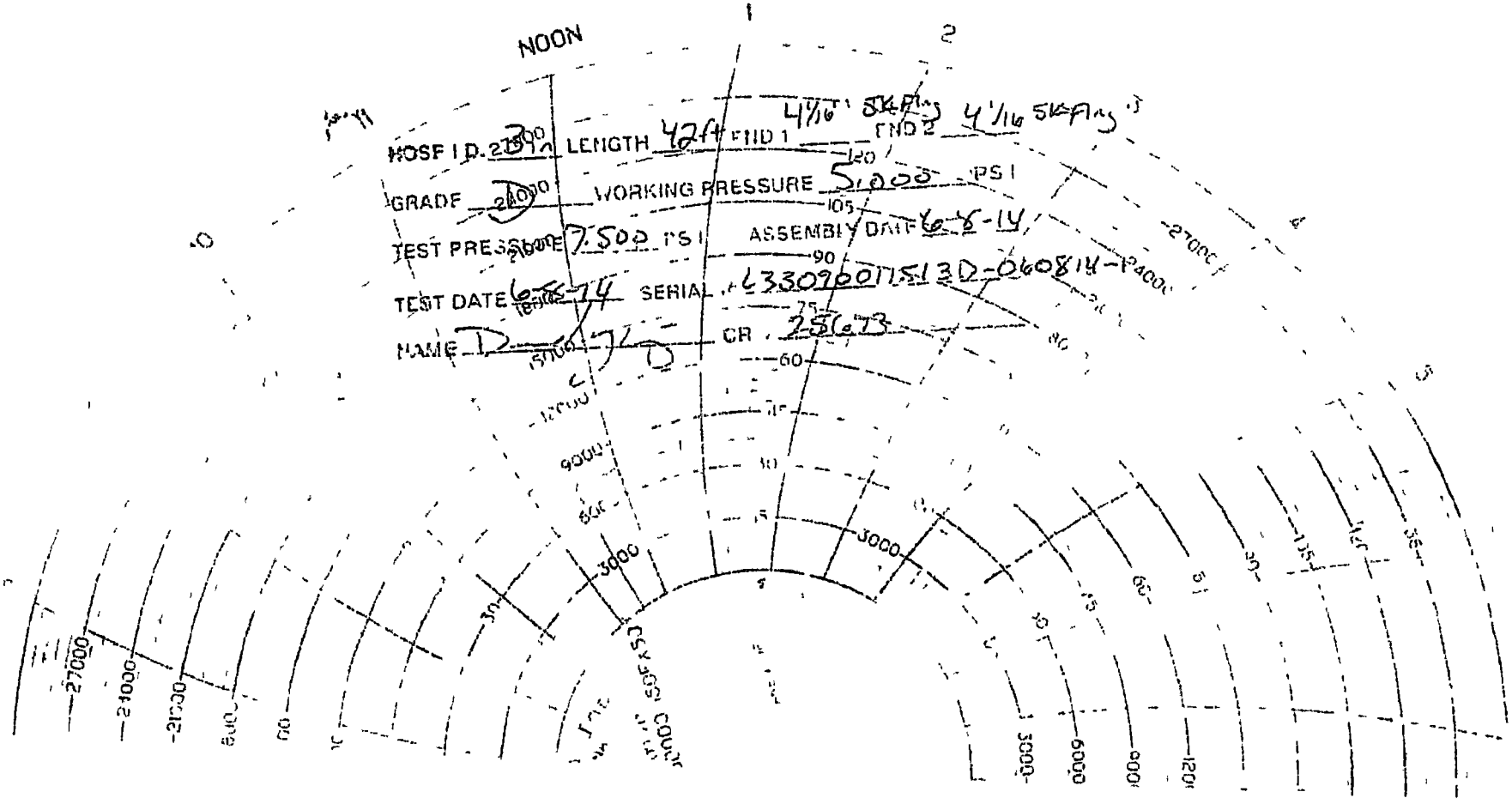

NOON
HOSE I.D. 2"
LENGTH 42ft
END 1 4½" SKFlng
END 2 4½" SKFlng
GRADE D
WORKING PRESSURE 5,000 PSI
TEST PRESSURE 7,500 PSI
ASSEMBLY DATE 6-6-14
TEST DATE 6-6-14
SERIAL 633096017513D-060814-P400
NAME D
CR 25673

APD ID 10400024296 **Submission Date** 11/10/2017

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Well Type OIL WELL **Well Work Type** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? NO

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map

PLU_18_BD_Road_20171109114350 pdf

New road type RESOURCE

Length 5356 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

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

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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 18 Brushy Draw area is accessed by existing U S Hwy 285 and Longhorn Road Go Northeast on Longhorn Road (paved) Road bend Southeast and back to Northeast approximately 4 25 miles Turn left and go Northeast on Pipeline Road #1 (Gravel) approximately 7 0 miles Turn left on gravel road for approximately 1 mile Road curves West, then East Turn left again for approximately 70 miles to another left turn heading South for approximately 45 miles to PLU 18 Brushy Draw pads 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 18 Brushy Draw 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

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

Drainage Control

New road drainage crossing OTHER

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

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

Road Drainage Control Structures (DCS) attachment

Access Additional Attachments

Additional Attachment(s)

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map

PLU_18_BD_1_Mile_20171109114359 pdf

Existing Wells description

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description Two 400' x 400' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB) The Western most facility is the PLU 18 BD West CTB and the Eastern most facility is the PLU 18 BD East CTB The pads are located in Section 18-T25S-R30E 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 Flares will also be located on the facility (see below for flare details) A 3160-5 sundry notification will be submitted after construction possessing a site-security diagram and layout of the facility with associated equipment In the event the wells are found productive, 4" composite flexpipe or steel flowlines with a maximum safety pressure rating of 750psi (operating pressure 125psi) will be laid on the surface within proposed lease road corridors from the proposed wells to the PLU 18 BD East CTB and the PLU 18 BD West CTB where the oil, gas, and water will be metered and appropriately separated The distance of proposed lines per well will be approximately 3465' 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 Additional lines will be buried within the lease road corridor for gas lift, fuel gas, and water The distance of proposed lines per pad will be approximately 3465' or less per well based on the location of the well pad in conjunction with the facility location All lines will follow proposed lease road corridors A plat of the proposed flowline route for the lease is attached Routing is the same as the surface flowlines A gas purchaser has been identified Two 110' corridors are requested to connect with the Poker Lake Unit Row 5 MSO corridor extending from the PLU 18 BD East CTB and the PLU 18 BD West CTB BOPCO, L P 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 18 BD East GSL Approx Length 197' PLU 18 BD West GSL Approx Length 1846' 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 18 Brushy Draw project The flare stacks will be 50'x50' One will be located on the PLU 18 BD East Central Tank Battery One will be located on the PLU 18 BD West Central Tank Battery Both will be sized and rated appropriately based on anticipated reserves and recovering 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 Approx 9575' of electrical poles and lines will be placed within existing and proposed lease roads corridors All electrical lines will be primary 12,740 volt to properly run expected production equipment

Production Facilities map

PLU_18_BD_East_Fac_20171109114410 pdf

PLU_18_BD_West_Fac_20171109114417 pdf

PLU_18_BD_GS_20171109114432 pdf

PLU_18_BD_FL1_20180219114339 pdf

PLU_18_BD_OHE1_20180219114348 pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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_18_BD_122H_Wtr_20171110084713 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 BOPCO, L P from Section 27, T25S-R30E, Eddy County, New Mexico In the event that Texas Pacific Water Resources does not have the appropriate water for BOPCO at time of drilling and completion, then BOPCO 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 BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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 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 **Disposal location ownership** COMMERCIAL

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

FACILITY

Disposal type description

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

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 **Disposal location ownership** COMMERCIAL FACILITY

Disposal type description

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

Waste type 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 **Disposal location ownership** COMMERCIAL FACILITY

Disposal type description

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

Waste type 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 **Disposal location ownership** COMMERCIAL FACILITY

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Disposal type description

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

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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 BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Section 9 - Well Site Layout

Well Site Layout Diagram

PLU_18_BD_122H_Well_20171110084932 pdf

PLU_18_BD_122H_Topo_20171110084950 pdf

Comments This is a multi-well pad

Section 10 - Plans for Surface Reclamation

Type of disturbance New Surface Disturbance

Multiple Well Pad Name PLU 18 BRUSHY DRAW

Multiple Well Pad Number 1

Recontouring attachment

PLU_18_BD_Pad_1_Rec_20171109114516 pdf

PLU_18_BD_Pad_2_Rec_20171109114527 pdf

PLU_18_BD_Pad_3_Rec_20171109114536 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) 14 14	**Well pad interim reclamation (acres)** 1 147	**Well pad long term disturbance (acres)** 12 993
Road proposed disturbance (acres) 3 68	**Road interim reclamation (acres)** 0 001	**Road long term disturbance (acres)** 3 68
Powerline proposed disturbance (acres) 0 001	**Powerline interim reclamation (acres)** 0 001	**Powerline long term disturbance (acres)** 0 001
Pipeline proposed disturbance (acres) 5 11	**Pipeline interim reclamation (acres)** 5 11	**Pipeline long term disturbance (acres)** 0 001
Other proposed disturbance (acres) 7 35	**Other interim reclamation (acres)** 0 001	**Other long term disturbance (acres)** 7 35
Total proposed disturbance 30 281	**Total interim reclamation** 6 26	**Total long term disturbance** 24 025

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

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

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

Existing Vegetation at the well pad Environmental Setting Soils are classified 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

Existing Vegetation at the well pad attachment

Existing Vegetation Community at the road 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

Existing Vegetation Community at the road attachment

Existing Vegetation Community at the pipeline 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

Existing Vegetation Community at the pipeline attachment

Existing Vegetation Community at other disturbances 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

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

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Seed harvest description attachment

Seed Management

Seed Table

Seed type

Seed source

Seed name

Source name

Source address

Source phone

Seed cultivar

Seed use location

PLS pounds per acre

Proposed seeding season

Seed Summary

Total pounds/Acre

Seed Type	Pounds/Acre

Seed reclamation attachment

Operator Contact/Responsible Official Contact Info

First Name Jeff **Last Name** Raines

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

Seedbed prep Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil Prior to seeding, the seedbed will be scarified to a depth of no less than 4-6 inches If the site is to be broadcast seeded, the surface will be left rough enough to trap seed and snow, control erosion, and increase water infiltration
Seed BMP If broadcast seeding is to be used and is delayed, final seedbed preparation will consist of contour cultivating to a depth of 4-6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites
Seed method Seeding will be conducted no more than two weeks following completion of final seedbed preparation A certified weed-free seed mix designed by the BLM to meet reclamation standards will be used If the site is harrowed or dragged, seed will be covered by no more than 0 25 inch of soil
Existing invasive species? NO

Existing invasive species treatment description

Existing invasive species treatment attachment

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

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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

Disturbance type OTHER

Describe Flowline

Surface Owner BUREAU OF LAND MANAGEMENT

Other surface owner description

BIA Local Office

BOR Local Office

COE Local Office

DOD Local Office

NPS Local Office

State Local Office

Military Local Office

USFWS Local Office

Other Local Office

USFS Region

USFS Forest/Grassland **USFS Ranger District**

Disturbance type WELL PAD

Describe

Surface Owner BUREAU OF LAND MANAGEMENT,BUREAU OF LAND MANAGEMENT,BUREAU OF LAND MANAGEMENT,STATE GOVERNMENT,STATE GOVERNMENT,STATE GOVERNMENT,STATE GOVERNMENT
Other surface owner description

BIA Local Office

BOR Local Office

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

COE Local Office

DOD Local Office

NPS Local Office

State Local Office NEW MEXICO STATE LAND 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 BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

Disturbance type TRANSMISSION LINE

Describe

Surface Owner BUREAU OF LAND MANAGEMENT

Other surface owner description

BIA Local Office

BOR Local Office

COE Local Office

DOD Local Office

NPS Local Office

State Local Office

Military Local Office

USFWS Local Office

Other Local Office

USFS Region

USFS Forest/Grassland **USFS Ranger District**

Disturbance type NEW ACCESS ROAD

Describe

Surface Owner BUREAU OF LAND MANAGEMENT,STATE GOVERNMENT

Other surface owner description

BIA Local Office

BOR Local Office

COE Local Office

DOD Local Office

NPS Local Office

State Local Office NEW MEXICO STATE LAND

Military Local Office

USFWS Local Office

Other Local Office

USFS Region

USFS Forest/Grassland **USFS Ranger District**

Operator Name BOPCO LP

Well Name POKER LAKE UNIT 18 BRUSHY DRAW **Well Number** 122H

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

Use a previously conducted onsite? NO

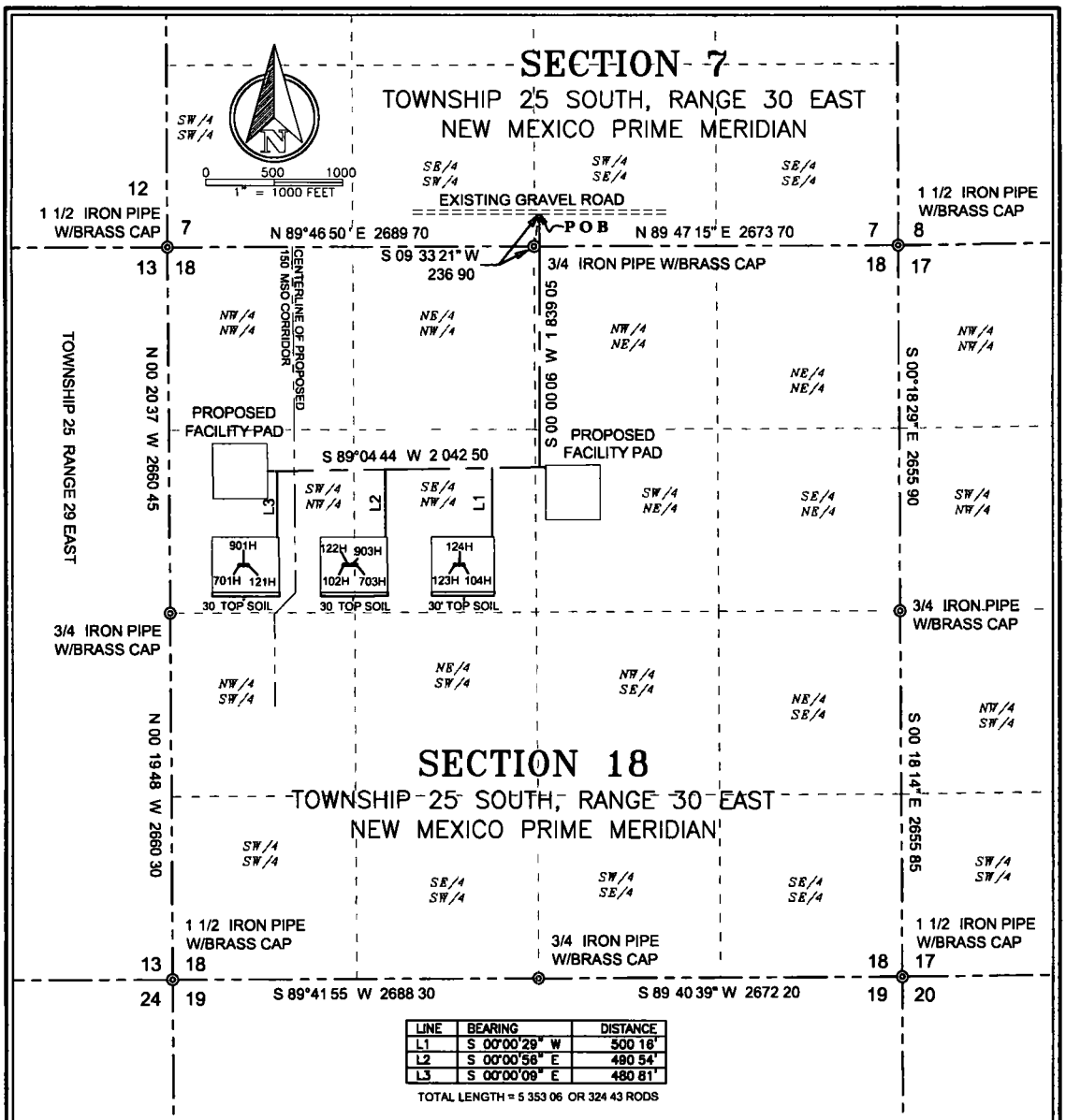
Previous Onsite information

Other SUPO Attachment

PLU_18_BD_SUPO_20171109114607 pdf

PLU_18_BD_Well_List_20171109114613 pdf

PLU_18_BD_Lse_WSL_20171110085105 pdf



LINE	BEARING	DISTANCE
L1	S 00°00'29" W	500 16'
L2	S 00°00'58" E	490 54'
L3	S 00°00'09" E	480 81'

TOTAL LENGTH = 5 353 06 OR 324 43 RODS

LEGEND

- PROPOSED PAD
- PROPOSED ROAD
- SECTION LINE
- EXISTING ROAD
- POB POINT OF BEGINNING
- ◎ FOUND MONUMENT W/ BRASS CAP

PLU 18 BRUSHY DRAW ACCESS ROAD DESCRIPTION

SURVEY OF A STRIP OF LAND 30 0 FEET WIDE AND 5 353 06 FEET 324 43 RODS OR 1 014 MILES IN LENGTH CROSSING SECTIONS 7 & 18 TOWNSHIP 25 RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO AND BEING 15 0 FEET RIGHT AND 15 0 FEET LEFT OF THE ABOVE PLATTED CENTERLINE OF ROAD SURVEY COMPRISING OF 3 65 ACRES AND IS DIVIDED IN EACH QUARTER-QUARTER SECTION IS AS FOLLOWS

SW/4 SE/4 SECTION 7 = 233 49 FEET 14 15 RODS 0 16 OF AN ACRE
NW/4 NE/4 SECTION 18 = 1 321 68 FEET 80 10 RODS 0 92 OF AN ACRE
SW/4 NE/4 SECTION 18 = 349 74 FEET 21 20 RODS 0 23 OF AN ACRE
SE/4 NW/4 SECTION 18 = 2 326 04 FEET 140 97 RODS 1 58 ACRES
SW/4 NW/4 SECTION 18 = 1 114 84 FEET 67 55 RODS 0 76 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)

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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

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

PLAT OF
PROPOSED CENTERLINE OF ACCESS ROADS FOR
BOPCO, L P
PLU 18 BRUSHY DRAW

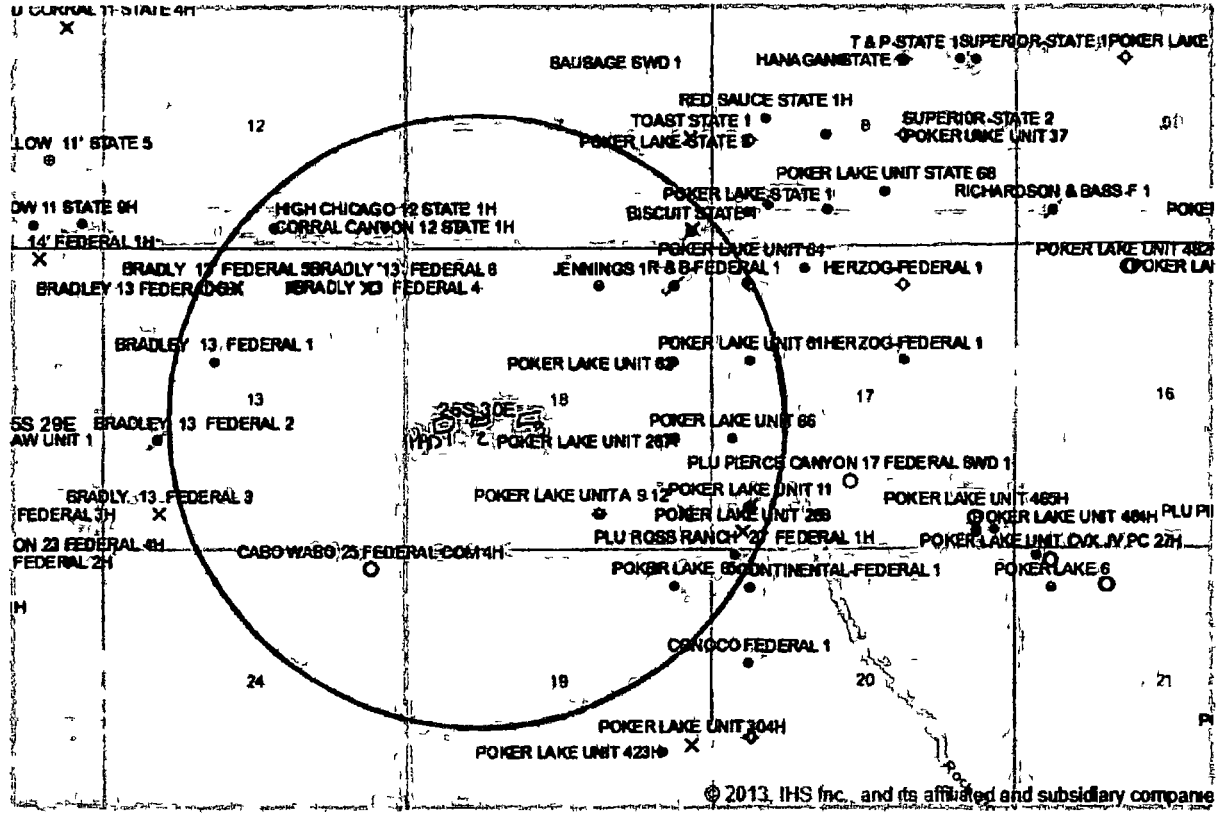
SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST, SITUATED IN SECTION 7 TOWNSHIP 25 SOUTH RANGE 30 EAST NEW MEXICO PRIME MERIDIAN, EDDY COUNTY NEW MEXICO

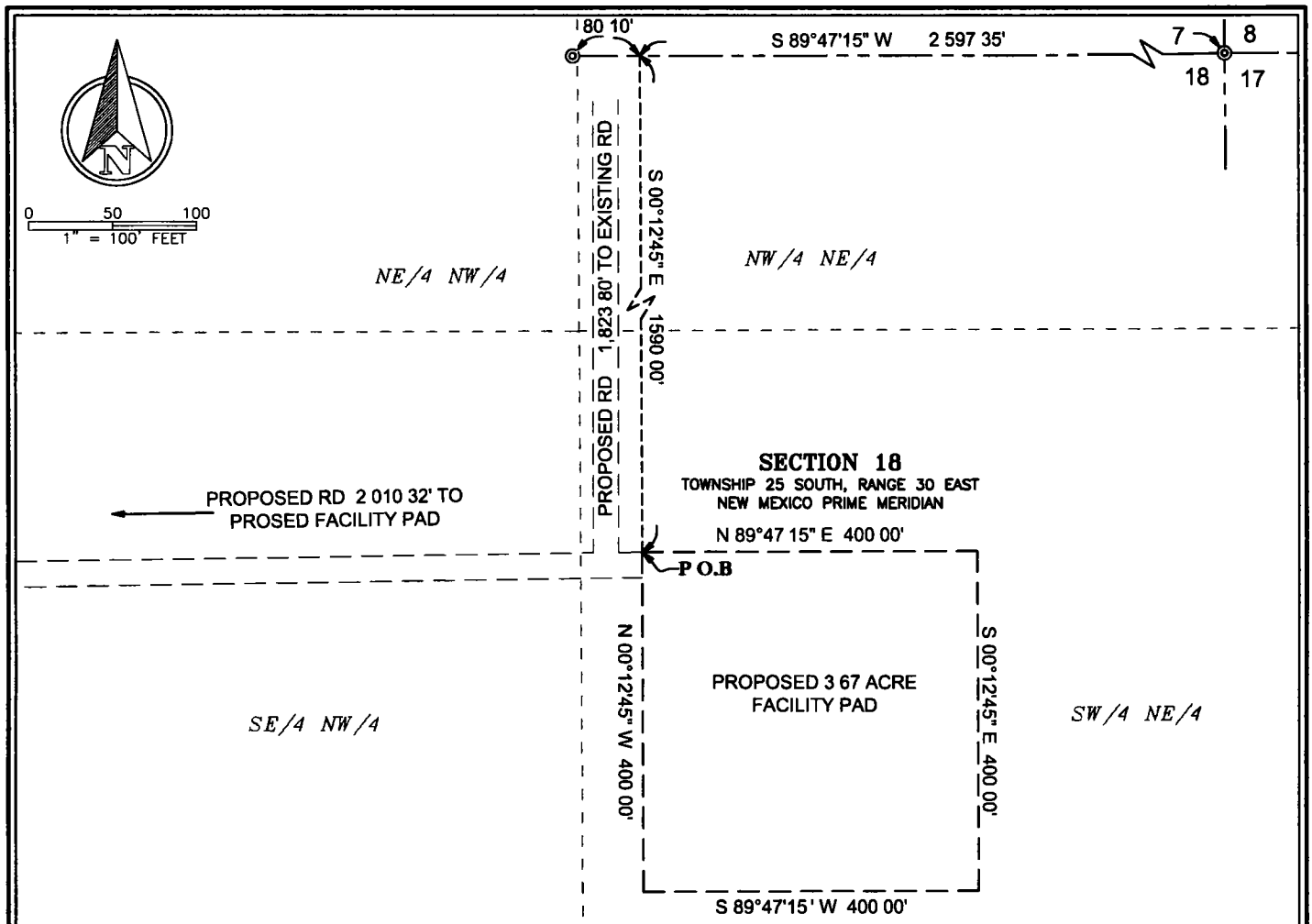
FSC INC SURVEYORS+ENGINEERS
550 Bailey Ave 205 Fort Worth TX 76107
Ph. 817 349 9800 Fax 979 732 5271
TBPE Firm 17957 | TBPLS Firm 10193887
www fscinc net

DATE	10-27 2017	PROJECT NO	2017040529
DRAWN BY	JAR	SCALE	1 = 1000
CHECKED BY	DH	SHEET	SHT 1 OF 1
FIELD CREW	RE/PD	REVISION	0

Poker Lake Unit 18 Brushy Draw Lease

1-Mile Radius Map





LEGEND

- PROPOSED ROAD
- SECTION LINE
- PROPOSED PAD
- POB POINT OF BEGINNING
- ◎ FOUND BRASS CAP MONUMENT

GENERAL NOTES

1 COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF NAD 83 (HARN) EAST ZONE DISTANCE ARE SURFACE VALUES

I MARK DILLON HARP DO HEREBY STATE THAT THE ABOVE AND FOREGOING SURVEY PLAT WAS PREPARED FROM A SURVEY MADE ON THE GROUND, UNDER MY DIRECTION AND SUPERVISION DURING THE MONTH OF MAY, 2017

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

PLU 18 BRUSHY DRAW FACILITY PAD DESCRIPTION

Description of a Facility pad totaling 3 67 acres and being situated in Section 18 Township 25 South Range 30 East New Mexico Prime Meridian Eddy County New Mexico and being more particularly described as follows

BEGINNING at the northwest corner of the facility pad which lies S 89° 47' 15" W 2 597 35 feet and S 00° 12 45" W 1 590 00 feet from the northeast of said Section 18

THENCE over and across said Section 18 the following courses and distances

N 89 47 15 E a distance of 400 00 feet to a point

S 00° 12' 45" E a distance of 400 00 feet to a point

S 89° 47 15" W a distance of 400 00 feet to a point

N 00° 12' 45" W a distance of 400 00 feet to to the POINT OF BEGINNING containing a total of **3 67 acres** more or less

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

SW/4 NE/4 Section 18 3 67 ACRES

FSC INC SURVEYORS+ENGINEERS
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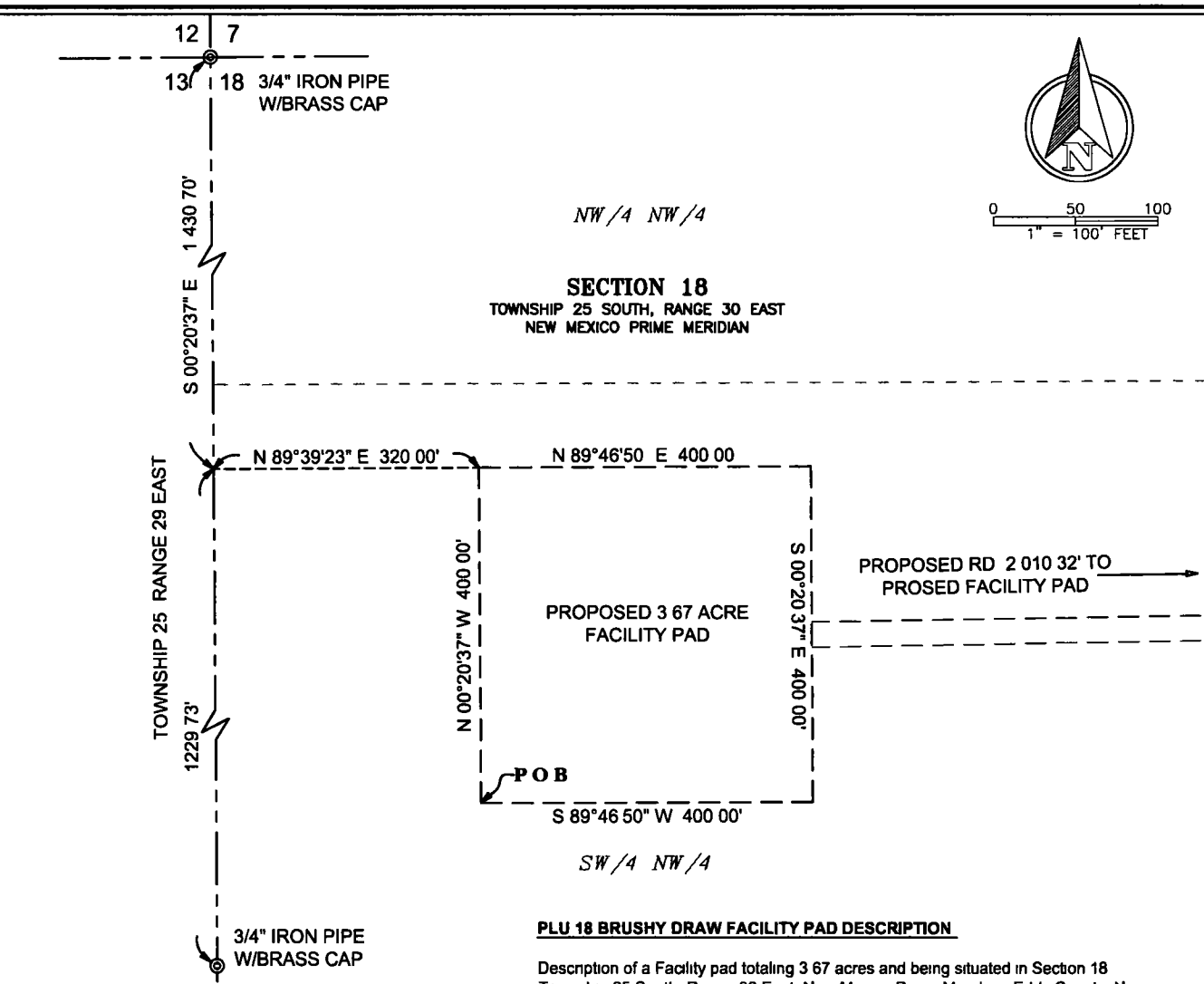
Ph. 817 349 9800 Fax. 979 732 5271
TBPE Firm 17957 | TBPLS Firm 10193887
www fscinc net

BOPCO, L.P.

SURVEY FOR A FACILITY PAD SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO

DATE	10-02 2017	PROJECT NO	2017040529
DRAWN BY	JAR	SCALE	1 = 100
CHECKED BY	DH	SHEET	SHT 1 OF 1
FIELD CREW	NGM,JLD	REVISION	0



LEGEND

- PROPOSED ROAD
- SECTION LINE
- PROPOSED PAD

P O B POINT OF BEGINNING

◎ FOUND BRASS CAP MONUMENT

GENERAL NOTES

1 COORDINATES SHOWN ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM OF NAD 83 (HARN) EAST ZONE DISTANCE ARE SURFACE VALUES

I MARK DILLON HARP DO HEREBY STATE THAT THE ABOVE AND FOREGOING SURVEY PLAT WAS PREPARED FROM A SURVEY MADE ON THE GROUND, UNDER MY DIRECTION AND SUPERVISION DURING THE MONTH OF MAY 2017

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PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO 23786

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

PLU 18 BRUSHY DRAW FACILITY PAD DESCRIPTION

Description of a Facility pad totaling 3 67 acres and being situated in Section 18 Township 25 South Range 30 East, New Mexico Prime Meridian Eddy County New Mexico and being more particularly described as follows

BEGINNING at the northwest corner of the facility pad which lies S 00 20 37 E 1 430 70 feet and N 89° 39 23 E 320 00 feet from the northwest corner of said Section 18,

THENCE over and across said Section 18 the following courses and distances

N 89° 46 50" E a distance of 400 00 feet to a point

S 00 20 37 E a distance of 400 00 feet to a point

S 89 46 50" W a distance of 400 00 feet to a point

N 00° 20 37" W a distance of 400 00 feet to to the POINT OF BEGINNING containing a total of **3 67 acres** more or less

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

SW/4 NW/4 Section 18 = 3 67 ACRES

BOPCO, L P.

SURVEY FOR A FACILITY PAD SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY, NEW MEXICO

DATE	10-02 2017	PROJECT NO	2017040529
DRAWN BY	JAR	SCALE	1 = 100
CHECKED BY	DH	SHEET	SHT 1 OF 1
FIELD CREW	NGM,JLD	REVISION	0

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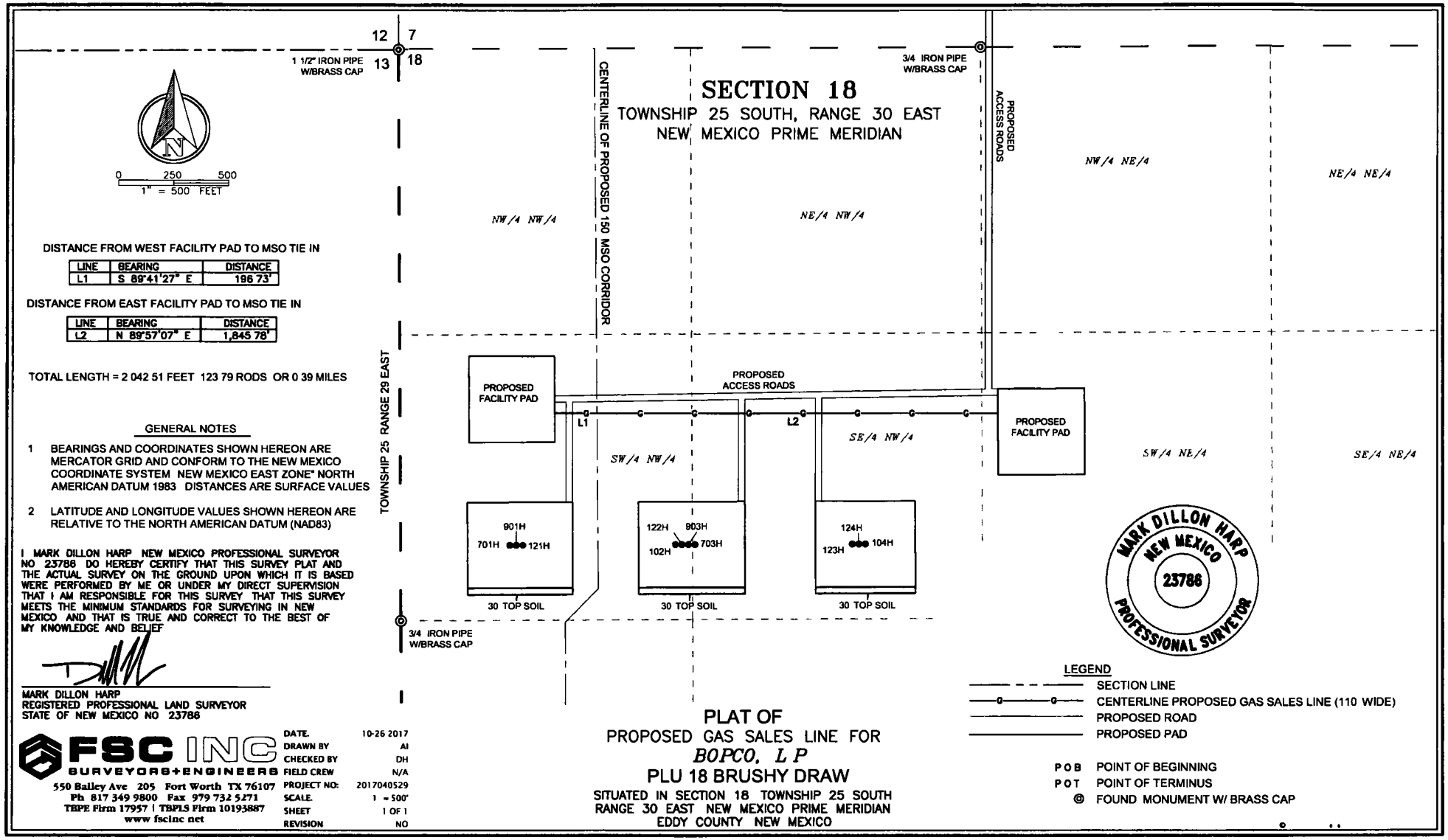

DISTANCE FROM WEST FACILITY PAD TO MSO TIE IN

LINE	BEARING	DISTANCE
L1	S 89°41'27" E	196 73'

DISTANCE FROM EAST FACILITY PAD TO MSO TIE IN

LINE	BEARING	DISTANCE
L2	N 89°57'07" E	1,845 78'

TOTAL LENGTH = 2 042 51 FEET 123 79 RODS OR 0 39 MILES

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)

I MARK DILLON HARP NEW MEXICO PROFESSIONAL SURVEYOR NO 23788 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 23788

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

LEGEND

- SECTION LINE
- CENTERLINE PROPOSED GAS SALES LINE (110 WIDE)
- PROPOSED ROAD
- PROPOSED PAD
- POB POINT OF BEGINNING
- POT POINT OF TERMINUS
- @ FOUND MONUMENT W/ BRASS CAP

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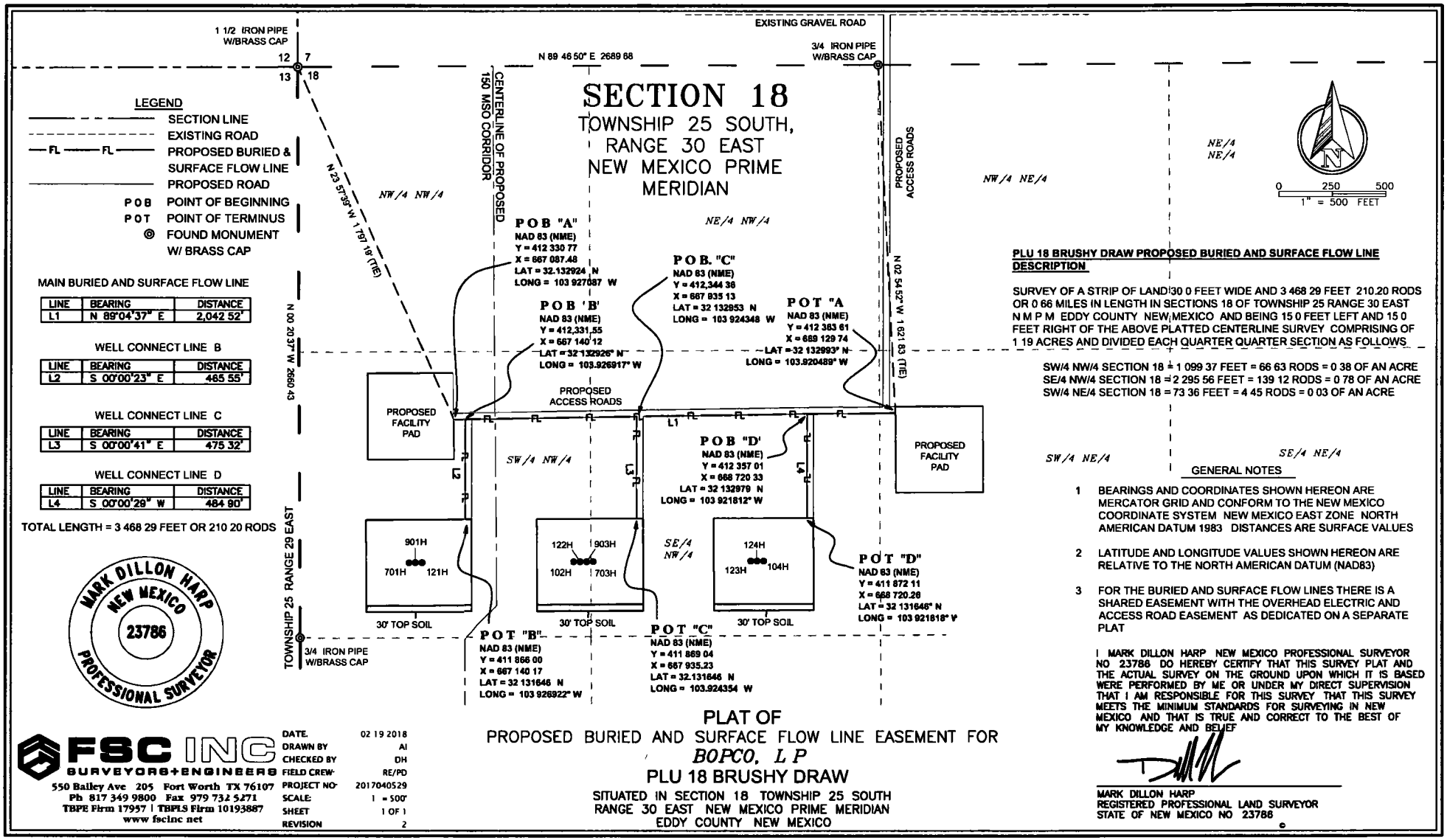
DATE	10-26 2017
DRAWN BY	AI
CHECKED BY	DH
FIELD CREW	N/A
PROJECT NO	2017040529
SCALE	1 = 500'
SHEET	1 OF 1
REVISION	NO

PLAT OF
PROPOSED GAS SALES LINE FOR
BOPCO, L P
PLU 18 BRUSHY DRAW

SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST NEW MEXICO PRIME MERIDIAN EDDY COUNTY NEW MEXICO



MAIN BURIED AND SURFACE FLOW LINE

LINE	BEARING	DISTANCE
L1	N 89°04'37" E	2,042 52'

WELL CONNECT LINE B

LINE	BEARING	DISTANCE
L2	S 00°00'23" E	465 55'

WELL CONNECT LINE C

LINE	BEARING	DISTANCE
L3	S 00°00'41" E	475 32'

WELL CONNECT LINE D

LINE	BEARING	DISTANCE
L4	S 00°00'29" W	484 90'

TOTAL LENGTH = 3 468 29 FEET OR 210 20 RODS

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

PLU 18 BRUSHY DRAW PROPOSED BURIED AND SURFACE FLOW LINE DESCRIPTION

SURVEY OF A STRIP OF LAND 30 0 FEET WIDE AND 3 468 29 FEET 210.20 RODS OR 0 66 MILES IN LENGTH IN SECTIONS 18 OF TOWNSHIP 25 RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO AND BEING 15 0 FEET LEFT AND 15 0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY COMPRISING OF 1 19 ACRES AND DIVIDED EACH QUARTER QUARTER SECTION AS FOLLOWS

SW/4 NW/4 SECTION 18 = 1 099 37 FEET = 66 63 RODS = 0 38 OF AN ACRE
SE/4 NW/4 SECTION 18 = 2 295 56 FEET = 139 12 RODS = 0 78 OF AN ACRE
SW/4 NE/4 SECTION 18 = 73 36 FEET = 4 45 RODS = 0 03 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)

3 FOR THE BURIED AND SURFACE FLOW LINES THERE IS A SHARED EASEMENT WITH THE OVERHEAD ELECTRIC AND ACCESS ROAD EASEMENT AS DEDICATED ON A SEPARATE PLAT

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

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STATE OF NEW MEXICO NO 23788

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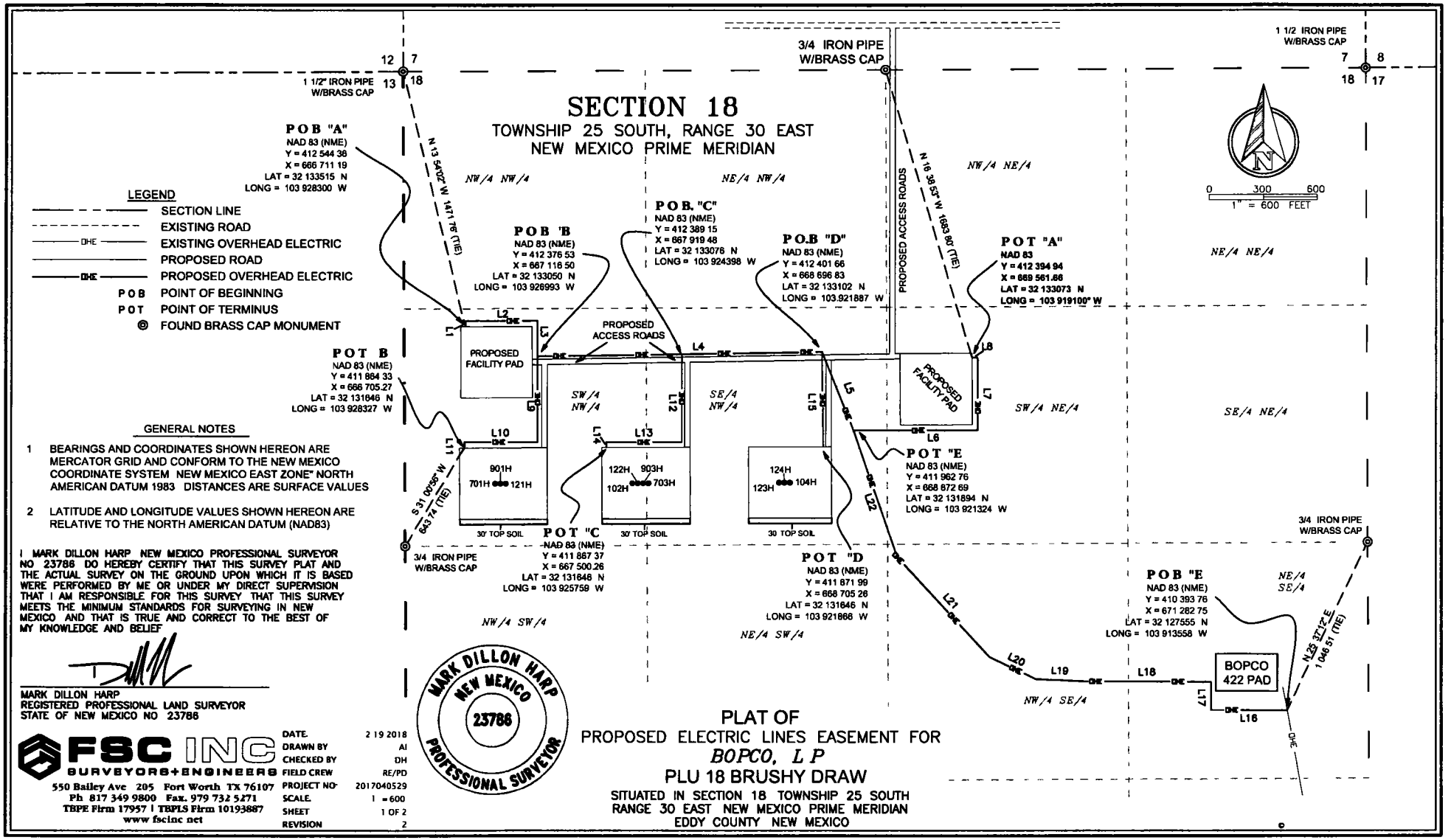
550 Bailey Ave 205 Fort Worth TX 76107
Ph 817 349 9800 Fax 979 732 5271
TBPE Firm 17957 | TBPLS Firm 10193887
www fscinc net

DATE	02 19 2018
DRAWN BY	AI
CHECKED BY	DH
FIELD CREW	RE/PD
PROJECT NO	2017040529
SCALE	1 = 500'
SHEET	1 OF 1
REVISION	2

PLAT OF
PROPOSED BURIED AND SURFACE FLOW LINE EASEMENT FOR
BOPCO, L P
PLU 18 BRUSHY DRAW

SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST NEW MEXICO PRIME MERIDIAN EDDY COUNTY NEW MEXICO



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

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TBPE Firm 17957 I TBPLS Firm 10193887
www fscinc net

DATE.	2 19 2018
DRAWN BY	AI
CHECKED BY	DH
FIELD CREW	RE/PD
PROJECT NO.	2017040529
SCALE.	1 = 600
SHEET	1 OF 2
REVISION	2

PLAT OF
PROPOSED ELECTRIC LINES EASEMENT FOR
BOPCO, L P
PLU 18 BRUSHY DRAW
SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH
RANGE 30 EAST NEW MEXICO PRIME MERIDIAN
EDDY COUNTY NEW MEXICO

LINE	BEARING	DISTANCE
L1	N 00°00'01" W	31 31'
L2	N 89°59'59" E	404 88'
L3	S 00°07'22" E	199 15'
L4	N 89°05'20" E	1580 54'
L5	S 21 50'04" E	472.82'
L6	N 89°49'09" E	688 72'
L7	N 00°14'06" W	405 29'
L8	S 89°45'54" W	30 07'
L9	S 00°07'22" E	480 10'
L10	S 89°59'41" W	412 28'
L11	S 00°00'19" E	32 06'
L12	S 00°00'33" E	492 07'
L13	S 89°58'32" W	419 30'
L14	S 00°01'28" E	29 52'
L15	S 00°54'40" E	529 73'
L16	S 89°49'14" W	423 30'
L17	N 00°03'51" W	160 12'
L18	N 89°49'11" W	708 24'
L19	N 87°26'22" W	265 41'
L20	N 64 08'07" W	288 07'
L21	N 42°28'33" W	780 57'
L22	N 18°51'27" W	750 33'

TOTAL LENGTH = 9 561 86 FEET OR 579 51 RODS

PLU 18 BRUSHY DRAW PROPOSED ELECTRIC LINES DESCRIPTION

SURVEY OF A STRIP OF LAND 30 0 FEET WIDE AND 9 561 86 FEET 579 51 RODS OR 1 81 MILES IN LENGTH IN SECTION 18 OF TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO AND BEING 15 0 FEET LEFT AND 15 0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY COMPRISING OF 5 54 ACRES AND DIVIDED EACH QUARTER QUARTER SECTION AS FOLLOWS

NE/4 SE/4 SECTION 18 = 1 039 71 FEET = 63 01 RODS = 0 71 OF AN ACRE
NW/4 SE/4 SECTION 18 = 1 640 58 FEET = 99 43 RODS = 1 13 ACRES
SW/4 NE/4 SECTION 18 = 1 026 93 FEET = 62 24 RODS = 0 71 OF AN ACRE
SE/4 NW/4 SECTION 18 = 3 437 36 FEET = 208 33 RODS = 1 59 ACRES
SW/4 NW/4 SECTION 18 = 2 417 28 FEET = 146 50 RODS = 1 40 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)

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
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STATE OF NEW MEXICO NO 23786

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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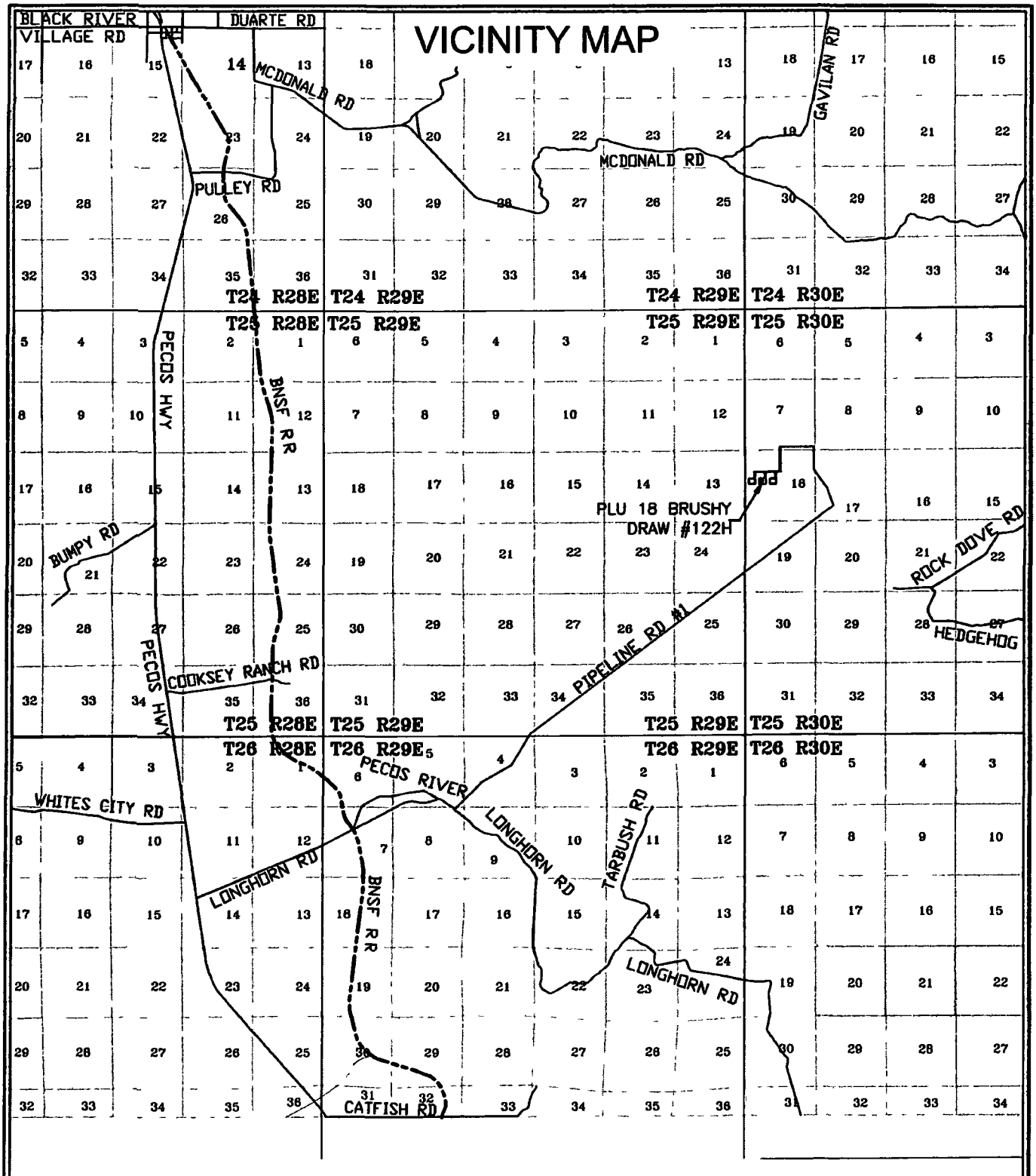
TBPE Firm 17957 | TBPLS Firm 10193887
www fscinc net

DATE.	2 19 2018
DRAWN BY	AI
CHECKED BY	DH
FIELD CREW	RE/PD
PROJECT NO	2017040529
SCALE.	1 = 600
SHEET	2 OF 2
REVISION.	2

PLAT OF
PROPOSED ELECTRIC LINES EASEMENT FOR
BOPCO, L P
PLU 18 BRUSHY DRAW
SITUATED IN SECTION 18 TOWNSHIP 25 SOUTH,
RANGE 30 EAST, NEW MEXICO PRIME MERIDIAN
EDDY COUNTY NEW MEXICO

VICINITY MAP



PLU 18 BRUSHY DRAW #122H LOCATED 2,310 FEET FROM THE NORTH LINE AND 1,305 FEET FROM THE WEST LINE OF SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY, NEW MEXICO

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

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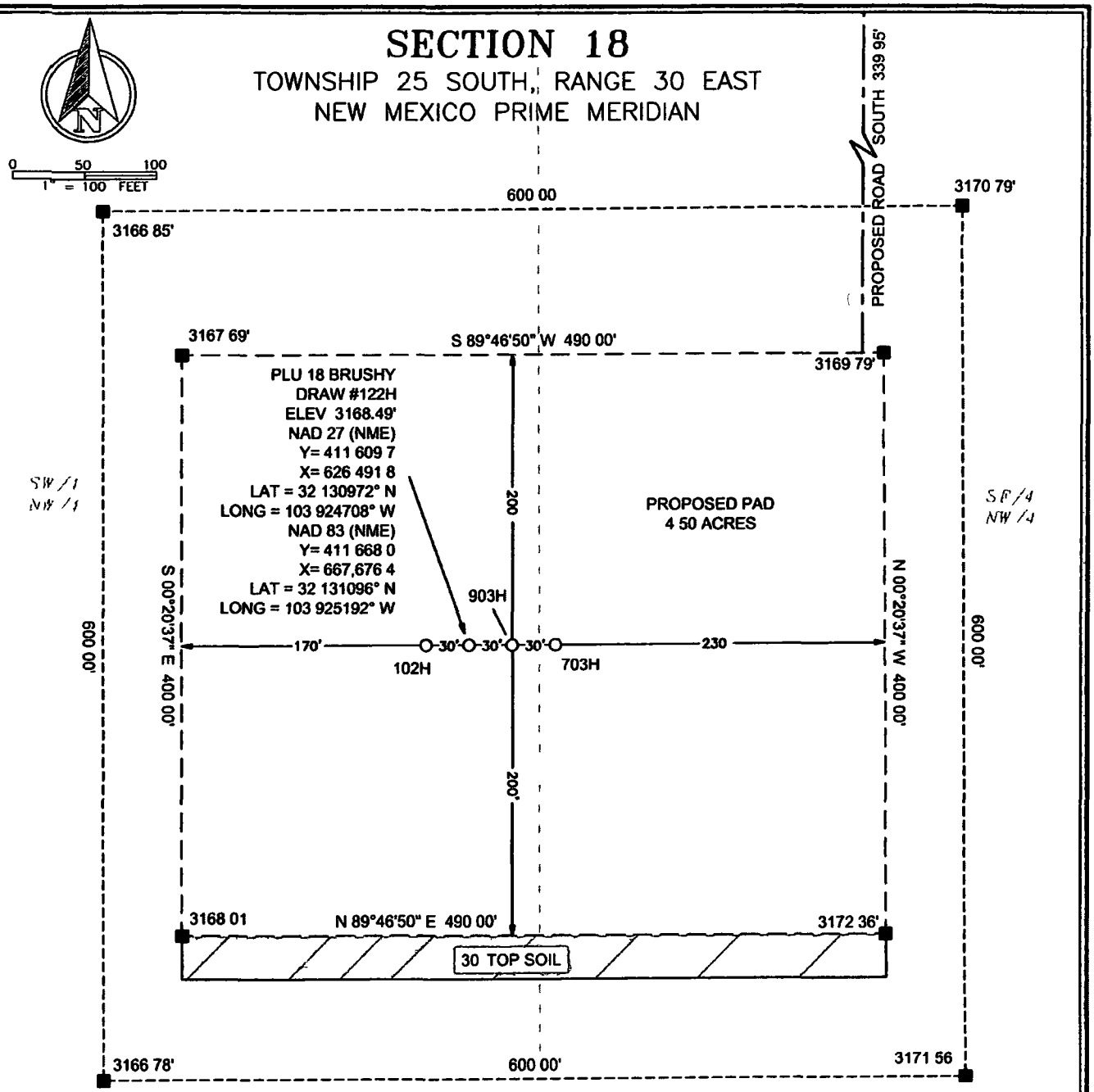
Ph 817 349 9800 Fax 979 732 5271
TBPE Firm 17957 | TBPLS Firm 10193887
www fscinc net

DATE:	10-30 2017
DRAWN BY:	JAR/AI
CHECKED BY:	DH
FIELD CREW:	RE/PD
PROJECT NO:	2017050636
SCALE:	1 = 10 000
SHEET:	1 OF 1
REVISION:	1

SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

LEGEND

- - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

BOPCO, L.P.

WELL SITE PLAN

PLU 18 BRUSHY DRAW #122H LOCATED 2 310 FEET FROM THE NORTH LINE AND 1,305 FEET FROM THE WEST LINE OF SECTION 18
TOWNSHIP 25 SOUTH RANGE 30 EAST
N M P M EDDY COUNTY, NEW MEXICO

DATE	10 30-2017	PROJECT NO	2017050636
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

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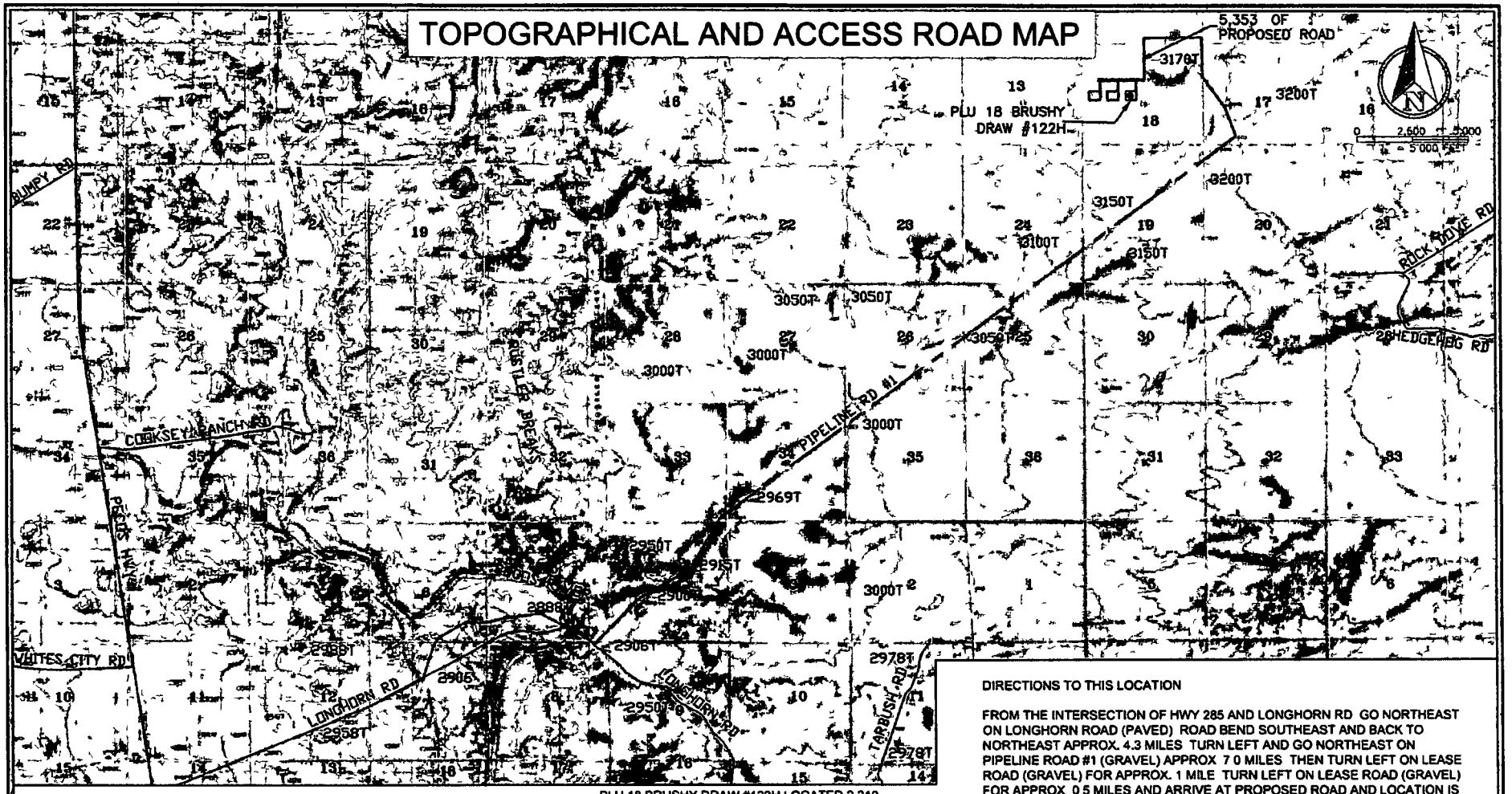
TOPOGRAPHICAL AND ACCESS ROAD MAP



DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX. 4.3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX. 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

DATE	10-30-2017	PROJECT NO	2017050636
DRAWN BY	JAR/AI	SCALE	1 = 5 000'
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NM/JD	REVISION	1

F8C INC
SURVEYORS+ENGINEERS
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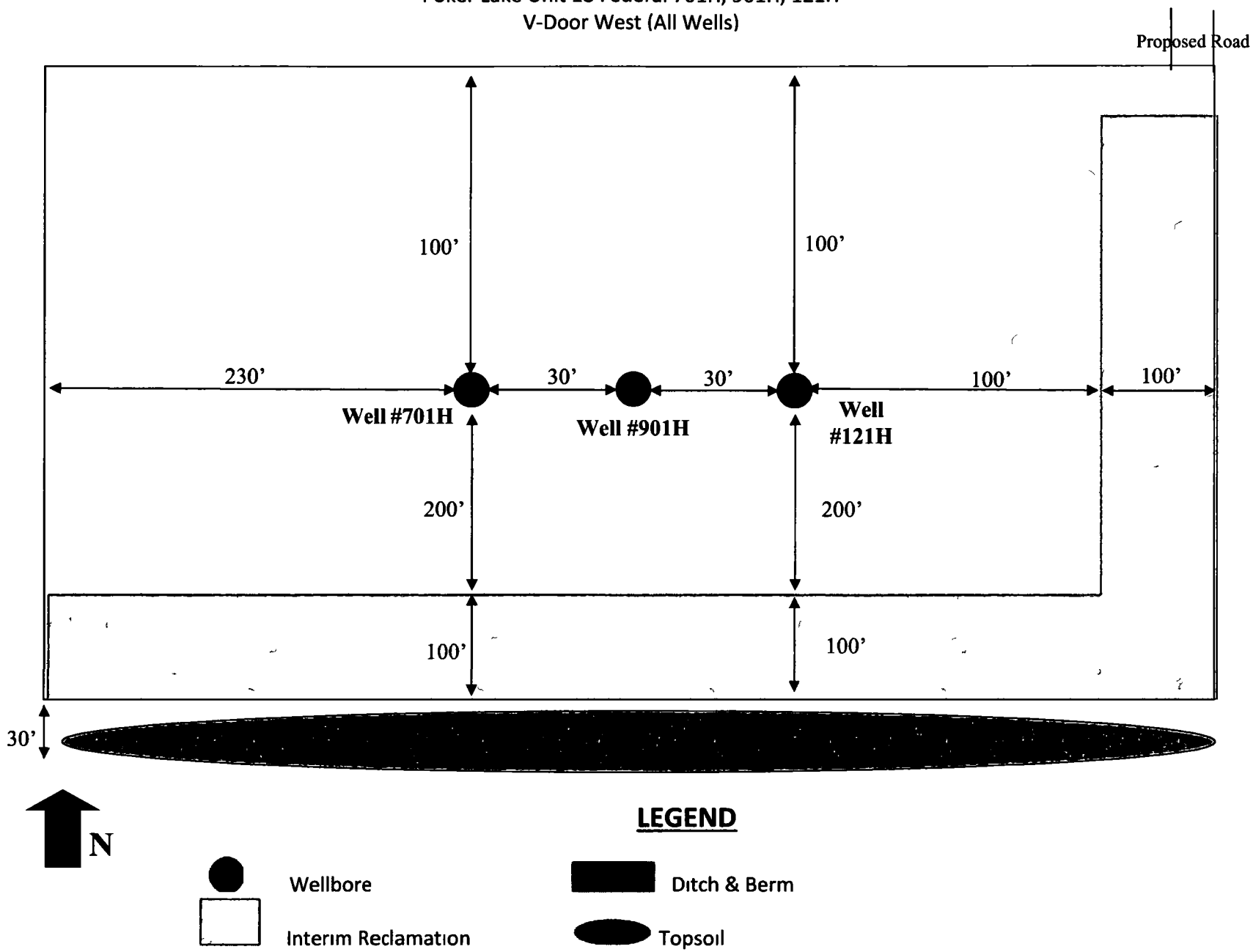
PLU 18 BRUSHY DRAW #122H LOCATED 2 310 FEET FROM THE NORTH LINE AND 1 305 FEET FROM THE WEST LINE OF SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO

Interim Reclamation Diagram

Poker Lake Unit 18 Federal 701H, 901H, 121H

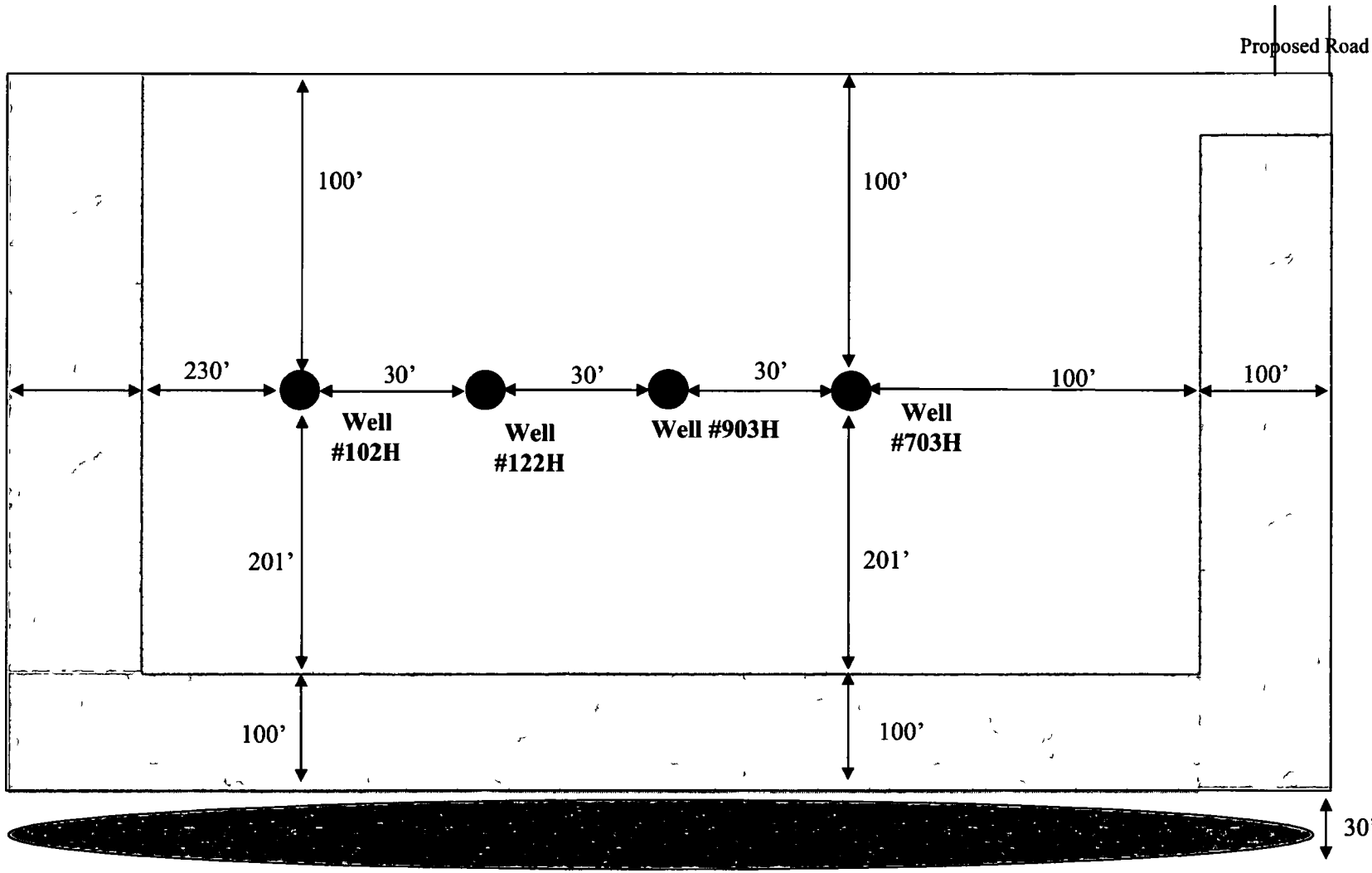
V-Door West (All Wells)



Interim Reclamation Diagram

Poker Lake Unit 18 Federal 703H, 903H, 102H, 122H

V-Door West (All Wells)



LEGEND

N

Wellbore

Interim Reclamation

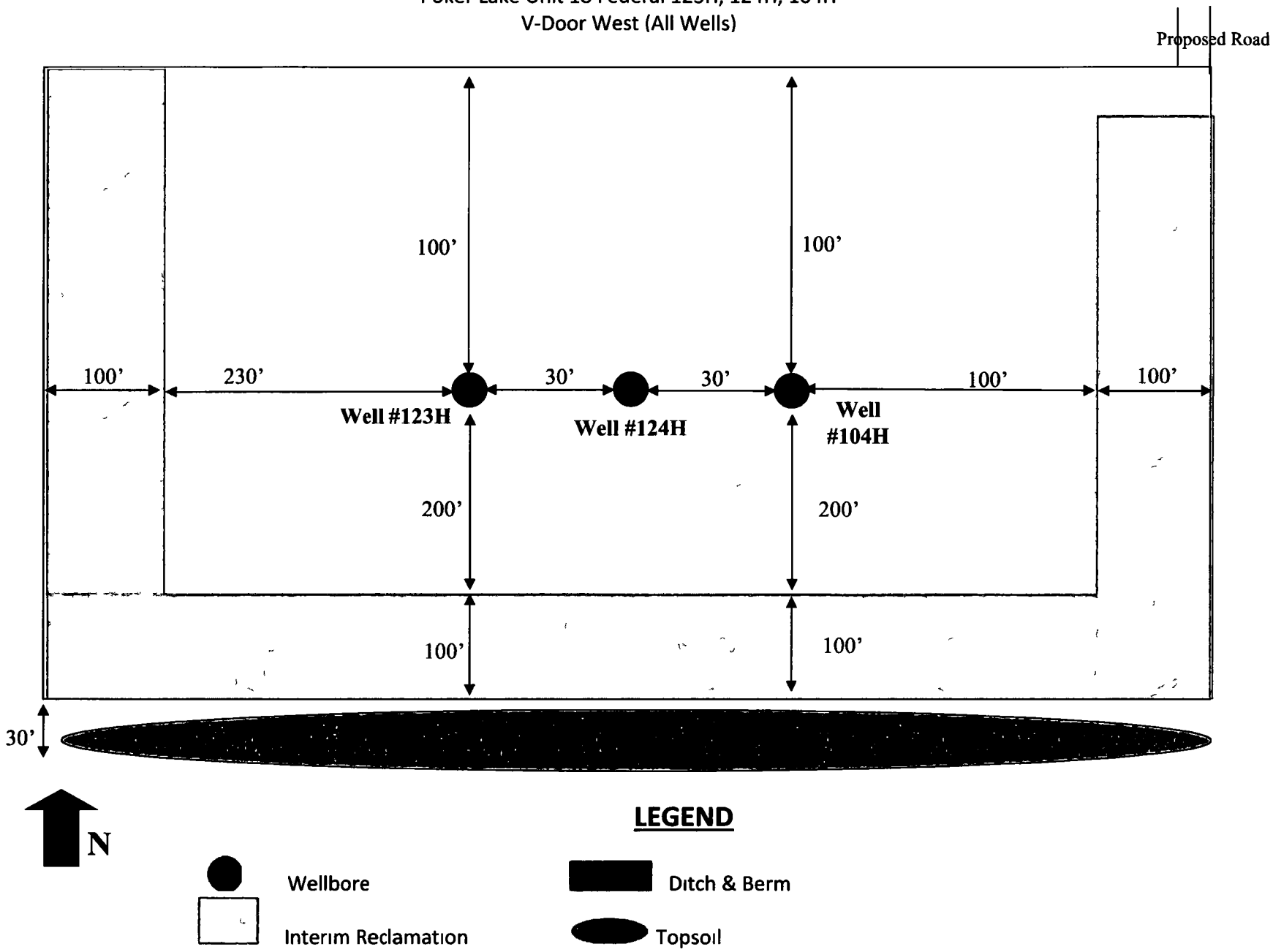
Ditch & Berm

Topsoil

Interim Reclamation Diagram

Poker Lake Unit 18 Federal 123H, 124H, 104H

V-Door West (All Wells)



Well Site Locations

The results of the Poker Lake Unit 18 Brushy Draw Development Program will develop economic quantities of oil and gas in the 'Poker Lake Unit 18 Brushy Draw' 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

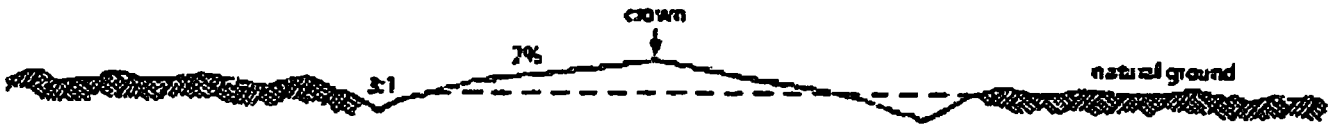
Surface Use Plan

1 **Existing Roads**

- A The Poker Lake Unit 18 Brushy Draw area is accessed by existing U S Hwy 285 and Longhorn Road Go Northeast on Longhorn Road (paved) Road bend Southeast and back to Northeast approximately 4 25 miles Turn left and go Northeast on Pipeline Road #1 (Gravel) approximately 7 0 miles Turn left on gravel road for approximately 1 mile Road curves West, then East Turn left again for approximately 70 miles to another left turn heading South for approximately 45 miles to PLU 18 Brushy Draw pads 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 18 Brushy Draw 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

2 **New or Upgraded Access Roads**

- A **New Roads** There is a total of 5356' or 1 014 miles of proposed and staked access roads in the Poker Lake Unit 18 Brushy Draw 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 Frank's Surveying unless otherwise approved by the BLM and applied for by BOPCO, L P
- 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 400' x 400' pads were staked with the BLM for construction and use as Central Tank Batteries (CTB) The Western most facility is the PLU 18 BD West CTB and the Eastern most facility is the PLU 18 BD East CTB The pads are located in Section 18-T25S-R30E 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 possessing a site-security diagram and layout of the facility with associated equipment

B **Flowlines** In the event the wells are found productive, 4" composite flexpipe or steel flowlines with a maximum safety pressure rating of 750psi (operating pressure 125psi) will be laid on the surface within proposed lease road corridors from the proposed wells to the PLU 18 BD East CTB and the PLU 18 BD West CTB where the oil, gas, and water will be metered and appropriately separated High pressure gas lines will be buried beneath the surface flowlines per well pad within the proposed lease road corridors for gas lift, fuel gas, and water Oil will be hauled from the location by truck following existing and proposed lease roads The distance of proposed flowlines per well will be approximately

3465' 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 MSO corridor extending from the PLU 18 BD East CTB and the PLU 18 BD West CTB BOPCO, L P 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 18 BD East GSL Approximate Length 197' PLU 18 BD West GSL Approximate Length 1846'

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 18 Brushy Draw project The flare stacks will be 50'x50' One will be located on the PLU 18 BD East Central Tank Battery One will be located on the PLU 18 BD West Central Tank Battery 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 12466' of electrical will be run from the anticipated tie-in point with a request for 30' ROW construction and maintenance buffer This distance is a max approximation and may vary based on lease road corridors, varying elevations and terrain in the area A plat of the proposed electrical is attached

6 Location and Types of Water Supply

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

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

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

Anticipated water usage for drilling includes an estimated 35,000 barrels of water to drill a horizontal well in a combination of fresh water and brine as detailed in the mud program in the drilling plans These volumes are calculated for ~1 5bbls per foot of hole drilled with excess to accommodate any lost circulation or wash out that may occur Actual water volumes used during operations will depend on the depth of the well, length of horizontal sections, and the losses that may occur during the operation

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

7 Construction Activities

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

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

C Anticipated Caliche Locations

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

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

8 Methods for Handling Waste

- **Cuttings** The well will be drilled utilizing a closed-loop mud system Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site
- **Drilling Fluids** These will be contained in steel mud pits and then taken to a NMOCD approved commercial disposal facility
- **Produced Fluids** Water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility Oil produced during operations will be stored in tanks until sold
- **Sewage** Portable, self-contained toilets will be provided for human waste disposal Upon completion of drilling and completion activities, or as required, the toilet holding tanks will be pumped and the contents thereof disposed of in an approved sewage disposal facility All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete
- **Garbage and Other Waste Materials** All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approve sanitary landfill Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location No potentially adverse materials or substances will be left on the location
- **Debris** Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned and removed from the well location No potential adverse materials or substances will be left on location
- **Hazardous Materials**
  - i All drilling wastes identified as hazardous substances by the Comprehensive Environmental Response Compensation Liability Act (CERCLA) removed from the location and not reused at another drilling location will be disposed of at a hazardous waste facility approved by the U S Environmental Protection Agency (EPA)
  - ii BOPCO, L P and its contractors will comply with all applicable Federal, State and local laws and regulations, existing or hereafter enacted promulgated, with regard to any hazardous material, as defined in this paragraph, that will be used, produced, transported or stored on the oil and gas lease "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the CERCLA of 1980, as amended, 42 U S C 9601 et seq , and its regulation The definition of hazardous substances under CERLCA includes any 'hazardous waste" as defined in the RCRA of 1976, as amended, 42 U S C 6901 et seq , and its regulations The term hazardous

material also includes any nuclear or nuclear by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U C S 2011 et seq The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101 (14) U S C 9601 (14) nor does the term include natural gas

iii No hazardous substances or wastes will be stored on the location after completion of the well

iv Chemicals brought to location will be on the Toxic Substance Control Act (TSCA) approved inventory list

v All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in Notice to Lessees (NTL) 3A will be reported to the BLM Carlsbad Field Office Major events will be reported verbally within 24 hours, followed by a written report within 15 days "Other than Major Events" will be reported in writing within 15 days

9 Well Site Layout

A **Rig Plat Diagrams** There are 3 multi-well pads in the Poker Lake Unit 18 Brushy Draw 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 From West to East

1 Pad 1 is a 3-well pad expected to be 375'x550'
2 Pad 2 is a 3-well pad expected to be 390'x550'
3 Pad 3 is a 3-well pad expected to be 490'x400'

B **Closed-Loop System** There will be no reserve pit as each well will be drilled utilizing a closed loop mud system The closed loop system will meet the NMOCD requirements 19 15 17

C **V-Door Orientation** These wells were staked with multiple v-door orientations The following list is from 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

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

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

10 Plans for Surface Reclamation

BOPCO, L P 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, BOPCO, L P will coordinate interim reclamation with the appropriate BLM personnel or use the following plan

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

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

Reclamation Standards

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

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

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

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

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

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

Seeding

- Seedbed Preparation Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil Prior to seeding, the seedbed will be scarified to a depth of no less than 4-6 inches If the site is to be broadcast seeded, the surface will be left rough enough to trap seed and snow, control erosion, and increase water infiltration
- If broadcast seeding is to be used and is delayed, final seedbed preparation will consist of contour cultivating to a depth of 4-6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites
- Seed Application Seeding will be conducted no more than two weeks following completion of final seedbed preparation A certified weed-free seed mix designed by the BLM to meet reclamation standards will be used
- If the site is harrowed or dragged, seed will be covered by no more than 0 25 inch of soil

11 Surface Ownership

A Within the Poker Lake Unit 18 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
1201H	121H
1202H	122H

1203H	123H
1204H	124H

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** A Class III Cultural Resources Examination has been completed on all wells by Boone Archaeological Services and the results will be forwarded to the BLM Office A copy of the report is also included as an attachment to this APD

- **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 BOPCO, L P representatives for ensuring compliance of the surface use plan are listed below

Surface

Jimie Scott
Contract Construction Lead
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Midland, Texas 79701
432-488-9955
james_scott@xtoenergy com

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

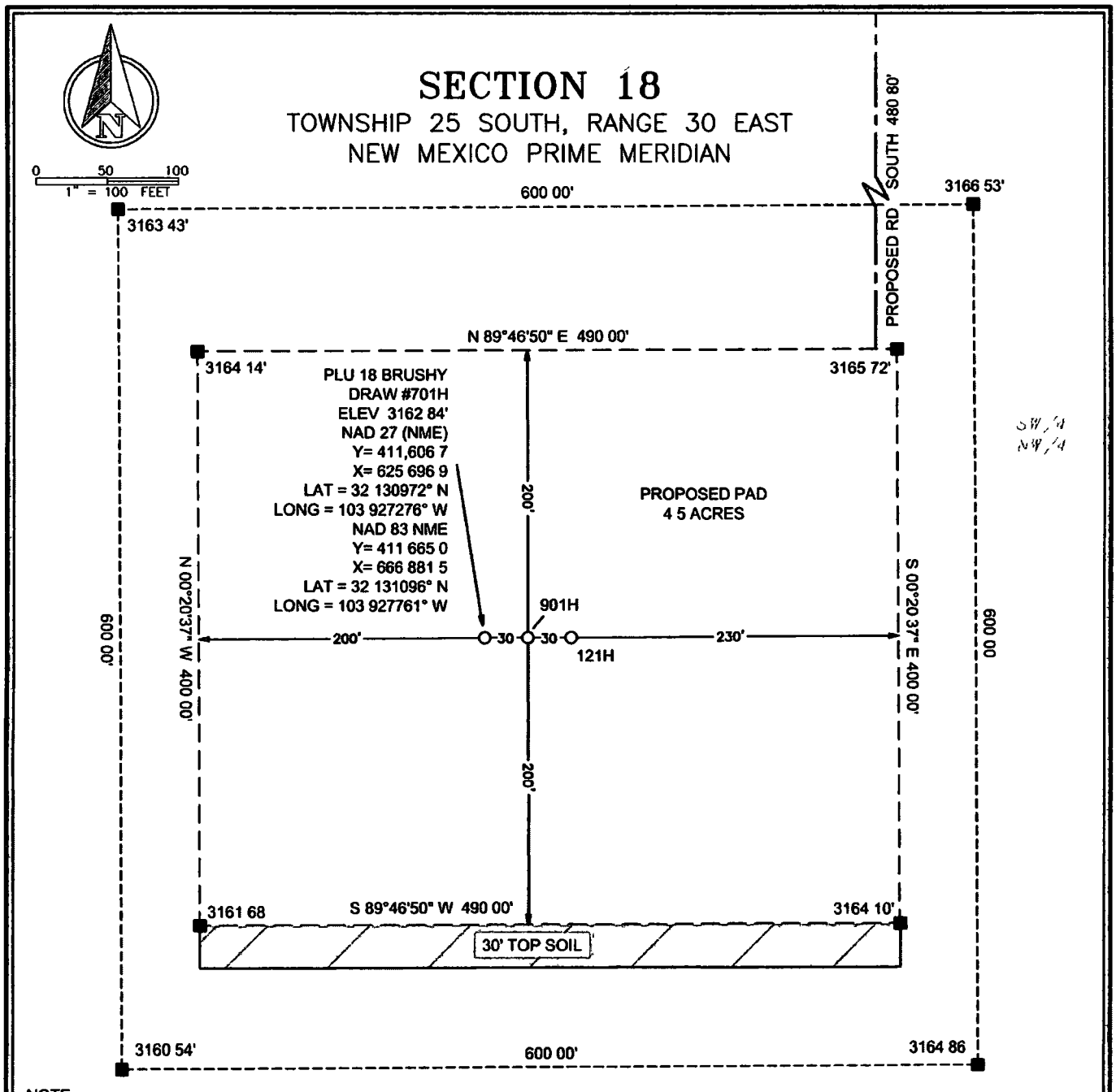
Poker Lake Unit 18 Brushy Draw List

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 18 Brushy Draw 701H		18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 901H		18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 121H	1201H	18	25S	30E	Bureau of Land Mgmt	West
2	Poker Lake Unit 18 Brushy Draw 102H	1002H	18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 122H	1202H	18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 903H		18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 703H		18	25S	30E	Bureau of Land Mgmt	West
3	Poker Lake Unit 18 Brushy Draw 123H	1203H	18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 124H	1204H	18	25S	30E	Bureau of Land Mgmt	West
	Poker Lake Unit 18 Brushy Draw 104H	1004H	18	25S	30E	Bureau of Land Mgmt	West

* Bold Indicates Portion Changed



NOTE

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

LEGEND

- - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

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BOPCO, L.P

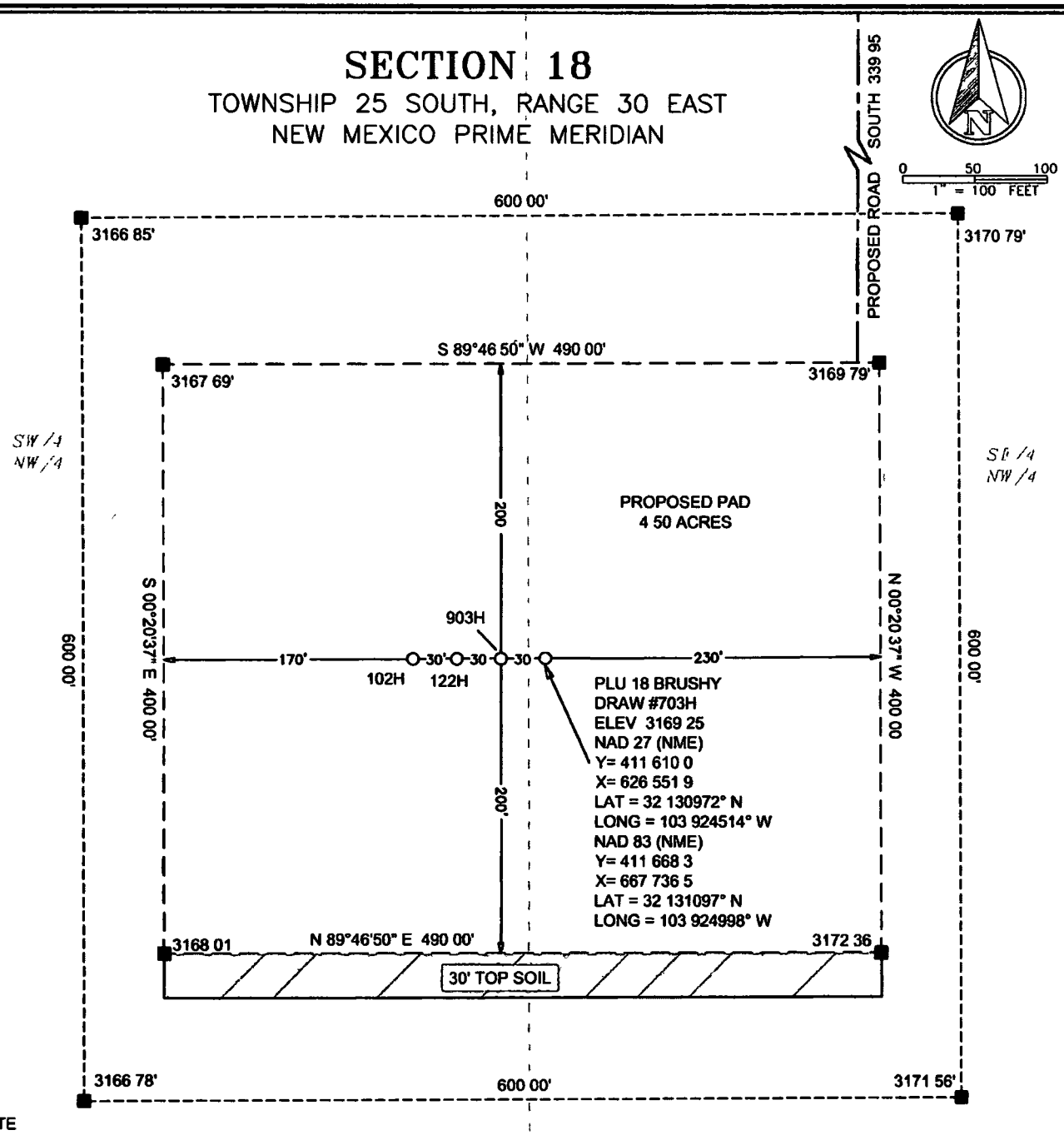
WELL SITE PLAN

PLU 18 BRUSHY DRAW #701H
LOCATED 2 310 FEET FROM THE NORTH LINE AND 510 FEET FROM THE WEST LINE OF SECTION 18, TOWNSHIP 25 SOUTH, RANGE 30 EAST, N M P M EDDY COUNTY NEW MEXICO

DATE	10 30 2017	PROJECT NO	2017040629
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



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LEGEND

- - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

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BOPCO, L.P.

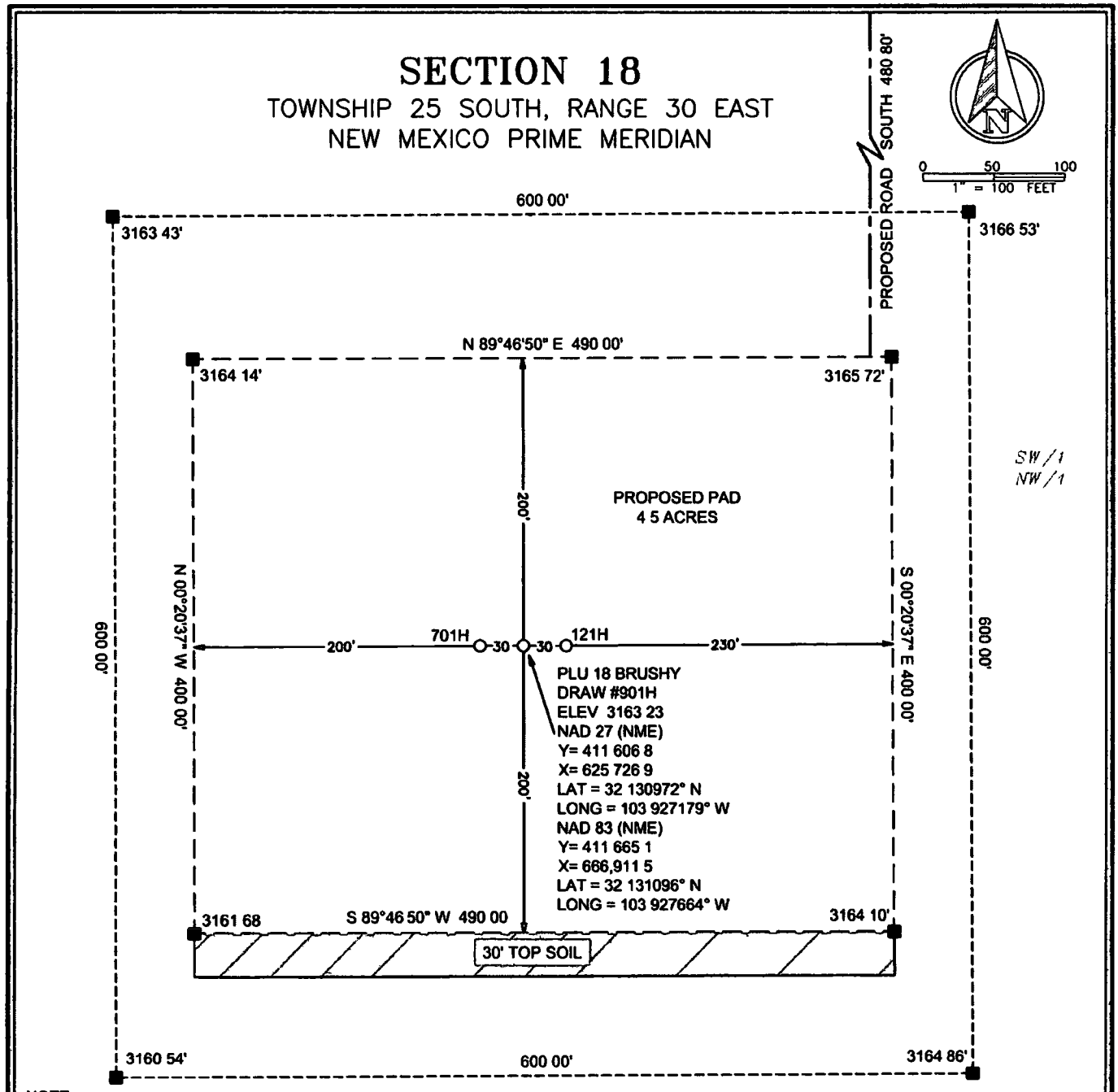
WELL SITE PLAN

PLU 18 BRUSHY DRAW #703H LOCATED 2,310 FEET FROM THE NORTH LINE AND 1 365 FEET FROM THE WEST LINE OF SECTION 18, TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO

DATE	10-30-2017	PROJECT NO	2017050630
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

LEGEND

- - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

BOPCO, L.P

WELL SITE PLAN

PLU 18 BRUSHY DRAW #901H LOCATED 2 310 FEET FROM THE NORTH LINE AND 540 FEET FROM THE WEST LINE OF SECTION 18 TOWNSHIP 25 SOUTH, RANGE 30 EAST N M P M EDDY COUNTY, NEW MEXICO

DATE	06/30/2017	PROJECT NO	2017050631
DRAWN BY	JAR	SCALE	1"= 100
CHECKED BY	DH	SHEET	SHT 1 OF 1
FIELD CREW	NGM,JLD	REVISION	0

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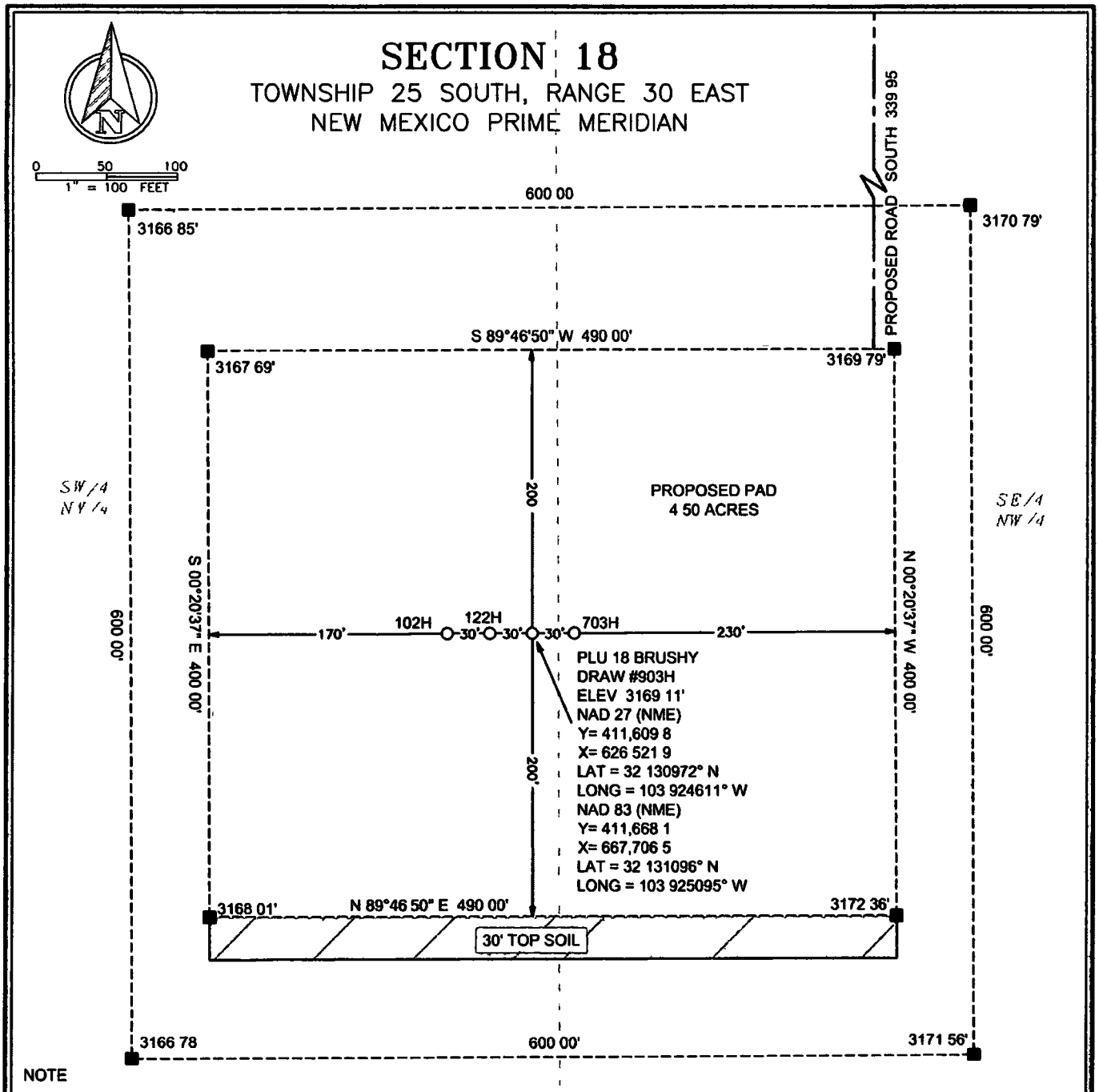
SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

LEGEND

- - - - - - PROPOSED PAD
——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

FSC INC
SURVEYORS+ENGINEERS
550 Bailey Ave , 205 Fort Worth TX 76107
Ph: 817 349 9800 Fax: 979 732 5271
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BOPCO, L P.

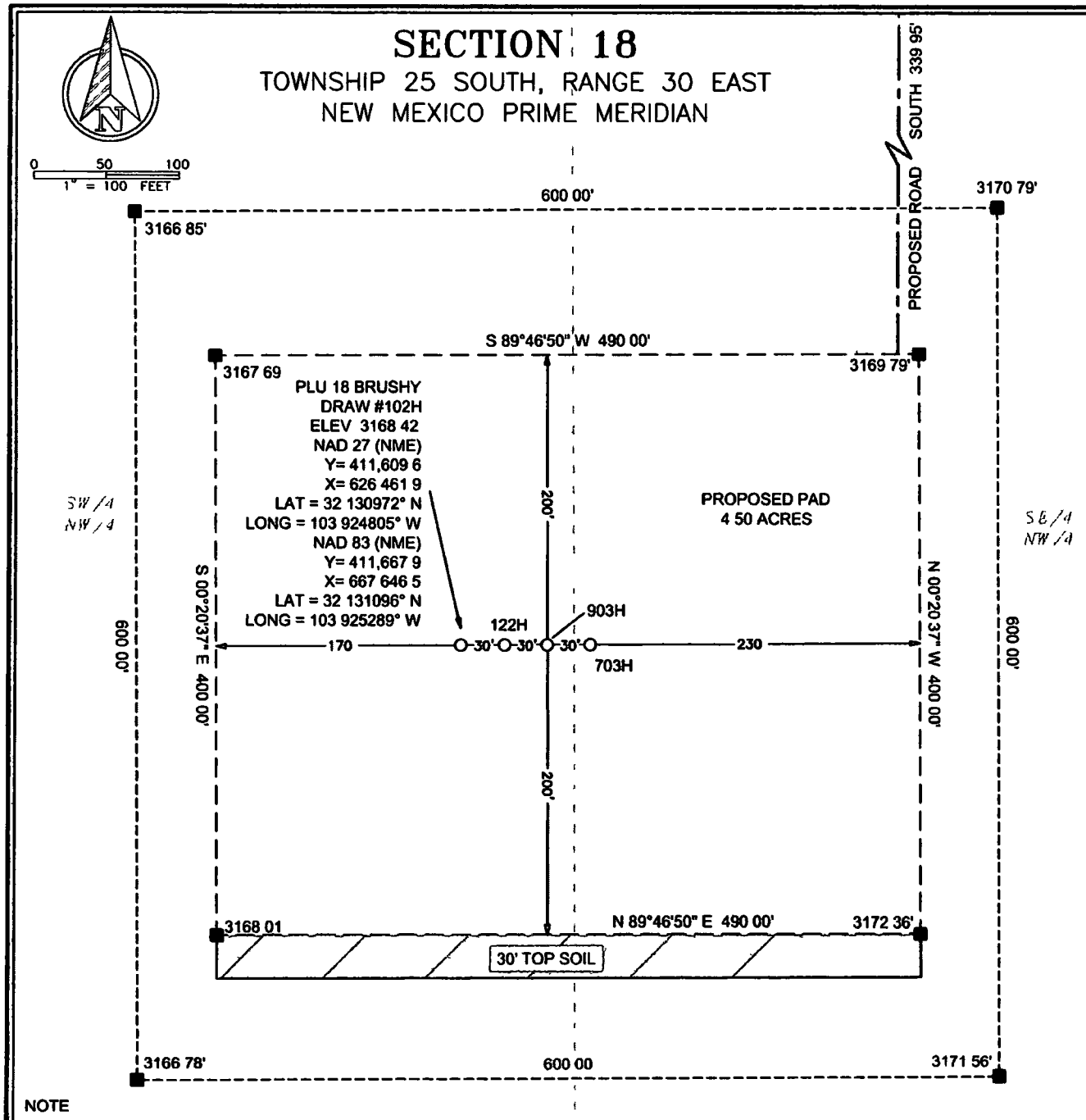
WELL SITE PLAN

PLU 18 BRUSHY DRAW #903H LOCATED 2,310 FEET FROM THE NORTH LINE AND 1,335 FEET FROM THE WEST LINE OF SECTION 18 TOWNSHIP 25 SOUTH, RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO

DATE	10-30 2017	PROJECT NO	2017050632
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION:	1

SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

LEGEND

- - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION GF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

BOPCO, L P

WELL SITE PLAN

PLU 18 BRUSHY DRAW #102H LOCATED 2,310 FEET FROM THE NORTH LINE AND 1 275 FEET FROM THE WEST LINE OF SECTION 18, TOWNSHIP 25 SOUTH, RANGE 30 EAST, N M P M EDDY COUNTY, NEW MEXICO

DATE	10-30 2017	PROJECT NO	20170506333
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

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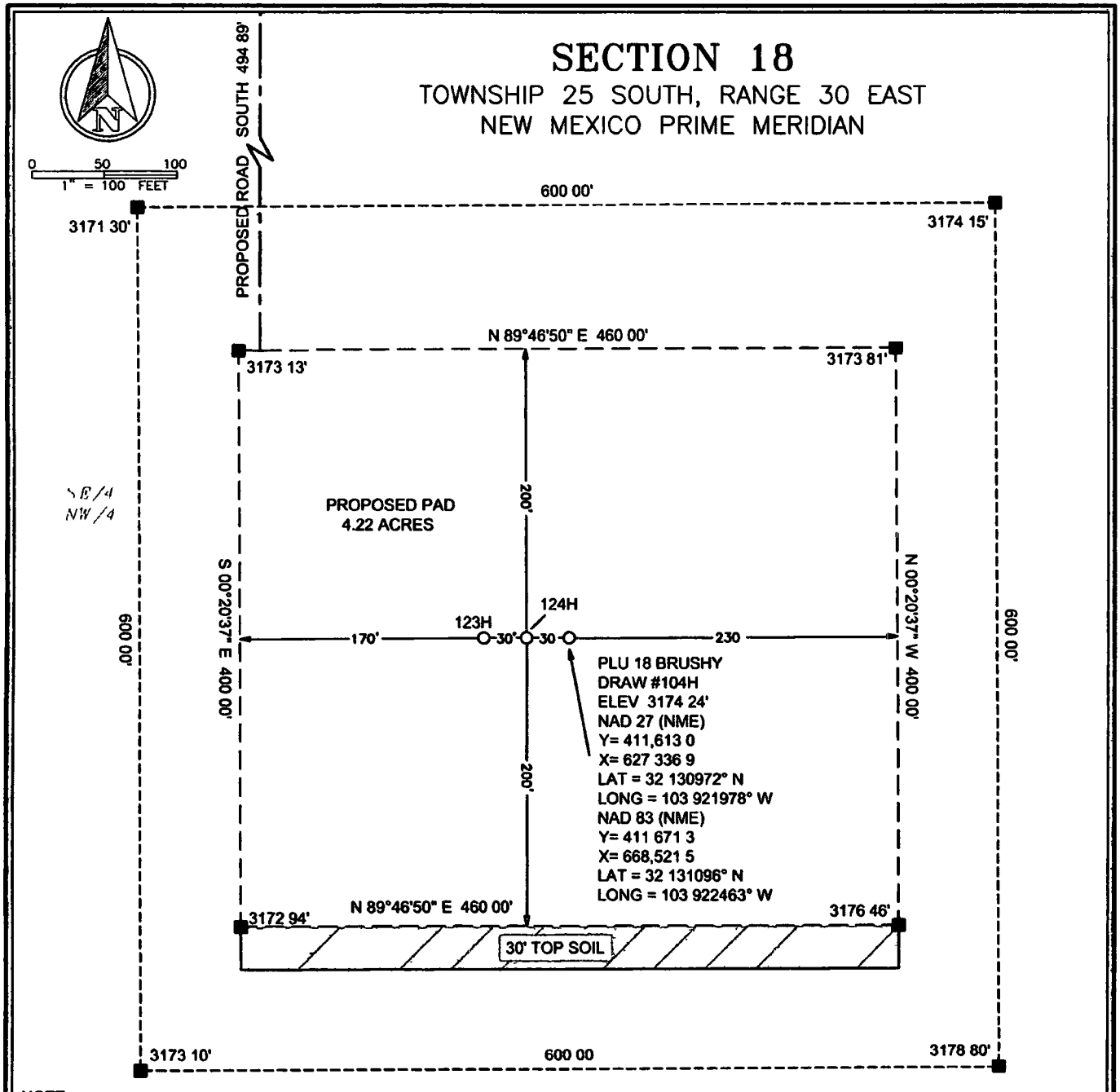

NOTE

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

LEGEND

- - - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

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BOPCO, L P.

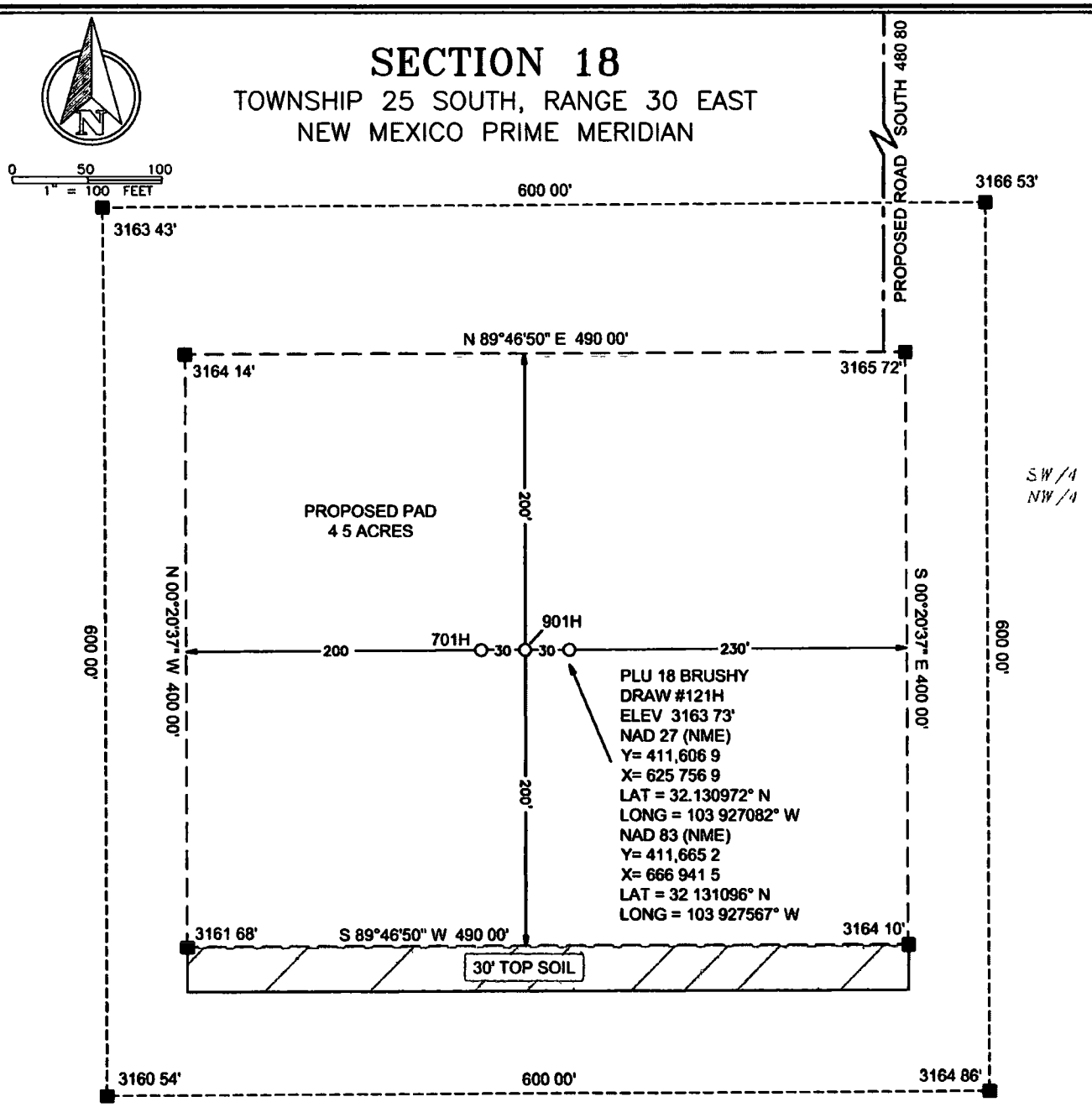
WELL SITE PLAN

PLU 18 BRUSHY DRAW #104H LOCATED 2,310 FEET FROM THE NORTH LINE AND 2,150 FEET FROM THE WEST LINE OF SECTION 18, TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY NEW MEXICO

DATE	10-30-2017	PROJECT NO	2017050637
DRAWN BY	JAR/AI	SCALE	1"= 100'
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

LEGEND

- - - - - - PROPOSED PAD
——-——- PROPOSED ACCESS ROAD

BOPCO, L.P.

WELL SITE PLAN

PLU 18 BRUSHY DRAW #121H
LOCATED 2 310 FEET FROM THE NORTH LINE AND 570 FEET FROM THE WEST LINE OF SECTION 18, TOWNSHIP 25 SOUTH RANGE 30 EAST, N M P M EDDY COUNTY, NEW MEXICO

DATE	10/30/2017	PROJECT NO	2017050635
DRAWN BY:	JAR/AI	SCALE.	1"= 100'
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

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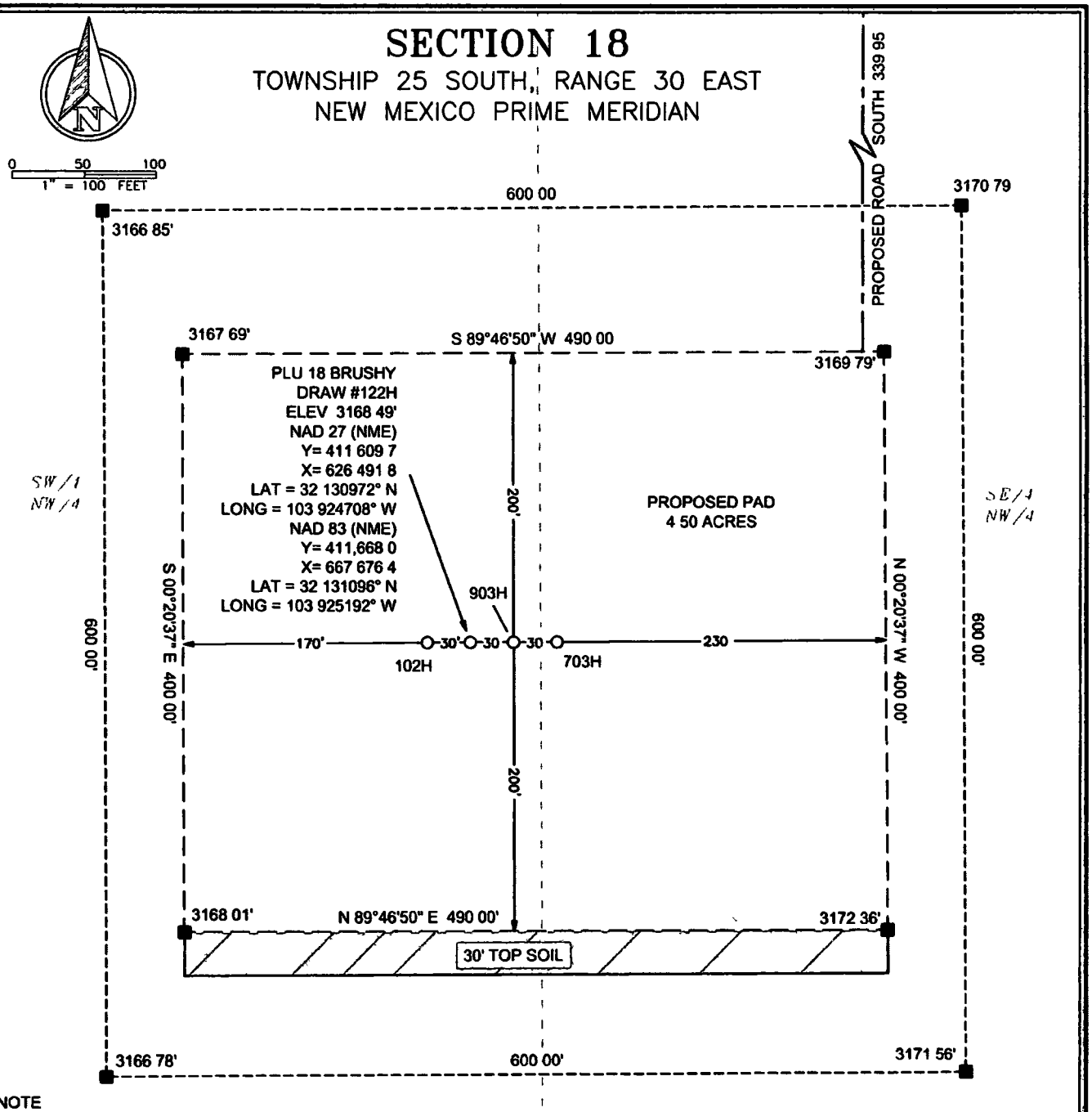
SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

LEGEND

- - - - - - PROPOSED PAD
——— - ——— PROPOSED ACCESS ROAD

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

BOPCO, L.P

WELL SITE PLAN

PLU 18 BRUSHY DRAW #122H LOCATED 2,310 FEET FROM THE NORTH LINE AND 1,305 FEET FROM THE WEST LINE OF SECTION 18
TOWNSHIP 25 SOUTH RANGE 30 EAST
N M P M EDDY COUNTY, NEW MEXICO

DATE	10-30 2017	PROJECT NO	2017050636
DRAWN BY	JAR/AI	SCALE.	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION.	1

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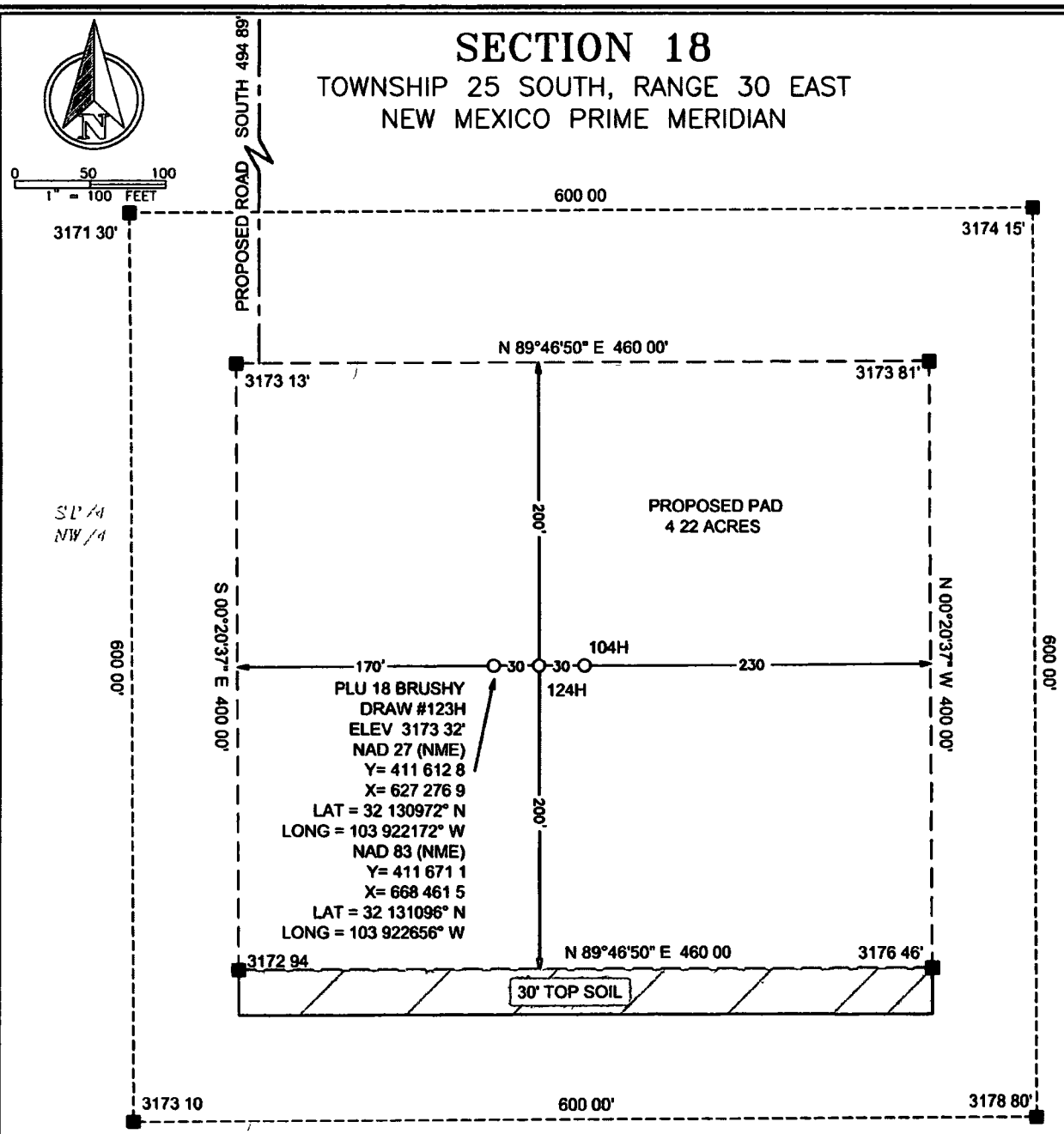
SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

LEGEND

- - - - - - PROPOSED PAD
——— PROPOSED ACCESS ROAD

BOPCO, L.P.

WELL SITE PLAN

PLU 18 BRUSHY DRAW #123H LOCATED 2 310 FEET FROM THE NORTH LINE AND 2,090 FEET FROM THE WEST LINE OF SECTION 18, TOWNSHIP 25 SOUTH, RANGE 30 EAST, N M P M EDDY COUNTY NEW MEXICO

DATE	10-30-2017	PROJECT NO	2017050637
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

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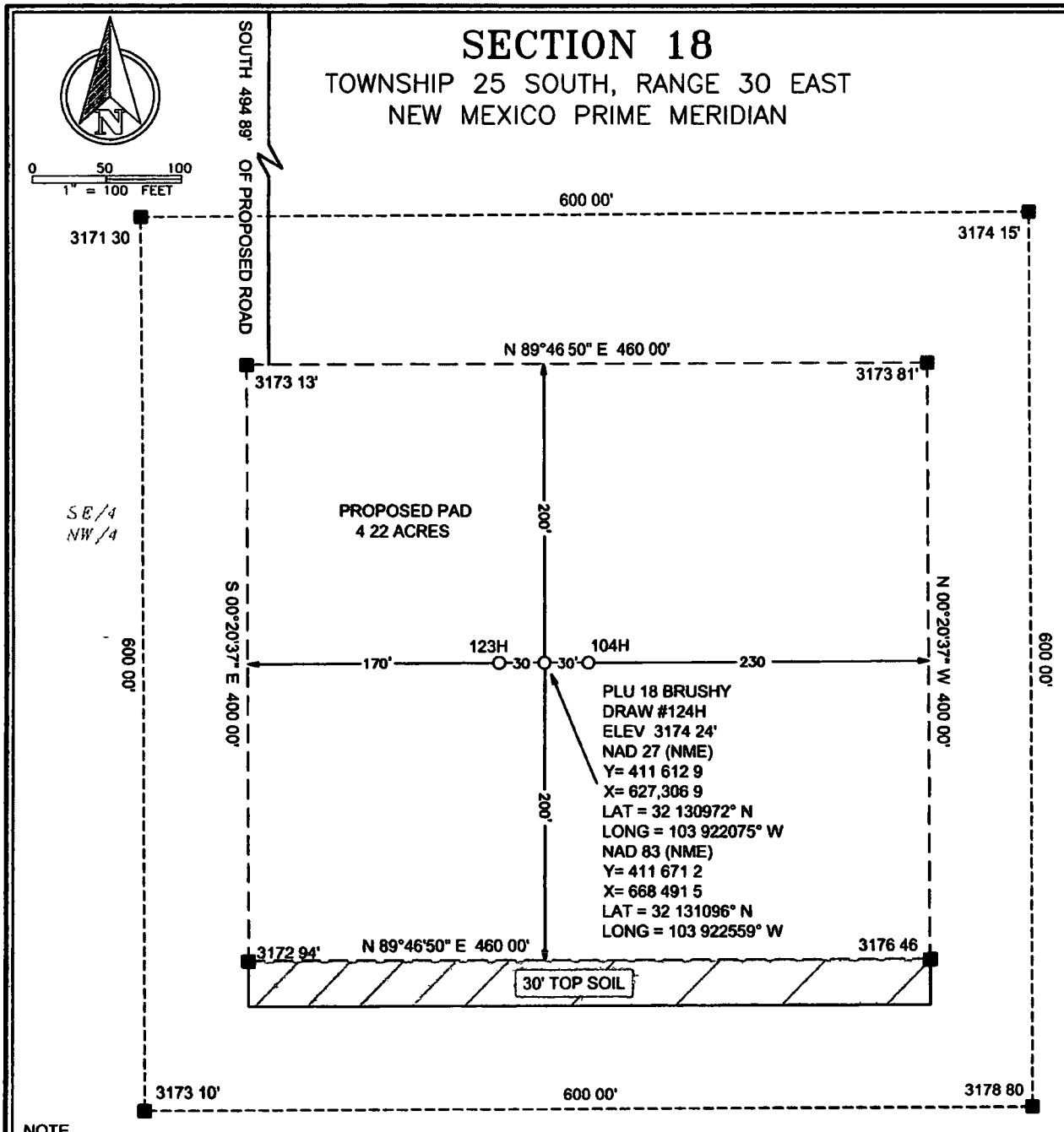
SECTION 18

TOWNSHIP 25 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN



NOTE

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

DIRECTIONS TO THIS LOCATION

FROM THE INTERSECTION OF HWY 285 AND LONGHORN RD GO NORTHEAST ON LONGHORN ROAD (PAVED) ROAD BEND SOUTHEAST AND BACK TO NORTHEAST APPROX 4 3 MILES TURN LEFT AND GO NORTHEAST ON PIPELINE ROAD #1 (GRAVEL) APPROX 7 0 MILES THEN TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 1 MILE TURN LEFT ON LEASE ROAD (GRAVEL) FOR APPROX 0 5 MILES AND ARRIVE AT PROPOSED ROAD AND LOCATION IS TO THE SOUTHWEST

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BOPCO, L.P.

WELL SITE PLAN

PLU 18 BRUSHY DRAW #124H LOCATED 2 310 FEET FROM THE NORTH LINE AND 2 120 FEET FROM THE WEST LINE OF SECTION 18 TOWNSHIP 25 SOUTH RANGE 30 EAST N M P M EDDY COUNTY, NEW MEXICO

DATE.	10-30-2017	PROJECT NO	2017050637
DRAWN BY	JAR/AI	SCALE	1 = 100
CHECKED BY	DH	SHEET	1 OF 1
FIELD CREW	NGM,JLD	REVISION	1

AFMSS

U.S Department of the Interior
BUREAU OF LAND MANAGEMENT

PWD Data Report
04/20/2018

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

Lined pit bond amount

Additional bond information attachment

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location

PWD 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 mineral owner

Injection well type

Injection well number | **Injection well name**

Assigned injection well API number? | **Injection well API number**

Injection well new surface disturbance (acres)

Minerals protection information

Mineral protection attachment

Underground Injection Control (UIC) Permit?

UIC Permit attachment

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location

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

Surface discharge PWD discharge volume (bbl/day)

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment

Surface Discharge site facilities information

Surface discharge site facilities map

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location

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

Other PWD discharge volume (bbl/day)

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

04/20/2018

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