

Form 3160-3  
(June 2015)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM2748
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator BURNETT OIL COMPANY INCORPORATED		8. Lease Name and Well No. GISSLER B 8 PM 2H
3a. Address BURNETT PLAZA - SUITE 1500, 801 CHERRY STREET	3b. Phone No. (include area code) (817) 583-8730	9. API Well No. 30-015-53418
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSW / 550 FSL / 610 FWL / LAT 32.843316 / LONG -103.983589 At proposed prod. zone SWSW / 350 FSL / 101 FWL / LAT 32.842771 / LONG -104.002442		10. Field and Pool, or Exploratory LOCO HILLS/GLORIETA YESO
11. Sec., T. R. M. or Blk. and Survey or Area SEC 9/T17S/R30E/NMP		
14. Distance in miles and direction from nearest town or post office* 3 miles	12. County or Parish EDDY	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 550 feet	16. No of acres in lease 160.0	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20 feet	19. Proposed Depth 5219 feet / 10595 feet	20. BLM/BIA Bond No. in file FED: NMB000197
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3677 feet	22. Approximate date work will start* 08/31/2022	23. Estimated duration 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.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 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). | 6. Such other site specific information and/or plans as may be requested by the BLM.            |

25. Signature (Electronic Submission)	Name (Printed/Typed) LESLIE GARVIS / Ph: (817) 583-8730	Date 06/27/2022
Title Regulatory Coordinator		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959	Date 10/04/2022
Title Assistant Field Manager Lands & Minerals Carlsbad Field Office		

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

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

(Continued on page 2)

\*(Instructions on page 2)



## INSTRUCTIONS

**GENERAL:** This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

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

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

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

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

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

**ITEM 24:** If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

**AUTHORITY:** 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

**PRINCIPAL PURPOSES:** The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

**ROUTINE USE:** Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

**EFFECT OF NOT PROVIDING INFORMATION:** Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

## Additional Operator Remarks

### Location of Well

0. SHL: SWSW / 550 FSL / 610 FWL / TWSP: 17S / RANGE: 30E / SECTION: 9 / LAT: 32.843316 / LONG: -103.983589 ( TVD: 0 feet, MD: 0 feet )

PPP: SESE / 350 FSL / 101 FEL / TWSP: 17S / RANGE: 30E / SECTION: 8 / LAT: 32.842769 / LONG: -103.985904 ( TVD: 5219 feet, MD: 10595 feet )

BHL: SWSW / 350 FSL / 101 FWL / TWSP: 17S / RANGE: 30E / SECTION: 8 / LAT: 32.842771 / LONG: -104.002442 ( TVD: 5219 feet, MD: 10595 feet )

### BLM Point of Contact

Name: TANJA BACA

Title: Land Law Examiner

Phone: (575) 234-5940

Email: tabaca@blm.gov

CONFIDENTIAL

### **Review and Appeal Rights**

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

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DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone (575) 393-8161 Fax: (575) 393-0720

DISTRICT II  
811 S. First St., Artesia, NM 88210  
Phone (575) 748-1263 Fax: (505) 748-9720

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised August 13, 2011

Submit one copy to appropriate  
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-015-53418</b>	Pool Code 96718	Pool Name Loco Hills Glorieta Yeso
Property Code <del>2389</del> <b>331833</b>	Property Name GISSLER B 8 PM	Well Number 2H
OGRID No. 03080	Operator Name BURNETT OIL COMPANY, INC.	Elevation 3677'

Surface Location

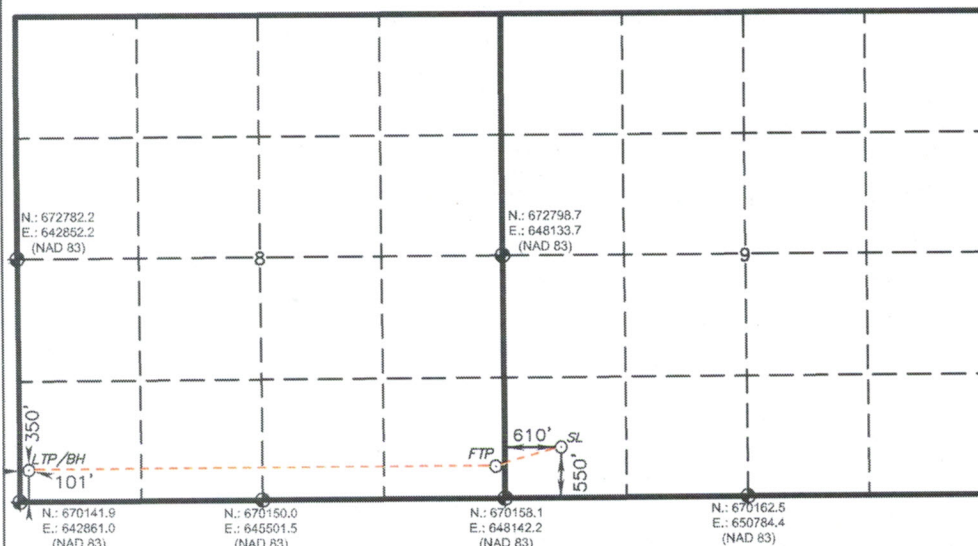
UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
M	9	17 S	30 E		550	SOUTH	610	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
M	8	17 S	30 E		350	SOUTH	101	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



BOTTOM HOLE LOCATION

Lat - N 32.842771°  
Long - W 104.002442°  
NMSPC- N 670492.2  
E 642960.8  
(NAD-83)

FIRST TAKE POINT  
350' FSL & 101' FEL

Lat - N 32.842769°  
Long - W 103.985904°  
NMSPC- N 670507.8  
E 648040.1  
(NAD-83)

SURFACE LOCATION

Lat - N 32.843316°  
Long - W 103.983589°  
NMSPC- N 670709.2  
E 648750.3  
(NAD-83)

BOTTOM HOLE LOCATION

Lat - N 32.842655°  
Long - W 104.001934°  
NMSPC- N 670428.6  
E 601781.8  
(NAD-27)

FIRST TAKE POINT  
350' FSL & 101' FEL

Lat - N 32.842653°  
Long - W 103.985395°  
NMSPC- N 670444.2  
E 606861.2  
(NAD-27)

SURFACE LOCATION

Lat - N 32.843200°  
Long - W 103.983081°  
NMSPC- N 670645.6  
E 607571.4  
(NAD-27)

OPERATOR CERTIFICATION

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

*Leslie Garvis* 6/23/22  
Signature Date

Printed Name  
Leslie Garvis

Email Address  
lgarvis@burnettoil.com

Email Address

SURVEYOR CERTIFICATION

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

*Gary L. Lueros* MAY 4, 2022  
Date Surveyed

Signature & Seal of  
Professional Surveyor  
7977

Certificate No. Gary L. Lueros 7977  
BASIN SURVEYS

Scale: 1" = 2000'

WO Num.: 35711

0' 1000' 2000' 3000' 4000'

SCALE: 1" = 2000'  
WO Num.: 35711

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

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

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Burnett Oil Co., Inc. **OGRID:** 03080 **Date:** 2 / 10 / 2023

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Gissler B 8 PM 2H	TBD	M-9-17S-30E	550 FSL 610 FWL	242	412	1,500

**IV. Central Delivery Point Name:** Gissler B 5 Tank Battery [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Gissler B 8 PM 2H	TBD	3/21/2023	3/30/2023	5/1/2023	5/20/2023	6/19/2023

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.



**Section 2 – Enhanced Plan**  
**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

**X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	<i>Walter M. Glasgow</i>
Printed Name:	WALTER GLASGOW
Title:	VP ENGINEERING
E-mail Address:	wglasgow@burnettoil.com
Date:	2.14.2023
Phone:	817-583-8871
<b>OIL CONSERVATION DIVISION</b> (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

## NATURAL GAS MANAGEMENT PLAN

### Section 1 – Attachments

Company: Burnett Oil Co. Inc Well Name: Gissler B 8 PM 2 H API#: TBD

- VI. Separation Equipment:** Description of how Operator will size separation equipment to optimize gas capture.
- A. This well will be added to an existing tank battery.
  - B. The engineered system is designed to handle 4,000 MCF/D. It will produce through the following vessels:
    - 1. 2-phase separator,
    - 2. free-water knockout,
    - 3. heater treater, and then finally a
    - 4. 2-phase gas scrubber.
  - C. Current battery throughput is ~2,822 MCF/D.
  - D. The referenced well is anticipated to produce a maximum of 412 MCF/D for a total throughput of 3,234 MCF/D.
- VII. Operational Practices:** Description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.
- A. In all circumstances, the operator shall flare rather than vent natural gas except when flaring is technically infeasible or would pose a risk to safe operations or personnel safety, and venting is a safer alternative than flaring.
  - B. During drilling operations a mud/gas separator will be on location. If needed, it will be utilized to capture natural gas for purposes of flaring. If flaring is required, a properly-sized flare stack will be at a minimum of 100' from the nearest surface hole location unless otherwise approved by the division.
  - C. Venting and flaring during completion or recompletion operations
    - 1. During completion or recompletion, gas is trapped/retained in the wellbore through use of properly weighted "kill" fluids.
    - 2. During the completion phase, the well will be routed directly into an existing battery. With this initial flowback already being connected to the existing battery, all flowback gasses will be routed, if applicable, only to flare. No venting will occur during this initial flowback period. As soon as it is feasible, the existing separation will be utilized.
  - D. Equipment redundancies within the system, along with the overall battery design, enables us to service equipment without interruption to gas flow in most scenarios. With the existing battery compression at this facility, in most cases we can avoid flaring during times of elevated transmission line pressures caused by mid-stream maintenance. Additionally, we have gas takeaway with two (2) midstream companies to try and keep gas going to sales in case one of them has a problem.



## E. Performance Standards

1. The existing facility is designed for maximum anticipated throughput and pressure to minimize waste.
2. The existing storage tanks are routed to a combustor.
3. The existing flare stack is properly sized and designed to ensure proper combustion efficiency.
4. The existing flare stack is securely anchored and located at least 100 feet from the storage tanks.
5. AVO inspections are conducted weekly.
6. NA
7. NA
8. We strive to minimize waste and shall resolve emergencies as quickly and safely as possible.

## F. Measurement or estimation of vented and flared natural gas

1. We shall measure or estimate the volume of natural gas that is vented, flared, or beneficially used during drilling, completion and production operations regardless of the reason or authorization for such venting or flaring.
2. The existing flare has a meter to measure the gas going to it.
3. The measurement equipment conforms to an industry standard such as American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.10 Measurement of Flow to Flares
4. The measuring equipment is not equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.
5. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, the operator will estimate the volume of vented or flared natural gas using a methodology that can be independently verified.
6. NA
7. The operator shall install measuring equipment whenever the division determines that metering is practicable or the existing measuring equipment or GOR test is not sufficient to measure the volume of vented and flared natural gas.

**VIII. Best Management Practices:** Operator's best management practices to minimize venting during active and planned maintenance.

- A. The existing facility is designed for maximum anticipated throughput and pressure to minimize waste.
- B. Equipment redundancies within the system, along with the overall battery design, enables us to service equipment without interruption to gas flow in most scenarios. With the existing battery compression at this facility, in most cases we can avoid flaring during times of elevated transmission line pressures caused by mid-stream maintenance.
- C. During well maintenance, gas is trapped/retained in the wellbore through use of properly weighted "kill" fluids.
- D. Additionally, we have gas takeaway with two (2) midstream companies to try and keep gas going to sales in case one of them has a problem.



**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** GISSLER B 8 PM**Well Number:** 2H

3M\_BOP\_r\_20220818124106.pdf

**BOP Diagram Attachment:**

3M\_BOP\_r\_20220818124141.pdf

**Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCTOR	24	20.0	NEW	API	N	0	90	0	90	3677	3587	90	OTHER	0	OTHER - Contractor Discretion						
2	SURFACE	17.5	13.375	NEW	API	N	0	500	0	500	3677	3177	500	J-55	48	ST&C	1.125	1	DRY	1.8	DRY	1.8
3	INTERMEDIATE	12.24	9.625	NEW	API	N	0	1200	0	1200	3677	2477	1200	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	3677	-1123	4800	L-80	26	LT&C	1.125	1	DRY	1.8	DRY	1.8
5	PRODUCTION	8.5	5.5	NEW	API	N	4800	10595	1800	5129	1877	-1452	5795	L-80	17	LT&C	1.125	1	DRY	1.8	DRY	1.8

**Casing Attachments****Casing ID:** 1      **String**      CONDUCTOR**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** GISSLER B 8 PM**Well Number:** 2H**Casing Attachments**

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**Casing ID:** 2      **String**      SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**Casing\_Assumbtion\_Worksheet\_20220623150832.pdf

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**Casing ID:** 3      **String**      INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**Casing\_Assumbtion\_Worksheet\_20220623151007.pdf

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**Casing ID:** 4      **String**      PRODUCTION**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**Casing\_Assumbtion\_Worksheet\_20220623151122.pdf

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**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** GISSLER B 8 PM**Well Number:** 2H**Casing Attachments****Casing ID:** 5      **String**      PRODUCTION**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing\_Assumbtion\_Worksheet\_20220623151329.pdf

**Section 4 - Cement**

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead		0	90	0	0	0	0		Contractor Discretion	Contractor Discretion

SURFACE	Lead		0	500	330	1.75	14.8	575.85	100	ExtendaCem	CZ 0.1250 lbm Poly-E-Flake
SURFACE	Tail		0	500	340	1.35	14.8	457.98	100	HalCem	2% Calcium Chloride – flake
INTERMEDIATE	Lead		0	1200	475	1.75	13.5	831.25	50	ExtendaCem	CZ 0.1250 lbm Poly-E-Flake
INTERMEDIATE	Tail		0	1200	205	1.33	14.8	271.83	50	HalCem	none
PRODUCTION	Lead	4000	0	4800	1135	1.48	13	1679.8	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	10595	305	1.82	12.9	555.1	35	35/65 PerLite/C	5% (BWOW) PF44 Salt + 6% PF20 Bentonite + 0.2%
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**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** GISSLER B 8 PM**Well Number:** 2H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		4800	1059 5	150	1.48	13	222	35	PVL	PF13 Retarder + 3 pps PF42 Kol-Seal + 0.4 pps PF45 Defoamer + 0.125 pps PF29 Cellophane  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	500	OTHER : Fresh Water	8.4	9.5							
500	1200	OTHER : Brine Water	10	10.2							
1200	1059 5	OTHER : Brine Water	10	10.2							

**Operator Name:** BURNETT OIL COMPANY INCORPORATED

**Well Name:** GISSLER B 8 PM

**Well Number:** 2H

## Section 6 - Test, Logging, Coring

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

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

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

MUD LOG/GEOLOGICAL LITHOLOGY LOG,

**Coring operation description for the well:**

No cores or DSTs are planned at this time.

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 2411

**Anticipated Surface Pressure:** 1262

**Anticipated Bottom Hole Temperature(F):** 105

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations**

H2S\_Plan\_20220623152745.pdf

## Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Gissler\_B\_8\_PM\_2H\_Plan\_\_1\_NAD\_83\_20220623152836.pdf

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

GISSLER\_B\_8\_PM\_2H\_35711\_20220624092902.pdf

2022.6.9\_Gissler\_B\_8\_PM\_2H\_Drlg\_Plan\_20220627094110.pdf

**Other Variance attachment:**

CONFIDENTIAL



**DRILLING PLAN  
GISSLER B 8 PM 2H  
HORIZONTAL LOCO HILLS GLORIETA YESO WELL**

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

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

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 @ +/-500' in the Anhydrite above the salt and circulate cement to surface.

We will set 9-5/8" intermediate casing at +/-1,200' 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 +/-4,000' and from +/-4,000' 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"	0-500'	13-3/8"	48#	ST&C	J-55	1.125	1.00	1.80
Intermediate	12-1/4"	0'-1200'	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'-10595'	5-1/2"	17#	LT&C	L-80	1.125	1.00	1.80



## DRILLING PLAN

### Horizontal Yeso

#### b. Surface Casing Info

The proposed 13-3/8" casing setting depth is +/- 500' 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 +/-1,200' 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 +/-4,000', then a crossover from 7" to 5-1/2" (4600' –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 ft<sup>3</sup>/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 ft<sup>3</sup>/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 ft<sup>3</sup>/sx, total mixing fluid 9.2 gal/sx.

## DRILLING PLAN

### Horizontal Yeso

- Tail: 205 sx HalCem fluid weight 14.8 lbm/gal, slurry yield 1.326 ft<sup>3</sup>/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 H<sub>2</sub>O 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 H<sub>2</sub>O 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 H<sub>2</sub>O 7.577.
- Excess Cement: 35%

#### 4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) will consist of a 3000 PSI Hydril Unit (annular) with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested to 3,000 psi and the Annular tested to 1,500 psi and maintained for a least ten (10) minutes. The 8-5/8" 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.

Occasionally, water flows are encountered from formations that have been water flooded including the Grayburg, Metex, Premier, San Andres, Vacuum, Lovington and Jackson formations. To control these water flows and to drill through salt formation(s), our anticipated maximum mud weight is 10.2 ppg. For the producing formation and at TD, the pore pressure in this area is 0.47 psi/ft based on review of drilling histories, mud weights, formation gradients etc. from surrounding wells.

Burnett is requesting to keep the Mud/Gas Separator on location but only connect if/when needed.

#### 5. Auxiliary Well Control and Monitoring Equipment:

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

## DRILLING PLAN

### Horizontal Yeso

- 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)

<u>Depth</u>	<u>Mud Wt</u>	<u>Vis</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 500'	8.4 - 9.5		NC	Fresh Water
500' - 1200' MD	10.0 max		NC	Brine Water
1200' – 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 production.

Occasionally, water flows are encountered from formations that have been water flooded including the Grayburg, Metex, Premier, San Andres, Vacuum, Lovington and Jackson formations. To control these water flows and to drill through salt formation(s), our anticipated maximum mud weight is 10.2 ppg.

For the producing formation and at TD, the pore pressure in this area is 0.47 psi/ft based on review of drilling histories, mud weights, formation gradients etc. from surrounding wells. Based upon logs of wells in this area, the anticipated bottom hole temperature is 105°F.

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

## **DRILLING PLAN**

### **Horizontal Yeso**

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.

#### **10. Completion Procedure**

Upon completion of drilling operations, this well will be perforated and frac'd in multiple stages. Due to the completion process that Burnett utilizes, we do not anticipate any flowback. Upon completion of stimulation, the well will be put on production.

# **Burnett Oil Company, Inc.**

**Eddy County, NM NAD 83**

**Sec 9-T17S-R30E**

**Gissler B 8 PM #2H (NAD 83)**

**Wellbore #1**

**Plan: Plan #1**

## **Standard Planning Report**

**15 June, 2022**

Microsoft  
Planning Report

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Gissler B 8 PM #2H (NAD 83)
<b>Company:</b>	Burnett Oil Company, Inc.	<b>TVD Reference:</b>	3677+16.7 @ 3693.7usft
<b>Project:</b>	Eddy County, NM NAD 83	<b>MD Reference:</b>	3677+16.7 @ 3693.7usft
<b>Site:</b>	Sec 9-T17S-R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Gissler B 8 PM #2H (NAD 83)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM NAD 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site		Sec 9-T17S-R30E			
Site Position:		Northing:	673,622.00 usft	Latitude:	32° 51' 4.767 N
From:	Map	Easting:	648,505.00 usft	Longitude:	103° 59' 3.683 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.19 °

Well	Gissler B 8 PM #2H (NAD 83)					
Well Position	+N/-S	-2,912.8 usft	Northing:	670,709.20 usft	Latitude:	32° 50' 35.937 N
	+E/-W	245.3 usft	Easting:	648,750.30 usft	Longitude:	103° 59' 0.920 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,677.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	06/15/22	6.65	60.50	47,742.48504321

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	267.85

<b>Plan Survey Tool Program</b>	<b>Date</b>	06/15/22		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	10,595.7	Plan #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,111.2	0.00	0.00	1,111.2	0.0	0.0	0.00	0.00	0.00	0.00	
1,361.2	5.00	213.50	1,360.9	-9.1	-6.0	2.00	2.00	0.00	213.50	
3,861.2	5.00	213.50	3,851.4	-190.8	-126.3	0.00	0.00	0.00	0.00	
4,111.2	0.00	0.00	4,101.1	-199.9	-132.3	2.00	-2.00	0.00	180.00	
4,611.2	0.00	0.00	4,601.1	-199.9	-132.3	0.00	0.00	0.00	0.00	
5,516.2	90.50	269.83	5,174.0	-201.6	-710.2	10.00	10.00	-9.96	269.83	
10,595.7	90.50	269.83	5,129.7	-217.0	-5,789.5	0.00	0.00	0.00	0.00	BHL Gissler B 8 PM ;

**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Gissler B 8 PM #2H (NAD 83)
<b>Company:</b>	Burnett Oil Company, Inc.	<b>TVD Reference:</b>	3677+16.7 @ 3693.7usft
<b>Project:</b>	Eddy County, NM NAD 83	<b>MD Reference:</b>	3677+16.7 @ 3693.7usft
<b>Site:</b>	Sec 9-T17S-R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Gissler B 8 PM #2H (NAD 83)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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
1,111.2	0.00	0.00	1,111.2	0.0	0.0	0.0	0.00	0.00	0.00
<b>Nudge 2°/100'</b>									
1,200.0	1.78	213.50	1,200.0	-1.1	-0.8	0.8	2.00	2.00	0.00
1,300.0	3.78	213.50	1,299.9	-5.2	-3.4	3.6	2.00	2.00	0.00
1,361.2	5.00	213.50	1,360.9	-9.1	-6.0	6.4	2.00	2.00	0.00
<b>EON HLD 5° Inc.</b>									
1,400.0	5.00	213.50	1,399.5	-11.9	-7.9	8.3	0.00	0.00	0.00
1,500.0	5.00	213.50	1,499.2	-19.2	-12.7	13.4	0.00	0.00	0.00
1,600.0	5.00	213.50	1,598.8	-26.4	-17.5	18.5	0.00	0.00	0.00
1,700.0	5.00	213.50	1,698.4	-33.7	-22.3	23.6	0.00	0.00	0.00
1,800.0	5.00	213.50	1,798.0	-41.0	-27.1	28.6	0.00	0.00	0.00
1,900.0	5.00	213.50	1,897.6	-48.3	-31.9	33.7	0.00	0.00	0.00
2,000.0	5.00	213.50	1,997.3	-55.5	-36.7	38.8	0.00	0.00	0.00
2,100.0	5.00	213.50	2,096.9	-62.8	-41.6	43.9	0.00	0.00	0.00
2,200.0	5.00	213.50	2,196.5	-70.1	-46.4	49.0	0.00	0.00	0.00
2,300.0	5.00	213.50	2,296.1	-77.3	-51.2	54.0	0.00	0.00	0.00
2,400.0	5.00	213.50	2,395.7	-84.6	-56.0	59.1	0.00	0.00	0.00
2,500.0	5.00	213.50	2,495.3	-91.9	-60.8	64.2	0.00	0.00	0.00
2,600.0	5.00	213.50	2,595.0	-99.1	-65.6	69.3	0.00	0.00	0.00
2,700.0	5.00	213.50	2,694.6	-106.4	-70.4	74.3	0.00	0.00	0.00
2,800.0	5.00	213.50	2,794.2	-113.7	-75.2	79.4	0.00	0.00	0.00
2,900.0	5.00	213.50	2,893.8	-120.9	-80.0	84.5	0.00	0.00	0.00
3,000.0	5.00	213.50	2,993.4	-128.2	-84.8	89.6	0.00	0.00	0.00
3,100.0	5.00	213.50	3,093.1	-135.5	-89.7	94.7	0.00	0.00	0.00
3,200.0	5.00	213.50	3,192.7	-142.7	-94.5	99.7	0.00	0.00	0.00
3,300.0	5.00	213.50	3,292.3	-150.0	-99.3	104.8	0.00	0.00	0.00
3,400.0	5.00	213.50	3,391.9	-157.3	-104.1	109.9	0.00	0.00	0.00
3,500.0	5.00	213.50	3,491.5	-164.5	-108.9	115.0	0.00	0.00	0.00
3,600.0	5.00	213.50	3,591.2	-171.8	-113.7	120.1	0.00	0.00	0.00
3,700.0	5.00	213.50	3,690.8	-179.1	-118.5	125.1	0.00	0.00	0.00
3,800.0	5.00	213.50	3,790.4	-186.3	-123.3	130.2	0.00	0.00	0.00
3,861.2	5.00	213.50	3,851.4	-190.8	-126.3	133.3	0.00	0.00	0.00
<b>DROP 2°/100'</b>									
3,900.0	4.22	213.50	3,890.0	-193.4	-128.0	135.1	2.00	-2.00	0.00
4,000.0	2.22	213.50	3,989.9	-198.1	-131.1	138.4	2.00	-2.00	0.00
4,100.0	0.22	213.50	4,089.9	-199.9	-132.3	139.7	2.00	-2.00	0.00
4,111.2	0.00	0.00	4,101.1	-199.9	-132.3	139.7	2.00	-2.00	1,308.07
<b>EOD HLD 0° Inc.</b>									
4,200.0	0.00	0.00	4,189.9	-199.9	-132.3	139.7	0.00	0.00	0.00
4,300.0	0.00	0.00	4,289.9	-199.9	-132.3	139.7	0.00	0.00	0.00
4,400.0	0.00	0.00	4,389.9	-199.9	-132.3	139.7	0.00	0.00	0.00



**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Gissler B 8 PM #2H (NAD 83)
<b>Company:</b>	Burnett Oil Company, Inc.	<b>TVD Reference:</b>	3677+16.7 @ 3693.7usft
<b>Project:</b>	Eddy County, NM NAD 83	<b>MD Reference:</b>	3677+16.7 @ 3693.7usft
<b>Site:</b>	Sec 9-T17S-R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Gissler B 8 PM #2H (NAD 83)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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)
4,500.0	0.00	0.00	4,489.9	-199.9	-132.3	139.7	0.00	0.00	0.00
4,600.0	0.00	0.00	4,589.9	-199.9	-132.3	139.7	0.00	0.00	0.00
4,611.2	0.00	0.00	4,601.1	-199.9	-132.3	139.7	0.00	0.00	0.00
<b>KOP BLD 10°/100'</b>									
4,650.0	3.88	269.83	4,639.8	-199.9	-133.6	141.0	10.00	10.00	0.00
4,700.0	8.88	269.83	4,689.5	-199.9	-139.1	146.5	10.00	10.00	0.00
4,750.0	13.88	269.83	4,738.5	-199.9	-149.0	156.4	10.00	10.00	0.00
4,800.0	18.88	269.83	4,786.5	-200.0	-163.1	170.5	10.00	10.00	0.00
4,850.0	23.88	269.83	4,833.0	-200.0	-181.3	188.7	10.00	10.00	0.00
4,900.0	28.88	269.83	4,877.8	-200.1	-203.5	210.9	10.00	10.00	0.00
4,950.0	33.88	269.83	4,920.5	-200.2	-229.6	236.9	10.00	10.00	0.00
5,000.0	38.88	269.83	4,960.7	-200.3	-259.2	266.5	10.00	10.00	0.00
5,050.0	43.88	269.83	4,998.2	-200.4	-292.3	299.6	10.00	10.00	0.00
5,100.0	48.88	269.83	5,032.7	-200.5	-328.4	335.7	10.00	10.00	0.00
5,150.0	53.88	269.83	5,063.9	-200.6	-367.5	374.7	10.00	10.00	0.00
5,200.0	58.88	269.83	5,091.6	-200.7	-409.1	416.3	10.00	10.00	0.00
5,250.0	63.88	269.83	5,115.5	-200.9	-453.0	460.2	10.00	10.00	0.00
5,300.0	68.88	269.83	5,135.5	-201.0	-498.8	506.0	10.00	10.00	0.00
5,350.0	73.88	269.83	5,151.5	-201.1	-546.2	553.3	10.00	10.00	0.00
5,400.0	78.88	269.83	5,163.3	-201.3	-594.7	601.9	10.00	10.00	0.00
5,450.0	83.88	269.83	5,170.7	-201.4	-644.2	651.2	10.00	10.00	0.00
5,500.0	88.88	269.83	5,173.9	-201.6	-694.0	701.1	10.00	10.00	0.00
5,516.2	90.50	269.83	5,174.0	-201.6	-710.2	717.3	10.00	10.00	0.00
<b>EOB HLD 90.5° Inc.</b>									
5,600.0	90.50	269.83	5,173.3	-201.9	-794.0	801.0	0.00	0.00	0.00
5,700.0	90.50	269.83	5,172.4	-202.2	-894.0	901.0	0.00	0.00	0.00
5,800.0	90.50	269.83	5,171.5	-202.5	-994.0	1,000.9	0.00	0.00	0.00
5,900.0	90.50	269.83	5,170.6	-202.8	-1,094.0	1,100.8	0.00	0.00	0.00
6,000.0	90.50	269.83	5,169.8	-203.1	-1,194.0	1,200.8	0.00	0.00	0.00
6,100.0	90.50	269.83	5,168.9	-203.4	-1,294.0	1,300.7	0.00	0.00	0.00
6,200.0	90.50	269.83	5,168.0	-203.7	-1,394.0	1,400.7	0.00	0.00	0.00
6,300.0	90.50	269.83	5,167.2	-204.0	-1,494.0	1,500.6	0.00	0.00	0.00
6,400.0	90.50	269.83	5,166.3	-204.3	-1,594.0	1,600.5	0.00	0.00	0.00
6,500.0	90.50	269.83	5,165.4	-204.6	-1,694.0	1,700.5	0.00	0.00	0.00
6,600.0	90.50	269.83	5,164.5	-204.9	-1,794.0	1,800.4	0.00	0.00	0.00
6,700.0	90.50	269.83	5,163.7	-205.2	-1,894.0	1,900.3	0.00	0.00	0.00
6,800.0	90.50	269.83	5,162.8	-205.5	-1,994.0	2,000.3	0.00	0.00	0.00
6,900.0	90.50	269.83	5,161.9	-205.8	-2,094.0	2,100.2	0.00	0.00	0.00
7,000.0	90.50	269.83	5,161.1	-206.1	-2,194.0	2,200.2	0.00	0.00	0.00
7,100.0	90.50	269.83	5,160.2	-206.4	-2,294.0	2,300.1	0.00	0.00	0.00
7,200.0	90.50	269.83	5,159.3	-206.7	-2,394.0	2,400.0	0.00	0.00	0.00
7,300.0	90.50	269.83	5,158.4	-207.0	-2,494.0	2,500.0	0.00	0.00	0.00
7,400.0	90.50	269.83	5,157.6	-207.3	-2,594.0	2,599.9	0.00	0.00	0.00
7,500.0	90.50	269.83	5,156.7	-207.6	-2,694.0	2,699.8	0.00	0.00	0.00
7,600.0	90.50	269.83	5,155.8	-207.9	-2,793.9	2,799.8	0.00	0.00	0.00
7,700.0	90.50	269.83	5,154.9	-208.2	-2,893.9	2,899.7	0.00	0.00	0.00
7,800.0	90.50	269.83	5,154.1	-208.5	-2,993.9	2,999.6	0.00	0.00	0.00
7,900.0	90.50	269.83	5,153.2	-208.8	-3,093.9	3,099.6	0.00	0.00	0.00
8,000.0	90.50	269.83	5,152.3	-209.1	-3,193.9	3,199.5	0.00	0.00	0.00
8,100.0	90.50	269.83	5,151.5	-209.5	-3,293.9	3,299.5	0.00	0.00	0.00
8,200.0	90.50	269.83	5,150.6	-209.8	-3,393.9	3,399.4	0.00	0.00	0.00
8,300.0	90.50	269.83	5,149.7	-210.1	-3,493.9	3,499.3	0.00	0.00	0.00
8,400.0	90.50	269.83	5,148.8	-210.4	-3,593.9	3,599.3	0.00	0.00	0.00

Microsoft  
Planning Report

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well Gissler B 8 PM #2H (NAD 83)
Company:	Burnett Oil Company, Inc.	TVD Reference:	3677+16.7 @ 3693.7usft
Project:	Eddy County, NM NAD 83	MD Reference:	3677+16.7 @ 3693.7usft
Site:	Sec 9-T17S-R30E	North Reference:	Grid
Well:	Gissler B 8 PM #2H (NAD 83)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)	
8,500.0	90.50	269.83	5,148.0	-210.7	-3,693.9	3,699.2	0.00	0.00	0.00	
8,600.0	90.50	269.83	5,147.1	-211.0	-3,793.9	3,799.1	0.00	0.00	0.00	
8,700.0	90.50	269.83	5,146.2	-211.3	-3,893.9	3,899.1	0.00	0.00	0.00	
8,800.0	90.50	269.83	5,145.4	-211.6	-3,993.9	3,999.0	0.00	0.00	0.00	
8,900.0	90.50	269.83	5,144.5	-211.9	-4,093.9	4,099.0	0.00	0.00	0.00	
9,000.0	90.50	269.83	5,143.6	-212.2	-4,193.9	4,198.9	0.00	0.00	0.00	
9,100.0	90.50	269.83	5,142.7	-212.5	-4,293.9	4,298.8	0.00	0.00	0.00	
9,200.0	90.50	269.83	5,141.9	-212.8	-4,393.9	4,398.8	0.00	0.00	0.00	
9,300.0	90.50	269.83	5,141.0	-213.1	-4,493.9	4,498.7	0.00	0.00	0.00	
9,400.0	90.50	269.83	5,140.1	-213.4	-4,593.9	4,598.6	0.00	0.00	0.00	
9,500.0	90.50	269.83	5,139.3	-213.7	-4,693.9	4,698.6	0.00	0.00	0.00	
9,600.0	90.50	269.83	5,138.4	-214.0	-4,793.9	4,798.5	0.00	0.00	0.00	
9,700.0	90.50	269.83	5,137.5	-214.3	-4,893.9	4,898.5	0.00	0.00	0.00	
9,800.0	90.50	269.83	5,136.6	-214.6	-4,993.9	4,998.4	0.00	0.00	0.00	
9,900.0	90.50	269.83	5,135.8	-214.9	-5,093.8	5,098.3	0.00	0.00	0.00	
10,000.0	90.50	269.83	5,134.9	-215.2	-5,193.8	5,198.3	0.00	0.00	0.00	
10,100.0	90.50	269.83	5,134.0	-215.5	-5,293.8	5,298.2	0.00	0.00	0.00	
10,200.0	90.50	269.83	5,133.1	-215.8	-5,393.8	5,398.1	0.00	0.00	0.00	
10,300.0	90.50	269.83	5,132.3	-216.1	-5,493.8	5,498.1	0.00	0.00	0.00	
10,400.0	90.50	269.83	5,131.4	-216.4	-5,593.8	5,598.0	0.00	0.00	0.00	
10,500.0	90.50	269.83	5,130.5	-216.7	-5,693.8	5,697.9	0.00	0.00	0.00	
10,595.7	90.50	269.83	5,129.7	-217.0	-5,789.5	5,793.6	0.00	0.00	0.00	
TD at 10595.7										

Design Targets										
Target Name										
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
- Shape										
BHL Gissler B 8 PM 2H	0.00	0.00	5,129.7	-217.0	-5,789.5	670,492.20	642,960.80	32° 50' 33.974 N		104° 0' 8.791 W
- plan hits target center										
- Point										
FTP Gissler B 8 PM 2H	0.00	0.00	5,174.0	-201.4	-710.2	670,507.80	648,040.10	32° 50' 33.967 N		103° 59' 9.253 W
- plan misses target center by 0.2usft at 5516.2usft MD (5174.0 TVD, -201.6 N, -710.2 E)										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,111.2	1,111.2	0.0	0.0	Nudge 2°/100'	
1,361.2	1,360.9	-9.1	-6.0	EON HLD 5° Inc.	
3,861.2	3,851.4	-190.8	-126.3	DROP 2°/100'	
4,111.2	4,101.1	-199.9	-132.3	EOD HLD 0° Inc.	
4,611.2	4,601.1	-199.9	-132.3	KOP BLD 10°/100'	
5,516.2	5,174.0	-201.6	-710.2	EOB HLD 90.5° Inc.	
10,595.7	5,129.7	-217.0	-5,789.5	TD at 10595.7	

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>BURNETT OIL COMPANY INCORPORATED</b>
<b>LEASE NO.:</b>	<b>NMNM2748</b>
<b>WELL NAME &amp; NO.:</b>	Gissler B 8 PM 2H
<b>SURFACE HOLE FOOTAGE:</b>	550'/S & 610'/W
<b>BOTTOM HOLE FOOTAGE:</b>	350'/S & 101'/W
<b>LOCATION:</b>	Section 9, T.17 S., R.30 E., NMP
<b>COUNTY:</b>	Eddy County, New Mexico

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input checked="" type="radio"/> None	<input type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input checked="" type="radio"/> Conventional	<input type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Undesignated** formation. Yates 1323', Tansill 1459', Queen 2334' are likely source formations H2S. 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 **500** 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 1/2** inch production casing is:

**Option 1 (Single Stage):**

Cement should tie-back at least **200 feet** into previous casing string.  
Operator shall provide method of verification.  
**Excess cement calculates to -37%, additional cement might be required.**

**Option 2:**

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 **2000 (2M)** psi.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **2000 (2M)** 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)  
689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> 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 integrity 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 integrity 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.

**OTA09292022**



## HYDROGEN SULFIDE (H<sub>2</sub>S) 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 H<sub>2</sub>S 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 (H<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S 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 (H<sub>2</sub>S) 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 H<sub>2</sub>S 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 H<sub>2</sub>S 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 H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S 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 M - EMERGENCY NOTIFICATION LIST****BURNETT CONTACTS****Burnett's New Mexico Office****817.332.5108 x202**

87 Square Lake Road (CR #220) Loco Hills, New Mexico 88255

**Directions: Loco Hills, NM – 2 miles east of Loco Hills on US Hwy 82 to CR#220. Then North on CR #220 approximately one (1) mile to office.****Burnett Oil Home Office****817.332.5108**

Burnett Plaza – Suite 1500 | 801 Cherry Street – Unit #9| Fort Worth, Texas 76102

Walter Glasgow

**Office - 817.583.8871**

VP of Operations – Permian Basin/New Mexico

**Cell - 817.343.5567**

Tyler Deans

**Office – 575.677.2313**

Engineering Manager

**Cell – 432.553.4699**

Leslie Garvis

**Office – 817.583.8730**

Regulatory &amp; Government Affairs Manager

**Cell – 713.819.4371****SHERIFF/POLICE CONTACTS**

Eddy County Sheriff

911 or 575.677.2313

New Mexico State Police

575.746.2701

**FIRE DEPARTMENT**

Loco Hills Fire Department (VOLUNTEER ONLY)

911 or 575.677.2349

For Medical and Fire (Artesia)

575.746.2701

**AIR AMBULANCE**

Flight for Life Air Ambulance

(Lubbock)

806.743.9911

Aerocare Air Ambulance

(Lubbock)

806.747.8923

Med Flight Air Ambulance

(Albuq)

505.842.4433

S B Med Svc Air Ambulance

(Albuq)

505.842.4949

**FEDERAL AND STATE**

US Bureau of Land Management (Carlsbad)

575.361.2822

575.234.5972

New Mexico Oil Conservation Division (Artesia)

575.748.1283

New Mexico Emergency Response Commission (24 hour)

575.827.9126

Local Emergency Planning Operation Center (Artesia)

505.842.4949

National Emergency Response Center (Washington, DC)

800.424.8802

**OTHER IMPORTANT NUMBERS**

Boots &amp; Coots IWC

800.256.9688

Cudd Pressure Control

432.570.5300

Halliburton Services

575.746.2757

BJ Service

575.746.2293

**THIS MUST BE POSTED AT THE RIG WHILE ON LOCATION**



BURNETT OIL CO., INC.

**EXHIBIT L - HYDROGEN SULFIDE (H2S) CONTINGENCY 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**

<u>Common Name</u>	<u>Chemical Formula</u>	<u>Specific Gravity</u>	<u>Threshold Limit</u>	<u>Hazardous Limit</u>	<u>Lethal Concentration</u>
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. personnel 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.





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

# Drilling Plan Data Report

10/05/2022

APD ID: 10400085404

Submission Date: 06/27/2022

Highlighted data  
reflects the most  
recent changes

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER B 8 PM

Well Number: 2H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
8798761	RUSTLER	3677	284	284	ANHYDRITE, SHALE	NONE	N
8798762	SALADO	3128	549	549	SALT	NONE	N
8798763	BASE OF SALT	2359	1318	1318	ANHYDRITE	NONE	N
8798764	YATES	2171	1506	1506	ANHYDRITE, SHALE	NONE	N
8798765	SEVEN RIVERS	1899	1778	1778	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
8798766	QUEEN	1290	2387	2387	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
8798767	GRAYBURG	886	2791	2791	DOLOMITE	NATURAL GAS, OIL	N
8798768	SAN ANDRES	573	3104	3104	DOLOMITE	NATURAL GAS, OIL	N
8798769	GLORIETA	-909	4586	4586	SANDSTONE, SHALE	NATURAL GAS, OIL	Y
8798770	YESO	-987	4664	4664	DOLOMITE	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:**



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

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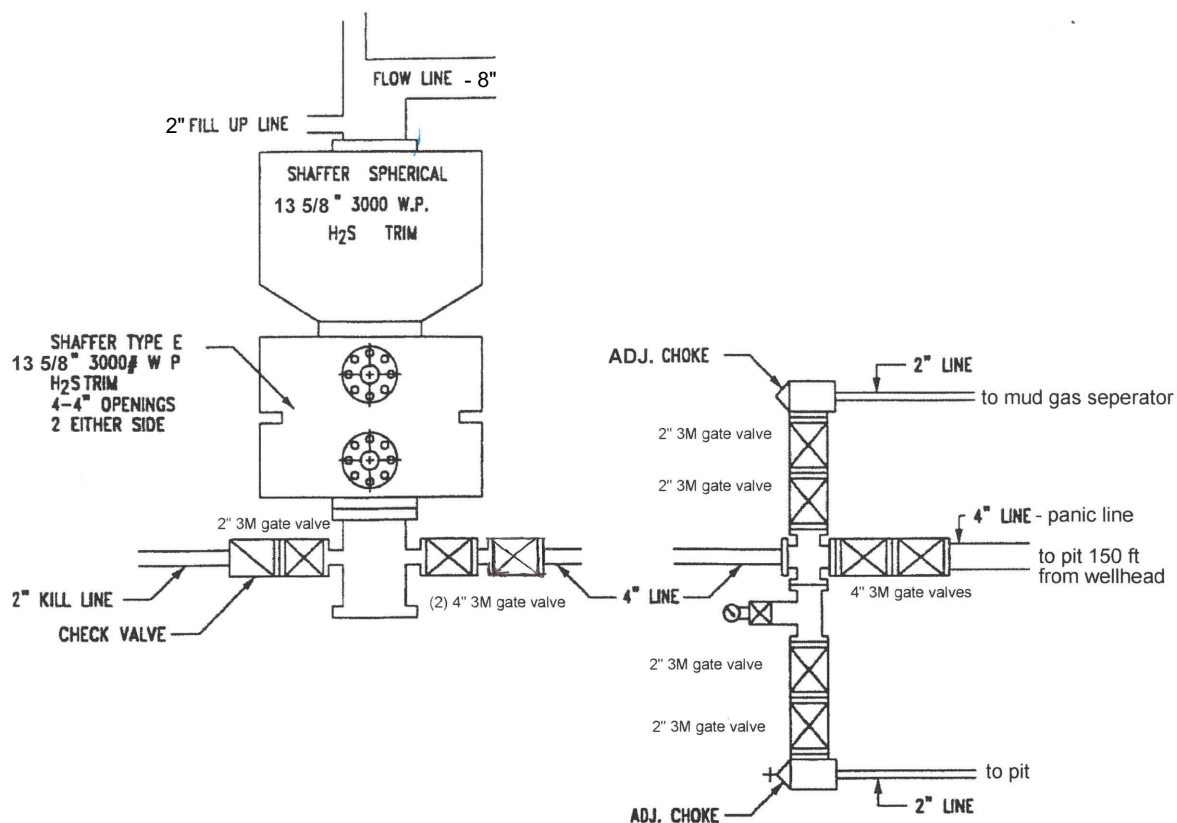
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**Choke Diagram Attachment:**

**13 5/8 " 3M BOP Stack**

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 185778

**CONDITIONS**

Operator: BURNETT OIL CO INC 801 Cherry Street Unit #9 Fort Worth, TX 76102	OGRID: 3080
	Action Number: 185778
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	2/15/2023
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	2/15/2023
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	2/15/2023
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	2/15/2023
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	2/15/2023