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Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMLC0029339A

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.
GISSLER A 12N-11O
1H 327122

2. Name of Operator
BURNETT OIL COMPANY INCORPORATED

9. API Well No.
30-015-46683

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory
Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9 Fort	(817)583-8730	CEDAR LAKE / GLORIETA YESO

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface LOT O / 590 FSL / 2140 FEL / LAT 32.843358 / LONG -103.92376

At proposed prod. zone LOT O / 660 FSL / 2540 FEL / LAT 32.843558 / LONG -103.942253

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 12 / T17S / R30E / NMP

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
27 miles	EDDY	NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
590 feet	560	160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
504 feet	6177 feet / 11701 feet	FED: NMB000197

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3773 feet	12/01/2019	14 days

24. Attachments

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

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

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Leslie Garvis / Ph: (817)583-8730	07/17/2019

Title
Regulatory Coordinator

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	01/29/2020

Title	Office
Assistant Field Manager Lands & Minerals	CARLSBAD

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

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVED WITH CONDITIONS

Approval Date: 01/29/2020

KS 2-10-20

(Continued on page 2)

*(Instructions on page 2)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Burnett Oil Company**
LEASE NO.:	**NMLC0029339A**
WELL NAME & NO.:	**GISSLER A 12N-11O 1H**
SURFACE HOLE FOOTAGE:	**590'/N & 2140'/E**
BOTTOM HOLE FOOTAGE	**660'/S & 2540'/E**
LOCATION:	**Section 12, T.17 S., R.30 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

COA

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

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Grayburg/San Andres/Queen** formations. 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.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **510** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

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

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

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

3. The minimum required fill of cement behind the **7 X 5 ½** inch production casing is:

   Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

   a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

   b. Second stage above DV tool:

      - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** 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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

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

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

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

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

A. CASING

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

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

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

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

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

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

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

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

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

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

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

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

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

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

lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

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

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

JJP01262020

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Burnett Oil Co Inc.
LEASE NO.:	Lease Number NMLC0293339A
LOCATION:	Gissler A 12N-110 1H
COUNTY:	Eddy

Well:

Well Pad 1
Gissler A 12N-110 1H
Surface Hole Location: 590' FSL & 2140' FEL, Section 12, T. 17 S., R. 30 E.
Bottom Hole Location: 660' FSL & 2540' FEL, Section 11, T. 17 S, R 30 E.

TABLE OF CONTENTS

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

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 resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The 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 the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The 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 the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

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

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

This authorization is subject to your Certificate of Participation and/or Certificate of Inclusion under the New Mexico Candidate Conservation Agreement. Because it involves surface disturbing activities covered under your Certificate, your Habitat Conservation Fund Account with the Center of Excellence for Hazardous Materials Management (CEHMM) will be debited according to Exhibit B Part 2 of the Certificate of Participation.

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.

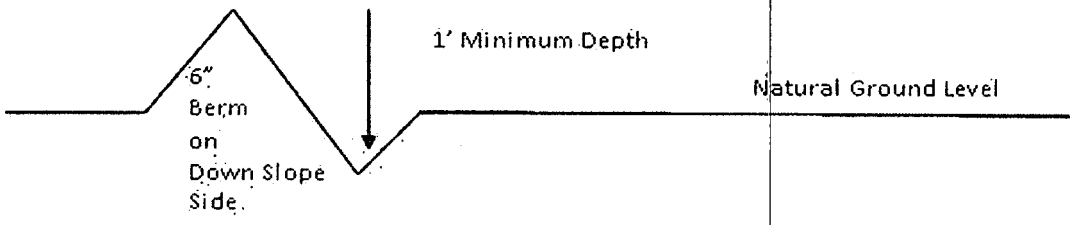
Ditching
Ditching shall be required on both sides of the road.

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

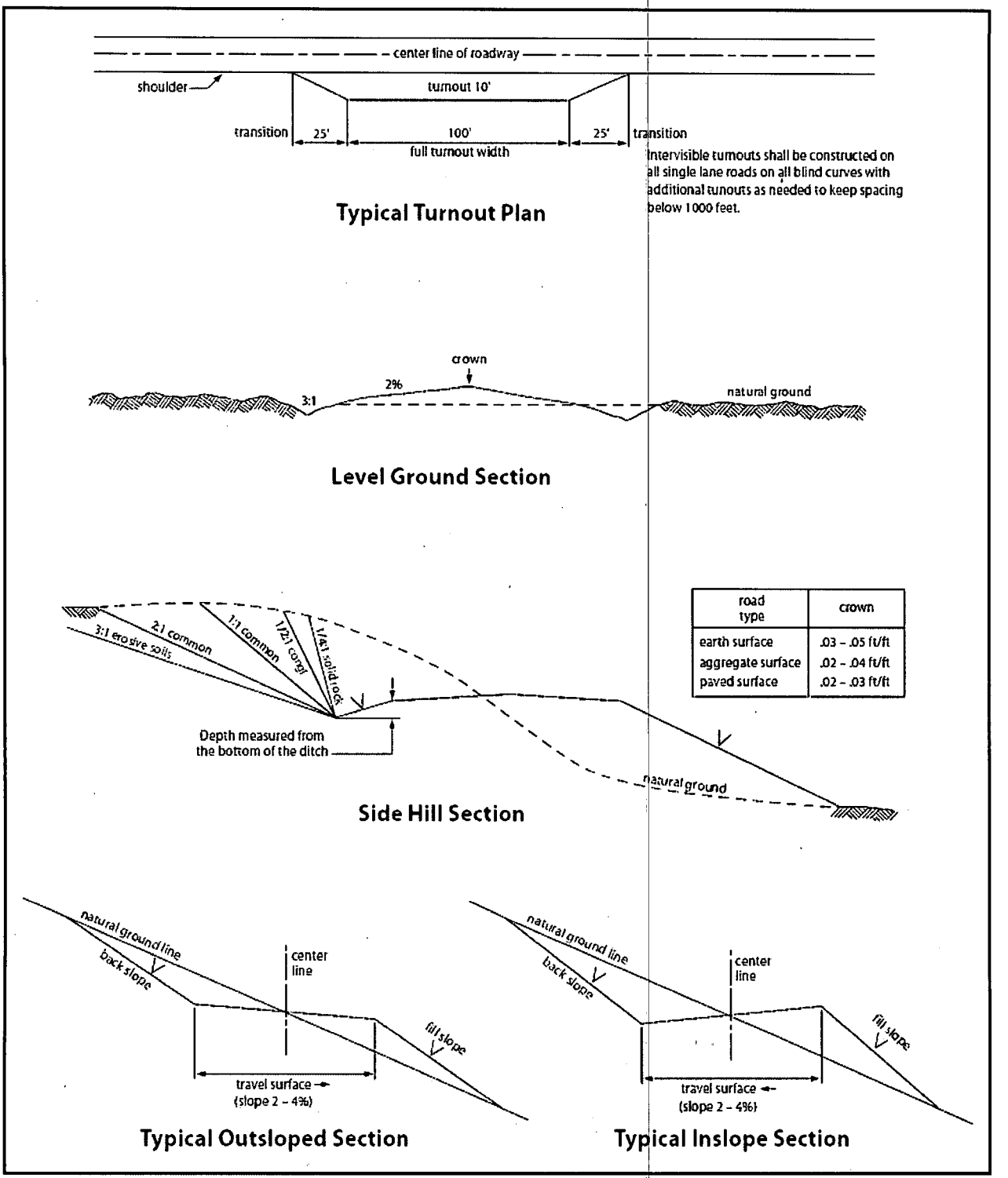


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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. SURFACE PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

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 30 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 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The 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 resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The 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 the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 16 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

16. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

17. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The 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 the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

18. 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.

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

20. Special Stipulations:

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

VIII. INTERIM RECLAMATION

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

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

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

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

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

IX. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

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

Seed Mixture 2, for Sandy Sites

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

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

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

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

*Pounds of pure live seed:

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

AFMSS

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

Operator Certification Data Report

01/31/2020

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

NAME: Leslie Garvis **Signed on:** 07/17/2019

Title: Regulatory Coordinator

Street Address: Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9

City: Fort Worth **State:** TX **Zip:** 76102

Phone: (817)583-8730

Email address: lgarvis@burnettoil.com

Field Representative

Representative Name:

Street Address:

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

Phone: (432)553-4699

Email address: tdeans@burnettoil.com

APD ID: 10400042895 **Submission Date:** 07/17/2019

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

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

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400042895 **Tie to previous NOS?** Y **Submission Date:** 07/17/2019

BLM Office: CARLSBAD **User:** Leslie Garvis **Title:** Regulatory Coordinator

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

Lease number: NMLC0029339A **Lease Acres:** 560

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

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO **APD Operator:** BURNETT OIL COMPANY INCORPORATED

Operator letter of designation:

Operator Info

Operator Organization Name: BURNETT OIL COMPANY INCORPORATED

Operator Address: Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9 **Zip:** 76102

Operator PO Box:

Operator City: Fort Worth **State:** TX

Operator Phone: (817)583-8730

Operator Internet Address:

Section 2 - Well Information

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

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

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

Well Name: GISSLER A 12N-11O **Well Number:** 1H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** CEDAR LAKE **Pool Name:** GLORIETA YESO

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

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

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

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

Type of Well Pad: SINGLE WELL **Multiple Well Pad Name:** **Number:**

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

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 27 Miles **Distance to nearest well:** 504 FT **Distance to lease line:** 590 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: C_102_20190716160739.pdf

2019.07.16_Lease_Map__2__20190716162632.pdf

Well work start Date: 12/01/2019 **Duration:** 14 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: **Reference Datum:**

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	590	FSL	2140	FEL	17S	30E	12	O	32.843358	-103.92376	EDDY	NEW MEXI	NEW MEXI	F	NMLC0029339	3773	0	0	
KOP Leg #1	590	FSL	2140	FEL	17S	30E	12	O	32.843358	-103.92376	EDDY	NEW MEXI	NEW MEXI	F	NMLC0029339	3773	0	0	

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-1	660	FSL	1320	FEL	17S	30E	11	O	32.843558	-103.938281	EDDY	NEW MEXI	NEW MEXI	F	NMNM 002746	-2404	11701	6177	
PPP Leg #1-2	648	FSL	2640	FWL	17S	30E	12	N	32.843519	-103.925389	EDDY	NEW MEXI	NEW MEXI	F	NMLC0 029338	-2404	11701	6177	
EXIT Leg #1	660	FSL	2540	FEL	17S	30E	11	O	32.843558	-103.942253	EDDY	NEW MEXI	NEW MEXI	F	NMNM 002746	-2404	11701	6177	
BHL Leg #1	660	FSL	2540	FEL	17S	30E	11	O	32.843558	-103.942253	EDDY	NEW MEXI	NEW MEXI	F	NMNM 002746	-2404	11701	6177	

APD ID: 10400042895 **Submission Date:** 07/17/2019

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

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

Highlighted data reflects the most recent changes

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Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
494813	RUSTLER	3446	335	335	ANHYDRITE, SHALE	NONE	N
494814	SALADO	2897	549	549	SALT	NONE	N
494821	BASE OF SALT	2128	1318	1318	ANHYDRITE	NONE	N
494822	YATES	1940	1506	1506	ANHYDRITE, SHALE	NONE	N
494824	SEVEN RIVERS	1668	1778	1778	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	Y
494825	QUEEN	1059	2387	2387	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	Y
494826	GRAYBURG	655	2791	2791	DOLOMITE	NATURAL GAS, OIL	Y
494827	SAN ANDRES	342	3104	3104	DOLOMITE	NATURAL GAS, OIL	Y
494828	GLORIETA	-1140	4586	4586	SANDSTONE, SHALE	NATURAL GAS, OIL	Y
494829	YESO	-1218	4664	4664		NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M **Rating Depth:** 8000

Equipment: The blowout prevention equipment (BOPE) shown in the attached diagram will consist of a 3000 PSI Hydril Unit (annular) with hydraulic closing equipment. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 3000 PSI WP rating.

Requesting Variance? NO

Variance request:

Testing Procedure: The equipment will comply with Onshore Order #2. BOPE will be tested to 3,000 psi and the Annular tested to 1,500 psi and maintained for at least ten (10) minutes. The 13 3/8" x 13 5/8" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing.

Choke Diagram Attachment:

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

BOP_Diagram_20191120104600.pdf

BOP Diagram Attachment:

BOP_Diagram_20191120104618.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	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCTOR	24	20.0	NEW	API	N	0	90	0	90			90	OTHER	0	OTHER - null						
2	SURFACE	17.5	13.75	NEW	API	N	0	544	0	544			544	J-55	48	ST&C	1.125	1	DRY	1.8	DRY	1.8
3	INTERMEDIATE	12.25	9.875	NEW	API	N	0	2000	0	2000			2000	J-55	36	ST&C	1.125	1	DRY	1.8	DRY	1.8
4	PRODUCTION	8.5	7.0	NEW	API	N	0	4800	0	4800			4800	L-80	26	LT&C	1.125	1	DRY	1.85	DRY	1.8
5	PRODUCTION	8.5	5.5	NEW	API	N	4800	11594	4800	6177			6794	L-80	17	LT&C	1.125	1	DRY	1.8	DRY	1.8

Casing Attachments

Casing ID: 1 **String Type:** CONDUCTOR

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

Casing Attachments

Casing ID: 2 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Safety_Factors_20190715132909.pdf

Casing ID: 3 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Safety_Factors_20190715132921.pdf

Casing ID: 4 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Safety_Factors_20190715132932.pdf

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

Casing Attachments

Casing ID: 5 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Safety_Factors_20190715132941.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead		0	90	0	0	0	0	0	Contractor Discrection	N/A
SURFACE	Lead		0	544	330	1.75	13.5	578	100	ExtendaCem	CZ 0.1250 lbm Poly-E-Flake
SURFACE	Tail		0	544	340	1.35	14.8	459	100	HalCem	2% Calcium Chloride – flake
INTERMEDIATE	Lead		0	2000	475	1.75	13.5	831	50	ExtendaCem	CZ 0.1250 lbm Poly-E-Flake
INTERMEDIATE	Tail		0	2000	205	1.33	14.8	272	50	HalCem	none
PRODUCTION	Lead	4700	0	4800	1135	1.48	13	1680	20	PVL + 1.3% (BWOW) PF44 Salt + 5% PF174 Expanding Cement	0.5% PF606 Fluidloss + 0.2% PF13 Retarder + 0.1%PF153 Antisettling + 0.4 pps PF45 Defoamer
PRODUCTION	Lead		4800	11594	305	1.82	12.9	555	35	35/65 PerLite/C	+ 5% (BWOW) PF44 Salt + 6% PF20 Bentonite + 0.2% PF13 Retarder + 3 pps PF42

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

String Type	Lead/Tail	Stage Tool	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
											Kol-Seal + 0.4 pps PF45 Defoamer + 0.125 pps PF29 Cellophane
PRODUCTION	Tail		4800	11594	150	1.48	13	222	35	PVL + 1.3% (BWOW) PF44 Salt + 5% PF174 Expanding Cement	0.5% PF606 Fluidloss + 0.1% PF153 Antisettling + 0.4 pps PF45 Defoamer

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: Pason equipment will be used to monitor the mud system.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	544	WATER-BASED MUD	8.4	9.5							
544	2000	OTHER : Brine Water	10	10.2							
2000	11594	OTHER : Brine Water	10	10.2							

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A 12N-11O **Well Number:** 1H

Section 6 - Test, Logging, Coring

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

No open hole logs will be run. b. A mud logger will be on the well from 200' to TD

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

MUDLOG

Coring operation description for the well:

No cores of DSTs are planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 2748 **Anticipated Surface Pressure:** 1389.06

Anticipated Bottom Hole Temperature(F): 105

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Emergency_Contact_List_20190711101559.pdf
07.11.2019_H2S_Plan_20190711101702.pdf
07.11.2019_Contingency_Plan_20190711101738.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

2019.6.3_Gissler_A_12N_11O_1H_Plan__1_20190711101814.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

GCP___Gissler_A_44_20190715135816.pdf
GISSLER_A_12N_11O_1H_FLOW_LINE_20190717162900.pdf
2019.12.9_JA_13_G_12J_1H_Drlg_Plan_R1_20191212154835.pdf

Other Variance attachment:

BURNETT OIL CO., INC.

HYDROGEN SULFIDE (H2S) PLAN & TRAINING

This plan was developed in accordance with 43 CFR 3162.3-1, section III.C, Onshore Oil and Gas Operations Order No. 6.

Based on our area testing H2S at 100 PPM has a radius of 139' and does not get off our well sites. There are no schools, residences, churches, parks, public buildings, recreation area or public within 2+ miles of our area.

A. Training

1. Training of Personnel

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in accordance with 43 CFR 3162.3-1, section III.C.3.a. Training will be given in the following areas prior to commencing drilling operations on each well:

a. The hazards and characteristics of Hydrogen Sulfide (H2S).

b. The proper use and maintenance of personal protective equipment and life support systems.

c. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and the prevailing wind.

d. The proper techniques for first aid and rescue procedures.

e. **ATTACHED HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN DRILLING EXHIBIT L.**

f. **ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBIT M.**

2. Training of Supervisory Personnel

In addition to the training above, supervisory personnel will also be trained in the following areas:

a. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in special maintenance requirements.

b. Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures.

c. The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan (if applicable.)

3. Initial and Ongoing Training

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan (if applicable). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

B. H2S Drilling Operations Plan

1. Well Control Equipment
   a. Flare line(s) and means of ignition
   b. Remote control choke
   c. Flare gun/flares
   d. Mud-gas separator

2. Protective equipment for essential personnel:

a. Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area (to be determined.)

b. Means of communication when using protective breathing apparatus.

3. H2S detection and monitoring equipment:

a. Three (3) portable H2S monitors positioned on location for best coverage and response. These units have warning lights at 10 PPM and warning lights and audible sirens when H2S levels of 15 PPM is reached. A digital display inside the doghouse shows current H2S levels at all three (3) locations.

b. An H2S Safety compliance set up is on location during all operations.

c. We will monitor and start fans at 1- ppm or less, an increase over 10 ppm results in the shutdown and installation of the mud/gas separator.

d. Portable H2S and SO2 monitor(s).

4. Visual warning systems:

a. Wind direction indicators will be positioned for maximum visibility.

b. Caution/Danger signs will be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

5. Mud program:

a. The mud program has been designed to minimize the volume of H2S circulated to the surface Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

a. All drill strings, casings, tubing, wellheads, Hydril BOPS, drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service.

b. All elastomers used for packing and seals shall be H2S trim.

7. **Communication**:

   a. Cellular Telephone and/or 2-way radio will be provided at well site.

   b. Landline telephone is located in our field office.

BURNETT OIL CO., INC.

EXHIBIT L - HYDROGEN SULFIDE (H2S) CONTIGENCY PLAN

A. Emergency Procedures

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

1. Isolate the area and prevent entry by other persons into the 100 PPM ROE. Assumed 100PPM ROE = 3000'.
2. Evacuate any public places encompassed by 100 PPM ROE.
3. Be equipped with H2S monitors and air packs in order to control release.
4. Use the "buddy system" to ensure no injuries occur during the response.
5. Take precautions to avoid personal injury during this operation.
6. Have received training in the following:
   a. H2S detection
   b. Measures for protection against this gas
   c. Equipment used for protection and emergency response.

B. Ignition of Gas Source

Should control of the well be considered lost and ignition considered, care will be taken to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition will be coordinated with the NMOCD and local officials. Additionally, the New Mexico State Police may become involved. NM State Police shall be the incident command on scene of any major release. Care will be taken to protect downwind whenever there is an ignition of gas.

C. Characteristics of H2S and SO2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO2	2.21 Air = 1	2 ppm	NA	1000 ppm

D. Contacting Authorities

Burnett Oil Co., Inc. personal will liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD will be notified of the release as soon as possible but no later than four (4) hours after the incident. Agencies will ask for information such as type and volume of release, wind and direction, location of release, etc. Be sure all is written down and ready to give to contact list attached. Burnett's response must be in coordination with the State of New Mexico's Hazardous Materials Emergency Response Plan.

Directions to the site are as follows:

Burnett Office
87 Square Lake Road (CR #220)
Loco Hills, NM 88255

Loco Hills, New Mexico (2 miles East of Loco Hills on US Hwy 82 to C #220. Then North on CR #220 approximately one (1) mile to office.

COMPANY: Burnett Oil Co.
WELL: Gissler A 12N-11O 1H
COUNTY: Eddy County, NM
DATUM: NAD 1927 (NADCON CONUS)
RIG:
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.73°

STRYKER DIRECTIONAL
OFFICE: 936.582.7296

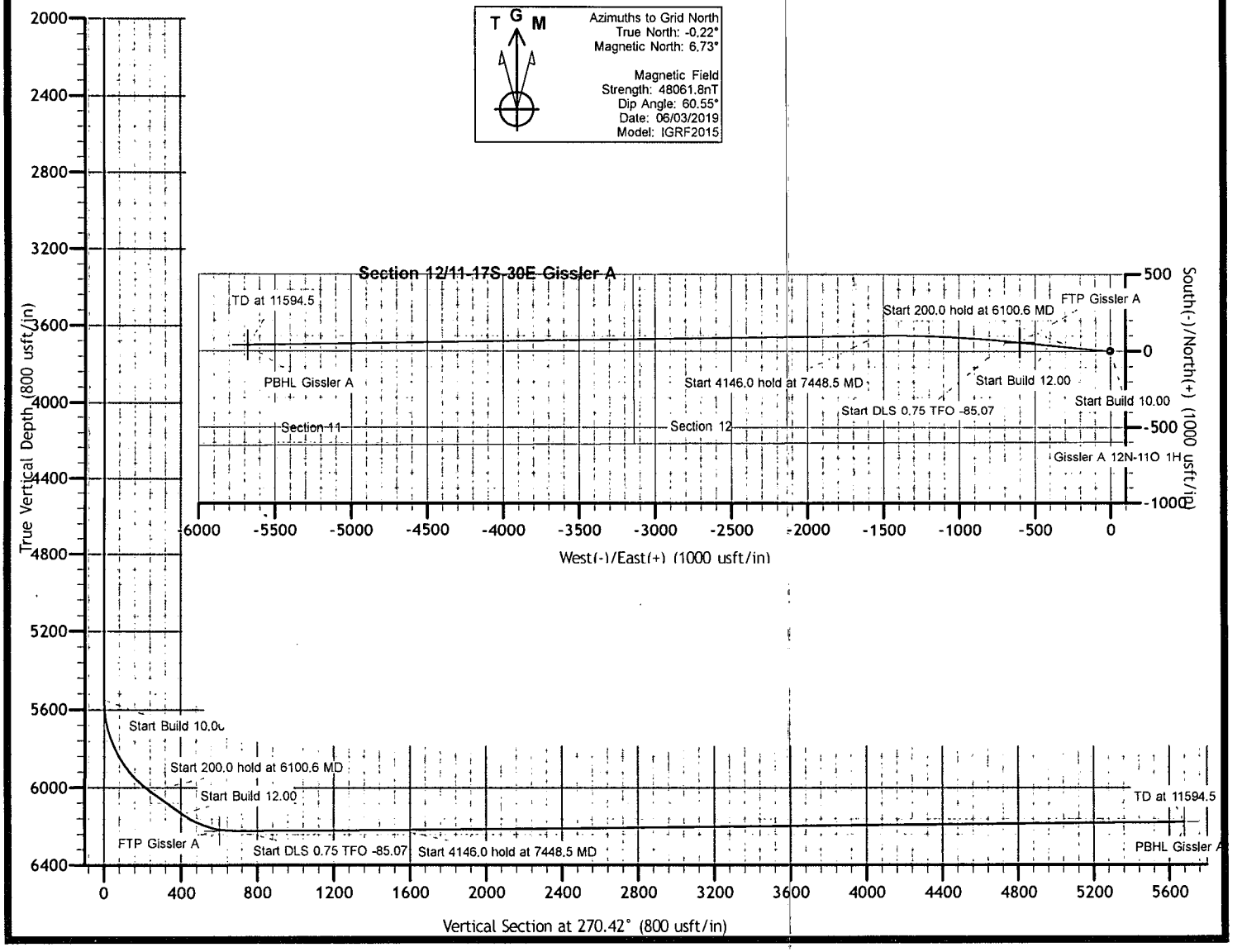
GEODETIC ZONE: New Mexico East 3001
3780+19 @ 3799.0usft
GROUND ELEVATION: 3780.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	670736.70	625945.67	32° 50' 35.766 N	103° 55' 23.715 W	

PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5550.6	0.00	0.00	5550.6	0.0	0.0	0.00	0.00	0.0	
3	6100.6	55.00	275.57	6019.9	23.7	-243.2	10.00	275.57	243.3	
4	6300.6	55.00	275.57	6134.7	39.6	-406.2	0.00	0.00	406.5	
5	6592.3	90.00	275.57	6221.0	66.2	-678.8	12.00	0.00	679.3	
6	7448.5	90.55	269.17	6216.9	101.6	-1533.8	0.75	-85.07	1534.5	
7	11594.5	90.55	269.17	6177.0	41.7	-5679.2	0.00	0.00	5679.4	PBHL Gissler A

SHL: 600' FSL; 2,140' FEL
Section 12O-17S-30E
PBHL: 660' FSL; 2,540' FEL
Section 11O-17S-30E



BURNETT OIL CO., INC.

Burnett Oil Co.

Eddy County, NM
Section 12/11-17S-30E Gissler A
Gissler A 12N-11O 1H

Original Hole

Plan: Plan #1

Standard Planning Report

03 June, 2019

STRYKER DIRECTIONAL

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #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 Section 12/11-17S-30E Gissler A

Site Position:		**Northing:**	670,736.70 usft	**Latitude:**	32° 50' 35.766 N
From:	Map	**Easting:**	625,945.67 usft	**Longitude:**	103° 55' 23.715 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.22 °

Well Gissler A 12N-11O 1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	670,736.70 usft	**Latitude:**	32° 50' 35.766 N
	+E/-W	0.0 usft	**Easting:**	625,945.67 usft	**Longitude:**	103° 55' 23.715 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	19.0 usft	**Ground Level:**	3,780.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	06/03/19	6.95	60.55	48,061.84880510

Design Plan #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	270.42

Plan Survey Tool Program **Date** 06/03/19

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	11,594.5	Plan #1 (Original Hole)	MWD	
				OWSG MWD - Standard	

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	
5,550.6	0.00	0.00	5,550.6	0.0	0.0	0.00	0.00	0.00	0.00	
6,100.6	55.00	275.57	6,019.9	23.7	-243.2	10.00	10.00	0.00	275.57	
6,300.6	55.00	275.57	6,134.7	39.6	-406.2	0.00	0.00	0.00	0.00	
6,592.3	90.00	275.57	6,221.0	66.2	-678.8	12.00	12.00	0.00	0.00	
7,448.5	90.55	269.17	6,216.9	101.6	-1,533.8	0.75	0.06	-0.75	-85.07	
11,594.5	90.55	269.17	6,177.0	41.6	-5,679.2	0.00	0.00	0.00	0.00	PBHL Gissler A

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	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
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
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
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

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	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
5,550.6	0.00	0.00	5,550.6	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	4.94	275.57	5,599.9	0.2	-2.1	2.1	10.00	10.00	0.00
5,700.0	14.94	275.57	5,698.3	1.9	-19.3	19.3	10.00	10.00	0.00
5,800.0	24.94	275.57	5,792.2	5.2	-53.2	53.2	10.00	10.00	0.00
5,900.0	34.94	275.57	5,878.7	10.0	-102.8	102.9	10.00	10.00	0.00
6,000.0	44.94	275.57	5,955.3	16.2	-166.6	166.7	10.00	10.00	0.00
6,100.0	54.94	275.57	6,019.6	23.7	-242.7	242.8	10.00	10.00	0.00
6,100.6	55.00	275.57	6,019.9	23.7	-243.2	243.3	10.00	10.00	0.00
6,200.0	55.00	275.57	6,077.0	31.6	-324.2	324.4	0.00	0.00	0.00
6,300.0	55.00	275.57	6,134.3	39.6	-405.7	406.0	0.00	0.00	0.00
6,300.6	55.00	275.57	6,134.7	39.6	-406.2	406.5	0.00	0.00	0.00
6,400.0	66.93	275.57	6,182.8	48.0	-492.6	492.9	12.00	12.00	0.00
6,500.0	78.93	275.57	6,212.1	57.3	-587.5	587.9	12.00	12.00	0.00
6,512.6	80.44	275.57	6,214.4	58.5	-599.9	600.3	12.00	12.00	0.00
FTP Gissler A									
6,592.3	90.00	275.57	6,221.0	66.2	-678.8	679.3	12.00	12.00	0.00
6,600.0	90.00	275.51	6,221.0	66.9	-686.5	687.0	0.75	0.06	-0.75
6,700.0	90.07	274.76	6,220.9	75.9	-786.1	786.6	0.75	0.06	-0.75
6,800.0	90.13	274.02	6,220.8	83.6	-885.8	886.4	0.75	0.06	-0.75
6,900.0	90.20	273.27	6,220.5	89.9	-985.6	986.2	0.75	0.06	-0.75
7,000.0	90.26	272.52	6,220.1	95.0	-1,085.5	1,086.1	0.75	0.06	-0.75
7,100.0	90.33	271.78	6,219.6	98.7	-1,185.4	1,186.1	0.75	0.06	-0.75
7,200.0	90.39	271.03	6,218.9	101.2	-1,285.4	1,286.1	0.75	0.06	-0.75
7,300.0	90.46	270.28	6,218.2	102.3	-1,385.3	1,386.1	0.75	0.06	-0.75
7,400.0	90.52	269.53	6,217.3	102.1	-1,485.3	1,486.1	0.75	0.06	-0.75
7,448.5	90.55	269.17	6,216.9	101.6	-1,533.8	1,534.5	0.75	0.06	-0.75
7,500.0	90.55	269.17	6,216.4	100.8	-1,585.3	1,586.0	0.00	0.00	0.00
7,600.0	90.55	269.17	6,215.4	99.4	-1,685.3	1,686.0	0.00	0.00	0.00
7,700.0	90.55	269.17	6,214.5	98.0	-1,785.3	1,786.0	0.00	0.00	0.00
7,800.0	90.55	269.17	6,213.5	96.5	-1,885.3	1,885.9	0.00	0.00	0.00
7,900.0	90.55	269.17	6,212.5	95.1	-1,985.3	1,985.9	0.00	0.00	0.00
8,000.0	90.55	269.17	6,211.6	93.6	-2,085.3	2,085.9	0.00	0.00	0.00
8,100.0	90.55	269.17	6,210.6	92.2	-2,185.2	2,185.9	0.00	0.00	0.00
8,200.0	90.55	269.17	6,209.7	90.7	-2,285.2	2,285.8	0.00	0.00	0.00
8,300.0	90.55	269.17	6,208.7	89.3	-2,385.2	2,385.8	0.00	0.00	0.00
8,400.0	90.55	269.17	6,207.7	87.8	-2,485.2	2,485.8	0.00	0.00	0.00
8,500.0	90.55	269.17	6,206.8	86.4	-2,585.2	2,585.7	0.00	0.00	0.00
8,600.0	90.55	269.17	6,205.8	84.9	-2,685.2	2,685.7	0.00	0.00	0.00
8,700.0	90.55	269.17	6,204.8	83.5	-2,785.1	2,785.7	0.00	0.00	0.00
8,800.0	90.55	269.17	6,203.9	82.1	-2,885.1	2,885.7	0.00	0.00	0.00
8,900.0	90.55	269.17	6,202.9	80.6	-2,985.1	2,985.6	0.00	0.00	0.00
9,000.0	90.55	269.17	6,202.0	79.2	-3,085.1	3,085.6	0.00	0.00	0.00
9,100.0	90.55	269.17	6,201.0	77.7	-3,185.1	3,185.6	0.00	0.00	0.00
9,200.0	90.55	269.17	6,200.0	76.3	-3,285.1	3,285.5	0.00	0.00	0.00
9,300.0	90.55	269.17	6,199.1	74.8	-3,385.1	3,385.5	0.00	0.00	0.00
9,400.0	90.55	269.17	6,198.1	73.4	-3,485.0	3,485.5	0.00	0.00	0.00
9,500.0	90.55	269.17	6,197.1	71.9	-3,585.0	3,585.5	0.00	0.00	0.00
9,600.0	90.55	269.17	6,196.2	70.5	-3,685.0	3,685.4	0.00	0.00	0.00
9,700.0	90.55	269.17	6,195.2	69.0	-3,785.0	3,785.4	0.00	0.00	0.00
9,800.0	90.55	269.17	6,194.3	67.6	-3,885.0	3,885.4	0.00	0.00	0.00
9,900.0	90.55	269.17	6,193.3	66.1	-3,985.0	3,985.3	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,000.0	90.55	269.17	6,192.3	64.7	-4,085.0	4,085.3	0.00	0.00	0.00
10,100.0	90.55	269.17	6,191.4	63.3	-4,184.9	4,185.3	0.00	0.00	0.00
10,200.0	90.55	269.17	6,190.4	61.8	-4,284.9	4,285.3	0.00	0.00	0.00
10,300.0	90.55	269.17	6,189.5	60.4	-4,384.9	4,385.2	0.00	0.00	0.00
10,400.0	90.55	269.17	6,188.5	58.9	-4,484.9	4,485.2	0.00	0.00	0.00
10,500.0	90.55	269.17	6,187.5	57.5	-4,584.9	4,585.2	0.00	0.00	0.00
10,600.0	90.55	269.17	6,186.6	56.0	-4,684.9	4,685.1	0.00	0.00	0.00
10,700.0	90.55	269.17	6,185.6	54.6	-4,784.8	4,785.1	0.00	0.00	0.00
10,800.0	90.55	269.17	6,184.6	53.1	-4,884.8	4,885.1	0.00	0.00	0.00
10,900.0	90.55	269.17	6,183.7	51.7	-4,984.8	4,985.1	0.00	0.00	0.00
11,000.0	90.55	269.17	6,182.7	50.2	-5,084.8	5,085.0	0.00	0.00	0.00
11,100.0	90.55	269.17	6,181.8	48.8	-5,184.8	5,185.0	0.00	0.00	0.00
11,200.0	90.55	269.17	6,180.8	47.4	-5,284.8	5,285.0	0.00	0.00	0.00
11,300.0	90.55	269.17	6,179.8	45.9	-5,384.8	5,384.9	0.00	0.00	0.00
11,400.0	90.55	269.17	6,178.9	44.5	-5,484.7	5,484.9	0.00	0.00	0.00
11,500.0	90.55	269.17	6,177.9	43.0	-5,584.7	5,584.9	0.00	0.00	0.00
11,594.5	90.55	269.17	6,177.0	41.6	-5,679.2	5,679.4	0.00	0.00	0.00
PBHL Gissler A									

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
PBHL Gissler A - plan hits target center - Point	0.00	0.00	6,177.0	41.6	-5,679.2	670,778.35	620,266.42	32° 50' 36.392 N	103° 56' 30.282 W
FTP Gissler A - plan misses target center by 6.7usft at 6512.6usft MD (6214.4 TVD, 58.5 N, -599.9 E) - Point	0.00	0.00	6,221.0	58.4	-599.3	670,795.14	625,346.39	32° 50' 36.368 N	103° 55' 30.737 W

BURNETT OIL CO., INC.

Burnett Oil Co.

Eddy County, NM
Section 12/11-17S-30E Gissler A
Gissler A 12N-11O 1H

Original Hole

Plan: Plan #1

Standard Planning Report - Geographic

03 June, 2019

STRYKER DIRECTIONAL

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #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 Section 12/11-17S-30E Gissler A

Site Position:		**Northing:**	670,736.70 usft	**Latitude:**	32° 50' 35.766 N
From:	Map	**Easting:**	625,945.67 usft	**Longitude:**	103° 55' 23.715 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.22 °

Well Gissler A 12N-11O 1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	670,736.70 usft	**Latitude:**	32° 50' 35.766 N
	+E/-W	0.0 usft	**Easting:**	625,945.67 usft	**Longitude:**	103° 55' 23.715 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	19.0 usft	**Ground Level:**	3,780.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	06/03/19	6.95	60.55	48,061.84880510

Design Plan #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	270.42

Plan Survey Tool Program **Date** 06/03/19

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	11,594.5	Plan #1 (Original Hole)	MWD OWSG MWD - Standard	

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	
5,550.6	0.00	0.00	5,550.6	0.0	0.0	0.00	0.00	0.00	0.00	
6,100.6	55.00	275.57	6,019.9	23.7	-243.2	10.00	10.00	0.00	275.57	
6,300.6	55.00	275.57	6,134.7	39.6	-406.2	0.00	0.00	0.00	0.00	
6,592.3	90.00	275.57	6,221.0	66.2	-678.8	12.00	12.00	0.00	0.00	
7,448.5	90.55	269.17	6,216.9	101.6	-1,533.8	0.75	0.06	-0.75	-85.07	
11,594.5	90.55	269.17	6,177.0	41.6	-5,679.2	0.00	0.00	0.00	0.00	PBHL Gissler A

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
100.0	0.00	0.00	100.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
200.0	0.00	0.00	200.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
300.0	0.00	0.00	300.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
400.0	0.00	0.00	400.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
500.0	0.00	0.00	500.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
600.0	0.00	0.00	600.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
700.0	0.00	0.00	700.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
800.0	0.00	0.00	800.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
900.0	0.00	0.00	900.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,500.0	0.00	0.00	5,500.0	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,550.6	0.00	0.00	5,550.6	0.0	0.0	670,736.70	625,945.67	32° 50' 35.766 N	103° 55' 23.715 W
5,600.0	4.94	275.57	5,599.9	0.2	-2.1	670,736.91	625,943.56	32° 50' 35.769 N	103° 55' 23.740 W
5,700.0	14.94	275.57	5,698.3	1.9	-19.3	670,738.58	625,926.40	32° 50' 35.786 N	103° 55' 23.941 W
5,800.0	24.94	275.57	5,792.2	5.2	-53.2	670,741.89	625,892.50	32° 50' 35.820 N	103° 55' 24.338 W
5,900.0	34.94	275.57	5,878.7	10.0	-102.8	670,746.73	625,842.89	32° 50' 35.870 N	103° 55' 24.919 W
6,000.0	44.94	275.57	5,955.3	16.2	-166.6	670,752.95	625,779.07	32° 50' 35.934 N	103° 55' 25.667 W
6,100.0	54.94	275.57	6,019.6	23.7	-242.7	670,760.37	625,702.99	32° 50' 36.010 N	103° 55' 26.558 W
6,100.6	55.00	275.57	6,019.9	23.7	-243.2	670,760.42	625,702.50	32° 50' 36.010 N	103° 55' 26.564 W
6,200.0	55.00	275.57	6,077.0	31.6	-324.2	670,768.32	625,621.47	32° 50' 36.092 N	103° 55' 27.514 W
6,300.0	55.00	275.57	6,134.3	39.6	-405.7	670,776.27	625,539.94	32° 50' 36.173 N	103° 55' 28.469 W
6,300.6	55.00	275.57	6,134.7	39.6	-406.2	670,776.32	625,539.45	32° 50' 36.174 N	103° 55' 28.475 W
6,400.0	66.93	275.57	6,182.8	48.0	-492.6	670,784.74	625,453.11	32° 50' 36.261 N	103° 55' 29.486 W
6,500.0	78.93	275.57	6,212.1	57.3	-587.5	670,794.00	625,358.14	32° 50' 36.356 N	103° 55' 30.599 W
6,512.6	80.44	275.57	6,214.4	58.5	-599.9	670,795.20	625,345.78	32° 50' 36.368 N	103° 55' 30.744 W
FTP Gissler A									
6,592.3	90.00	275.57	6,221.0	66.2	-678.8	670,802.90	625,266.88	32° 50' 36.447 N	103° 55' 31.668 W
6,600.0	90.00	275.51	6,221.0	66.9	-686.5	670,803.65	625,259.18	32° 50' 36.455 N	103° 55' 31.758 W
6,700.0	90.07	274.76	6,220.9	75.9	-786.1	670,812.60	625,159.58	32° 50' 36.548 N	103° 55' 32.926 W
6,800.0	90.13	274.02	6,220.8	83.6	-885.8	670,820.26	625,059.88	32° 50' 36.627 N	103° 55' 34.094 W
6,900.0	90.20	273.27	6,220.5	89.9	-985.6	670,826.61	624,960.08	32° 50' 36.694 N	103° 55' 35.263 W
7,000.0	90.26	272.52	6,220.1	95.0	-1,085.5	670,831.67	624,860.21	32° 50' 36.748 N	103° 55' 36.434 W
7,100.0	90.33	271.78	6,219.6	98.7	-1,185.4	670,835.42	624,760.28	32° 50' 36.788 N	103° 55' 37.605 W
7,200.0	90.39	271.03	6,218.9	101.2	-1,285.4	670,837.86	624,660.32	32° 50' 36.817 N	103° 55' 38.776 W
7,300.0	90.46	270.28	6,218.2	102.3	-1,385.3	670,839.01	624,560.33	32° 50' 36.832 N	103° 55' 39.948 W
7,400.0	90.52	269.53	6,217.3	102.1	-1,485.3	670,838.85	624,460.33	32° 50' 36.834 N	103° 55' 41.121 W
7,448.5	90.55	269.17	6,216.9	101.6	-1,533.8	670,838.30	624,411.84	32° 50' 36.830 N	103° 55' 41.689 W
7,500.0	90.55	269.17	6,216.4	100.8	-1,585.3	670,837.55	624,360.34	32° 50' 36.825 N	103° 55' 42.293 W
7,600.0	90.55	269.17	6,215.4	99.4	-1,685.3	670,836.11	624,260.36	32° 50' 36.814 N	103° 55' 43.465 W
7,700.0	90.55	269.17	6,214.5	98.0	-1,785.3	670,834.66	624,160.37	32° 50' 36.804 N	103° 55' 44.637 W
7,800.0	90.55	269.17	6,213.5	96.5	-1,885.3	670,833.22	624,060.39	32° 50' 36.793 N	103° 55' 45.809 W
7,900.0	90.55	269.17	6,212.5	95.1	-1,985.3	670,831.77	623,960.40	32° 50' 36.783 N	103° 55' 46.981 W
8,000.0	90.55	269.17	6,211.6	93.6	-2,085.3	670,830.32	623,860.42	32° 50' 36.772 N	103° 55' 48.153 W
8,100.0	90.55	269.17	6,210.6	92.2	-2,185.2	670,828.88	623,760.43	32° 50' 36.762 N	103° 55' 49.325 W
8,200.0	90.55	269.17	6,209.7	90.7	-2,285.2	670,827.43	623,660.45	32° 50' 36.751 N	103° 55' 50.497 W
8,300.0	90.55	269.17	6,208.7	89.3	-2,385.2	670,825.99	623,560.46	32° 50' 36.741 N	103° 55' 51.669 W
8,400.0	90.55	269.17	6,207.7	87.8	-2,485.2	670,824.54	623,460.48	32° 50' 36.730 N	103° 55' 52.841 W
8,500.0	90.55	269.17	6,206.8	86.4	-2,585.2	670,823.10	623,360.49	32° 50' 36.720 N	103° 55' 54.013 W
8,600.0	90.55	269.17	6,205.8	84.9	-2,685.2	670,821.65	623,260.51	32° 50' 36.709 N	103° 55' 55.185 W
8,700.0	90.55	269.17	6,204.8	83.5	-2,785.1	670,820.20	623,160.52	32° 50' 36.698 N	103° 55' 56.357 W
8,800.0	90.55	269.17	6,203.9	82.1	-2,885.1	670,818.76	623,060.54	32° 50' 36.688 N	103° 55' 57.529 W
8,900.0	90.55	269.17	6,202.9	80.6	-2,985.1	670,817.31	622,960.55	32° 50' 36.677 N	103° 55' 58.701 W
9,000.0	90.55	269.17	6,202.0	79.2	-3,085.1	670,815.87	622,860.57	32° 50' 36.667 N	103° 55' 59.873 W
9,100.0	90.55	269.17	6,201.0	77.7	-3,185.1	670,814.42	622,760.58	32° 50' 36.656 N	103° 56' 1.045 W
9,200.0	90.55	269.17	6,200.0	76.3	-3,285.1	670,812.97	622,660.60	32° 50' 36.646 N	103° 56' 2.217 W
9,300.0	90.55	269.17	6,199.1	74.8	-3,385.1	670,811.53	622,560.61	32° 50' 36.635 N	103° 56' 3.389 W
9,400.0	90.55	269.17	6,198.1	73.4	-3,485.0	670,810.08	622,460.63	32° 50' 36.625 N	103° 56' 4.561 W
9,500.0	90.55	269.17	6,197.1	71.9	-3,585.0	670,808.64	622,360.64	32° 50' 36.614 N	103° 56' 5.733 W
9,600.0	90.55	269.17	6,196.2	70.5	-3,685.0	670,807.19	622,260.66	32° 50' 36.603 N	103° 56' 6.905 W
9,700.0	90.55	269.17	6,195.2	69.0	-3,785.0	670,805.75	622,160.67	32° 50' 36.593 N	103° 56' 8.077 W
9,800.0	90.55	269.17	6,194.3	67.6	-3,885.0	670,804.30	622,060.69	32° 50' 36.582 N	103° 56' 9.249 W
9,900.0	90.55	269.17	6,193.3	66.1	-3,985.0	670,802.85	621,960.70	32° 50' 36.572 N	103° 56' 10.421 W
10,000.0	90.55	269.17	6,192.3	64.7	-4,085.0	670,801.41	621,860.72	32° 50' 36.561 N	103° 56' 11.593 W
10,100.0	90.55	269.17	6,191.4	63.3	-4,184.9	670,799.96	621,760.74	32° 50' 36.550 N	103° 56' 12.765 W

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Site Section 12/11-17S-30E Gissler A
Company:	Burnett Oil Co.	**TVD Reference:**	3780+19 @ 3799.0usft
Project:	Eddy County, NM	**MD Reference:**	3780+19 @ 3799.0usft
Site:	Section 12/11-17S-30E Gissler A	**North Reference:**	Grid
Well:	Gissler A 12N-11O 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,200.0	90.55	269.17	6,190.4	61.8	-4,284.9	670,798.52	621,660.75	32° 50' 36.540 N	103° 56' 13.937 W
10,300.0	90.55	269.17	6,189.5	60.4	-4,384.9	670,797.07	621,560.77	32° 50' 36.529 N	103° 56' 15.109 W
10,400.0	90.55	269.17	6,188.5	58.9	-4,484.9	670,795.63	621,460.78	32° 50' 36.519 N	103° 56' 16.281 W
10,500.0	90.55	269.17	6,187.5	57.5	-4,584.9	670,794.18	621,360.80	32° 50' 36.508 N	103° 56' 17.453 W
10,600.0	90.55	269.17	6,186.6	56.0	-4,684.9	670,792.73	621,260.81	32° 50' 36.497 N	103° 56' 18.625 W
10,700.0	90.55	269.17	6,185.6	54.6	-4,784.8	670,791.29	621,160.83	32° 50' 36.487 N	103° 56' 19.797 W
10,800.0	90.55	269.17	6,184.6	53.1	-4,884.8	670,789.84	621,060.84	32° 50' 36.476 N	103° 56' 20.969 W
10,900.0	90.55	269.17	6,183.7	51.7	-4,984.8	670,788.40	620,960.86	32° 50' 36.466 N	103° 56' 22.141 W
11,000.0	90.55	269.17	6,182.7	50.2	-5,084.8	670,786.95	620,860.87	32° 50' 36.455 N	103° 56' 23.314 W
11,100.0	90.55	269.17	6,181.8	48.8	-5,184.8	670,785.50	620,760.89	32° 50' 36.444 N	103° 56' 24.486 W
11,200.0	90.55	269.17	6,180.8	47.4	-5,284.8	670,784.06	620,660.90	32° 50' 36.434 N	103° 56' 25.658 W
11,300.0	90.55	269.17	6,179.8	45.9	-5,384.8	670,782.61	620,560.92	32° 50' 36.423 N	103° 56' 26.830 W
11,400.0	90.55	269.17	6,178.9	44.5	-5,484.7	670,781.17	620,460.93	32° 50' 36.412 N	103° 56' 28.002 W
11,500.0	90.55	269.17	6,177.9	43.0	-5,584.7	670,779.72	620,360.95	32° 50' 36.402 N	103° 56' 29.174 W
11,594.5	90.55	269.17	6,177.0	41.6	-5,679.2	670,778.35	620,266.42	32° 50' 36.392 N	103° 56' 30.282 W
PBHL Gissler A									

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
PBHL Gissler A - plan hits target center - Point	0.00	0.00	6,177.0	41.6	-5,679.2	670,778.35	620,266.42	32° 50' 36.392 N	103° 56' 30.282 W
FTP Gissler A - plan misses target center by 6.7usft at 6512.6usft MD (6214.4 TVD, 58.5 N, -599.9 E) - Point	0.00	0.00	6,221.0	58.4	-599.3	670,795.14	625,346.39	32° 50' 36.368 N	103° 55' 30.737 W

BURNETT OIL CO., INC.

DRILLING PLAN
Jackson A 13G 12J 1H
HORIZONTAL LOCO HILLS GLORIETA YESO WELL
CONFIDENTIAL

1. **Geological Name of Surface Formation with Estimated Depth:**

Geological Name	Estimate Top	Anticipated Fresh Water, Oil or Gas
Alluvium	Surface	There is no fresh water here
Rustler	335	
Salt	549'	
Base Salt	1318'	
Yates	1506'	
Seven Rivers	1778'	Oil
Queen	2387'	Oil
Grayburg	2791'	Oil
San Andres	3104'	Oil
Glorieta	4586'	Oil
Yeso	4664'	Oil
Total Depth	Refer to APD	

No other formations are expected to yield fresh water, oil or gas in measurable volumes. There is no groundwater in the immediate vicinity where we will be drilling. We will set 13-3/8" casing @ +/-544' in the Anhydrite above the salt and circulate cement to surface.

We will set 9-5/8" intermediate casing at +/-2,000' and circulate cement to surface. All intervals will be isolated by setting 7" x 5-1/2" casing to total depth and circulating cement from the shoe to the stage tool at +/-4,700' and from +/-4,700' to above the base of the 9-5/8" intermediate casing shoe.

2. **Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)**

(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)

a. Design Safety Factors:

Type	Hole Size	Depth Interval	OD CSG	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
Conductor	24"	0-90'	20"	Contractor	Discretion	----------	----------	----------	----------
Surface	17-1/2"	0-544'	13-3/8"	48#	ST&C	J-55	1.125	1.00	1.80
Intermediate	12-1/4"	0'-2000'	9-5/8"	36#	ST&C	J-55	1.125	1.00	1.80
Production	8-1/2"	0'-4800'	7"	26#	LT&C	L-80	1.125	1.00	1.80
	8-1/2"	4800'-11515'	5-1/2"	17#	LT&C	L-80	1.125	1.00	1.80

b. Surface Casing Info

The proposed 13-3/8" casing setting depth is +/- 544' based on cross sections which show the estimated top of the rustler and top of salt. Drilling times will be plotted to find the hard section just above the salt. A mud logger will be on location to evaluate drill and cutting samples as long as circulation is maintained. If salt is penetrated, it will be obvious by the sudden increase in water salinity and surface casing will then be set above the top of salt. Our highly experienced drilling personnel have drilled many wells in this area and are able to easily identify the hard streak on the top of the salt.

c. Intermediate casing

We will run 9-5/8" intermediate casing to +/-2,000' and circulate cement to surface to get the Salt section behind pipe.

d. Production casing

We will run 7" x 5-1/2" production casing with a DV Tool at the bottom of the 7" (4700' +/-), then a crossover from 7" to 5-1/2" (4800' –TD). The lateral will be cemented up to the stage tool and then from the stage tool up hole into the intermediate casing with top of cement reaching approximately 1,500'.

3. Cementing Program

BLM to be notified prior to all cementing and tag operations in order to observe the operation if desired.

a. 13 3/8" Surface Casing:

- Cement to surface
- 20 bbls fresh water spacer at 8.4 lbm/gal.
- Lead: 330 sx ExtendaCem – CZ 0.1250 lbm Poly-E-Flake. Fluid weight 13.5 lbm/gal, slurry yield 1.745 ft3/sx, total mixing fluid 9.18 gal/sx.
- Tail: 340 sx HalCem 2% Calcium Chloride – flake, fluid weight 14.8 lbm/gal, slurry yield 1.347 ft3/sx, total mixing fluid 6.39 gal/sx.
- Excess Cement: **100%**

If cement does not circulate to surface, BLM will be notified of same, and advised of the plan to bring the cement to surface so BLM may witness tagging and cementing. If surface pressures when circulating indicate cement is low in the annulus, temperature survey results will be reviewed with BLM representative to determine the remediation needed.

b. 9 5/8" Intermediate Casing:

- Cement to surface

- Lead: 475 sx ExtendaCem – CZ 0.1250 lbm Poly-E-Flake, Fluid weight 13.5 lbm/gal, slurry yield 1.745 ft3/sx, total mixing fluid 9.2 gal/sx.
- Tail: 205 sx HalCem fluid weight 14.8 lbm/gal, slurry yield 1.326 ft3/sx, total mixing fluid 6.34 gal/sx.
- Excess Cement: 50%

c. **7" & 5 1/2" Production Casing**:

- This casing/cementing is designed to bring cement to approximately 1,500' inside the intermediate casing.
- Lead: 1135 Sx PVL + 1.3% (BWOW) PF44 Salt + 5% PF174 Expanding Cement + 0.5% PF606 Fluidloss + 0.2% PF13 Retarder + 0.1%PF153 Antisettling + 0.4 pps PF45 Defoamer, 13.0# Yield 1.48 H2O 7.577.
- Excess Cement: 20%
- Open DV Tool and pump the following cement.
- Lead: 305 Sx 35/65 PerLite/C + 5% (BWOW) PF44 Salt + 6% PF20 Bentonite + 0.2% PF13 Retarder + 3 pps PF42 Kol-Seal + 0.4 pps PF45 Defoamer + 0.125 pps PF29 Cellophane, 12.9#, Yield 1.82 H2O 9.21.
- Tail: 150 Sx PVL + 1.3% (BWOW) PF44 Salt + 5% PF174 Expanding Cement + 0.5% PF606 Fluidloss + 0.1% PF153 Antisettling + 0.4 pps PF45 Defoamer, 13.0#, Yield 1.48 H2O 7.577.
- Excess Cement: 35%

4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) shown in the attached diagram will consist of a 3000 PSI Hydril Unit (annular) with hydraulic closing equipment. The equipment will comply with Onshore Order #2. BOPE will be tested to 3,000 psi and the Annular tested to 1,500 psi and maintained for at least ten (10) minutes. The 13 3/8" x 13 5/8" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 3000 PSI WP rating.

5. Auxiliary Well Control and Monitoring Equipment:

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

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

c. Hydrogen Sulfide detection and breathing equipment will be installed and in operation at a drilling depth of 1800' (which is more than 500' above top of Grayburg) and will remain until production casing is cemented.

d. An H2S compliance package will be on all sites while drilling.

6. Proposed Mud Circulation System (Closed Loop System)

Depth	Mud Wt	Vis	Fluid Loss	Type System
0' - 544'	8.4 - 9.5		NC	Fresh Water
544' - 2000' MD	10.0 max		NC	Brine Water
2000' – TD MD	10.0 max		NC	Brine Water

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

Pason equipment will be used to monitor the mud system.

7. Logging, Coring and Testing program:

a. No cores or DSTs are planned at this time.

b. A mud logger will be on the well from 200' to TD.

c. No open hole logs will be run.

8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in the production hole. Water flows can occur periodically at various depths in the production hole. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom hole pressure is 2719#. This is based upon the following formula of .445 x BH ft. estimate. The anticipated bottom hole temperature is 105°F. This is based upon logs of drilled wells surrounding this well.

There is known H2S in this area. In the event that it is necessary to follow the H2S plan, a remote choke will be installed as required in Onshore Order 6. Refer to the attached H2S plan for details.

9. Anticipated Start Date and Duration of Operation

Road and location construction will begin after BLM has approved the APD and has approved the start of the location work. Anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in operations and drilling is expected to take approximately 25 days. If production casing is run, an additional 90 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) in order to place the well on production.