Rec'd 08/17/2020 - NMOCD

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.
NMLC0029338A

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
58

2. Name of Operator
BURNETT OIL COMPANY INCORPORATED

9. API Well No.
30 015 47341

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

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

At surface NESE / 2360 FSL / 480 FEL / LAT 32.833722 / LONG -103.935502

At proposed prod. zone NESE / 2310 FSL / 330 FEL / LAT 32.833586 / LONG -103.935014

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 14/T17S/R30E/NMP

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State
	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
480 feet	600	40.0

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
58 feet	6100 feet / 6105 feet	FED: NMB000197

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3697 feet	02/29/2020	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	11/06/2019

Title
Regulatory Coordinator

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	08/07/2020

Title	Office
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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 08/07/2020

Entered - KMS NMOCD

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) 476-3460 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30 015 47341	96718	Loco Hills Glorieta Yeso

Property Code	Property Name	Well Number
2388	GISSLER A	58

OGRID No.	Operator Name	Elevation
03080	BURNETT OIL COMPANY, INC.	3697'

Surface Location

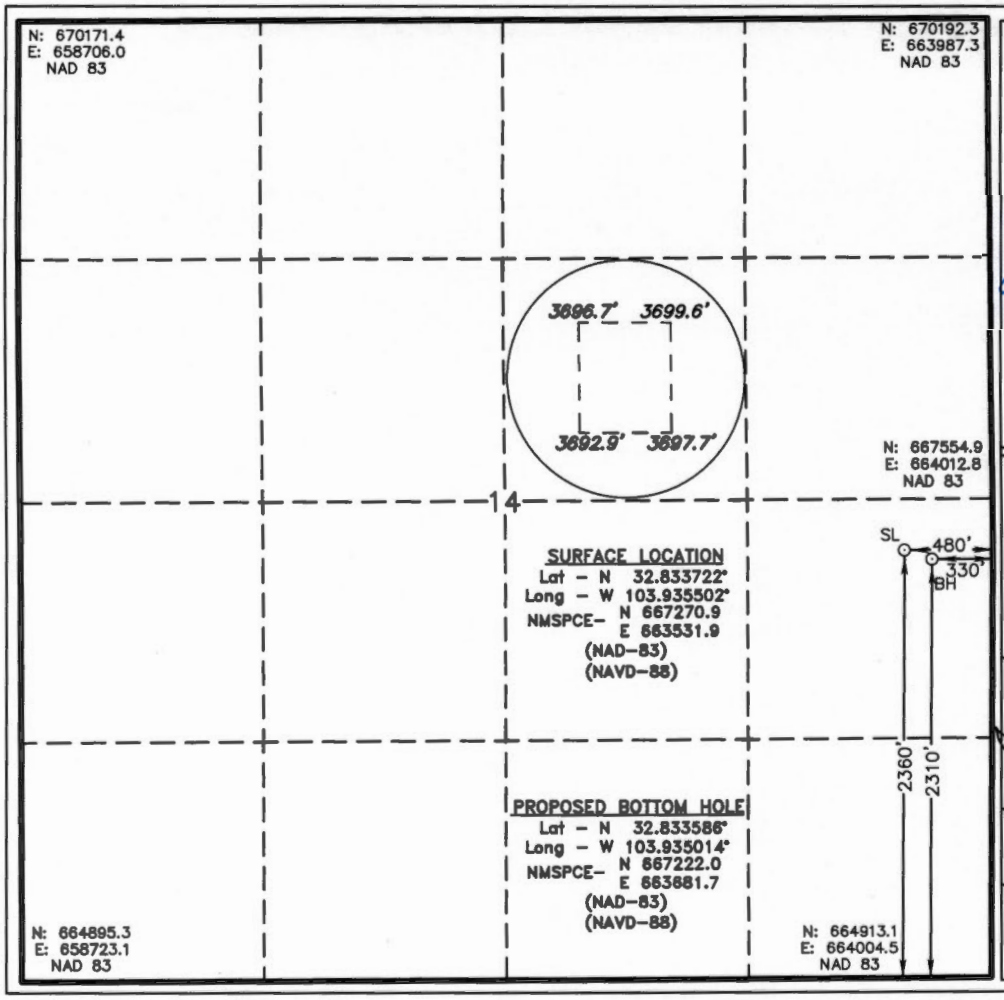
UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
I	14	17 S	30 E		2360	SOUTH	480	EAST	EDDY

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
I	14	17 S	30 E		2310	SOUTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



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 11/6/19
Signature Date

Leslie Garvis
Printed Name

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 supervison, and that the same is true and correct to the best of my belief.

JULY 12, 2018
Date Surveyed

Signature & Seal of Professional Surveyor
7977

GARY L. JONES NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number Gary L. Jones 7977
BASIN SURVEYS

0' 500' 1000' 1500' 2000'
SCALE: 1" = 1000'
WO Num.: 33868

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District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 8/12/20

☒ Original
☐ Amended - Reason for Amendment:

Operator & OGRID No.: Burnett Oil Co., Inc./ 03080

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

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

Well(s)/Production Facility – Name of facility

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Gissler A 58	TBD	I-14+/5Q+10C	2360' FSL 480' FEL	300 MCF		Will go to gas sales line, first day of production

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to DCP and will be connected to DCP low/high pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to low/high pressure gathering system. Burnett Oil Co., Inc. provides (periodically) to DCP a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Burnett Oil Co., Inc. and DCP have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at DCP Linam Ranch Processing Plant located in Sec.6, Twn.19S, Rng.37E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on DCP Gas system at that time. Based on current information, it is Burnett's belief the system can take this gas upon completion of the well(s). NOTE: It should be noted that Burnett does not flowback but rather sends wells to the production facility upon completion.
Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

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

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

BURNETT OIL CO., INC.

DRILLING PLAN
Jackson A 58

SL: Sec 13, T17S, R30E, 2390' FSL, 330' FEL, Unit H
BHL: Sec 13, T17S, R30E, 2310' FSL, 330' FEL, Unit H
Eddy County, NM

VERTICAL CEDAR LAKE GLORIETA YESO WELL

1. Geological Name of Surface Formation with Estimated Depth:

Geological Name	Estimate Top	Anticipated Fresh Water, Oil or Gas
a. Cenozoic	Surface	Fresh water - None
b. Rustler	225'	
c. Salado	420'	
d. Base Salt	1170'	
e. Yates	1350'	
f. Seven Rivers	1650'	Oil
g. Queen	2245'	Oil
h. Grayburg	2640'	Oil
i. San Andres	2965'	Oil
j. Glorieta	4460'	Oil
k. Yeso	4555'	Oil
l. Total Depth	Refer to Form 3160-3	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. We will set 8-5/8" casing @ approx. 415' in the Anhydrite, above the salt and circulate cement to surface.

The oil zones will be isolated by running 5-1/2" casing to total depth and circulating cement to surface.

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

(MW = 10.2 PPG IN DESIGN FACTOR CALCULATIONS.)

a. Design Safety Factors:

Type	Hole Size	Interval	OD Csg	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
Conductor		0'-90'	14"	Contractor Discretion			---	---	---
Surface	12-1/4"	0' - +/- 415'	8-5/8"	24.00#	ST & C	J55	1.125	1.00	1.80
Production	7-7/8"	0' - TD	5-1/2"	17.00#	LT & C	J55	1.125	1.00	1.80

b. Surface Casing Info

The proposed casing setting depth is +/- 415' 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. Production Casing Info

Production casing will be set to TD with float shoe on bottom, float collar in first collar, centralizers throughout intervals and above and below a DV Tool set at +/-2600'. After drilling out and testing the casing to 2000 PSI, a cement bond log will be run to evaluate the cement job.

3. Cementing Program (Note Yields and DV Tool Depth if Multiple Stage.)

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

a. 8-5/8" Surface Cement to surface

- 330 sx C +2% PF1 (Calcium Chloride) + PF424 (Water Gelling Agent), mixed at 14.8 lbm/gal, Yield 1.34 with 6.3 gal water per sack.
- **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. When circulating cement, if surface pressures indicate cement is low in the annulus, temperature survey results will be reviewed with BLM representative to determine the remediation needed.

b. 5-1/2" Production Casing

Stage 1: **Lead:** 260 sx 35/65 P/C +5 %PF44 (BWOW)(Salt)+6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.3% PF13 (Retarder) +0.1 25#/sx PF29 (Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defoamer), mixed at 12.5 lbm/gal, Slurry Yield 2.11 with 11.364 gal water per sack.

Tail: 330 sx C +0.3%PF13 (Retarder), mixed at 14.8 lbm/gal, Slurry Yield 1.33 with 6.298 gal water per sack.

30% excess cement.

Stage 2: **Lead:** 340 sx 35/65 P/C + 5% PF44 (BWOW)(Salt) +6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.125#/sx PF29Celloflake) +3#/sx PF42 (KoIseal) +0.4#/sx PF45 (Defaomer), mixed at 12.5 lbm/gal, Slurry Yield 2.11 with 11.362 gal water per sack.

Tail: 200 sx C Neat, mixed at 14.8 lbm/gal, Slurry Yield 1.32 with 6.3 gal water per sack.

140% excess cement.

The above cement volumes may be revised pending the caliper measurement from the open hole logs. **Casing/cementing design is to bring cement to the surface.**

4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) will consist of a 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested to 50% of rated working pressure (RWP) and maintained for at 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 2000 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.

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

c. Hydrogen Sulfide detection and breathing equipment will be installed and in operation at drilling depth of 1800' (which is more than 500' above top of Grayburg) until 5-1/2" casing is cemented.

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

6. Proposed Mud Circulation System

Depth	Mud Wt	Visc	Fluid Loss	Type System	Max Volume
0' - +/-415'	8.6 - 9.5			Fresh Water	
+/- 415' - TD' MD	8.6-10.2			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. Any drill stem tests will be based on geological sample shows and planned before spudding.

b. The open hole electrical logging program will be:

1. Total depth to 1000': Dual Laterolog-Micro Laterolog with Compensated Neutron, Spectral Density log with Spectral Gamma Ray and Caliper.
2. Total depth to Surface: Compensated Neutron with Spectral Gamma Ray.
3. Coring program will be planned and submitted on a well by well basis.
4. Additional testing will be done after setting the 5-1/2" production casing. The specific Intervals will be based on log evaluation, geological sample shows and/or drill stem tests.

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. **B**ased upon logs of wells in this area, the anticipated bottom hole temperature is 105°F.

9. 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**Anticipated Start Date and Duration of Operation**

Road and location construction will begin after BLM has approved the specific 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 and drilling is expected to take approximately 11 days. If production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) 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.

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A **Well Number:** 58

Choke Diagram Attachment:

2.12.20_2MBOP___ChokeManifold_Drilling_20200309142130.pdf

BOP Diagram Attachment:

2.12.20_2MBOP___ChokeManifold_Drilling_20200309142138.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	20	14.0	NEW	API	N	0	90	0	90	3697	3607	90	OTHER	0	N/A						
2	SURFACE	12.25	8.625	NEW	API	N	0	415	0	415	3697	3282	415	J-55	24	ST&C	1.125	1	DRY	1.8	DRY	1.8
3	PRODUCTION	7.875	5.5	NEW	API	N	0	6101	0	6100	3691	-2403	6101	J-55	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):

Casing_Assumption_20191018125720.pdf

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A **Well Number:** 58

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumption_20191106145622.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumption_20191018125615.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	0	Contractor Discretion	0
SURFACE	Lead		0	415	330	1.34	14.8	442	100	C+2% PF1 (Calcium Chloride)	PF424 (Water Gelling Agent)
PRODUCTION	Lead	2600	0	6101	260	2.11	12.5	548	30	35/65 P/C	+5% PF 44 (BWOW)(Salt)+6%

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER A **Well Number:** 58

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
											Gel) +0.2%PF153 (Anti Settling). +0.3% PF13 (Retarder) +0.1 25#/sx PF29(Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defoamer).
PRODUCTION	Tail		0	6101	330	1.33	14.8	4.8	30	Class C	+0.3%PF13 (Retarder)
PRODUCTION	Lead		0	6101	340	2.11	12.5	717	140	35/65 P/C	+ 5% PF44 (BWOW)(Salt) +6% PF20 (Bentonite Gel)+0.2% PF153 (Anti Settling) +0.125#/sxPF29Celloflake) +3#/sxPF42 (KoIseaI)+0.4#/sx PF45
PRODUCTION	Tail		0	6105	200	1.32				C Neat	N/A

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 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	415	OTHER : Fresh Water	8.6	9.5							

BURNETT OIL CO., INC.

COMPANY: Burnett Oil Company
WELL: Jackson A #58
COUNTY: Eddy County, N.M.
DATUM: NAD 1927 (NADCON CONUS)
RIG:
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.68°
True Correction; To convert a Magnetic Direction to a True Direction, Add 6.90° East

STRYKER DIRECTIONAL

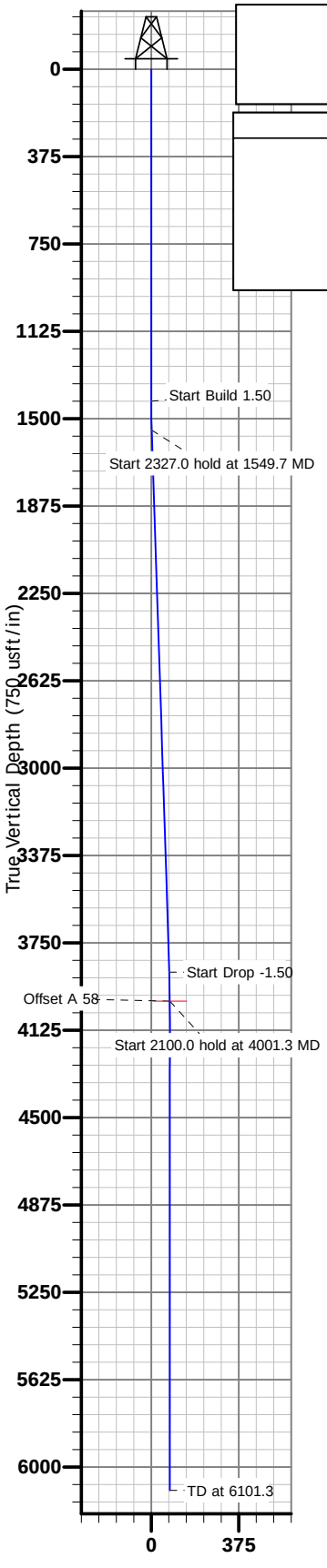
OFFICE: 936.582.7296

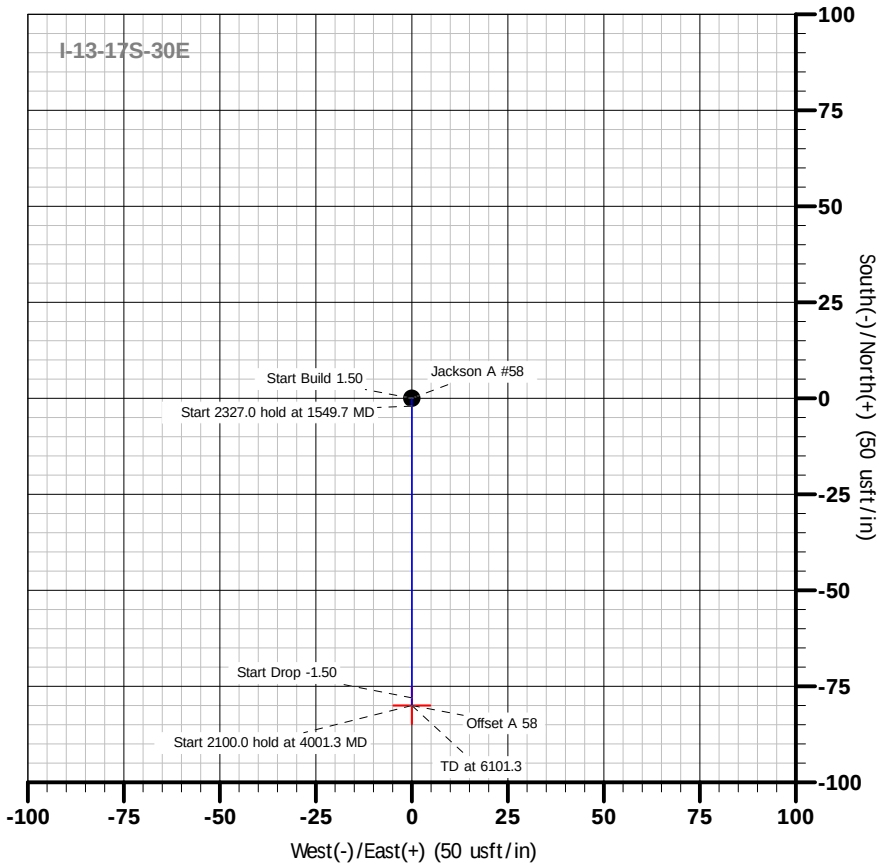
GEODETIC ZONE: New Mexico East 3001
3755+19 @ 3774.0usft
GROUND ELEVATION: 3755.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	667250.20	627766.70	32° 50' 1.197 N	103° 55' 2.531 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	1425.0	0.00	0.00	1425.0	0.0	0.0	0.00	0.00	0.0	
3	1549.7	1.87	180.00	1549.6	-2.0	0.0	1.50	180.00	2.0	
4	3876.6	1.87	180.00	3875.4	-78.0	0.0	0.00	0.00	78.0	
5	4001.3	0.00	0.00	4000.0	-80.0	0.0	1.50	180.00	80.0	Offset A 58
6	6101.3	0.00	0.00	6100.0	-80.0	0.0	0.00	0.00	80.0	





Burnett Oil Company

Eddy County, N.M.
I-13-17S-30E
Jackson A #58

Original Hole

Plan: Plan #1

Standard Planning Report

05 November, 2019

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Jackson A #58
Company:	Burnett Oil Company	**TVD Reference:**	3755+19 @ 3774.0usft
Project:	Eddy County, N.M.	**MD Reference:**	3755+19 @ 3774.0usft
Site:	I-13-17S-30E	**North Reference:**	Grid
Well:	Jackson A #58	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Project Eddy County, N.M.

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 I-13-17S-30E

Site Position:		**Northing:**	667,250.20 usft	**Latitude:**	32° 50' 1.197 N
From:	Map	**Easting:**	627,766.70 usft	**Longitude:**	103° 55' 2.531 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.23 °

Well Jackson A #58

Well Position	**+N/-S**	0.0 usft	**Northing:**	667,250.20 usft	**Latitude:**	32° 50' 1.197 N
	+E/-W	0.0 usft	**Easting:**	627,766.70 usft	**Longitude:**	103° 55' 2.531 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	19.0 usft	**Ground Level:**	3,755.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/04/19	6.90	60.53	48,013.33437978

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	180.00

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	
1,425.0	0.00	0.00	1,425.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,549.7	1.87	180.00	1,549.6	-2.0	0.0	1.50	1.50	0.00	180.00	
3,876.6	1.87	180.00	3,875.4	-78.0	0.0	0.00	0.00	0.00	0.00	
4,001.3	0.00	0.00	4,000.0	-80.0	0.0	1.50	-1.50	0.00	180.00	Offset A 58
6,101.3	0.00	0.00	6,100.0	-80.0	0.0	0.00	0.00	0.00	0.00	

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Jackson A #58
Company:	Burnett Oil Company	**TVD Reference:**	3755+19 @ 3774.0usft
Project:	Eddy County, N.M.	**MD Reference:**	3755+19 @ 3774.0usft
Site:	I-13-17S-30E	**North Reference:**	Grid
Well:	Jackson A #58	**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
1,425.0	0.00	0.00	1,425.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	1.13	180.00	1,500.0	-0.7	0.0	0.7	1.50	1.50	0.00
1,549.7	1.87	180.00	1,549.6	-2.0	0.0	2.0	1.50	1.50	0.00
1,600.0	1.87	180.00	1,600.0	-3.7	0.0	3.7	0.00	0.00	0.00
1,700.0	1.87	180.00	1,699.9	-6.9	0.0	6.9	0.00	0.00	0.00
1,800.0	1.87	180.00	1,799.8	-10.2	0.0	10.2	0.00	0.00	0.00
1,900.0	1.87	180.00	1,899.8	-13.5	0.0	13.5	0.00	0.00	0.00
2,000.0	1.87	180.00	1,999.7	-16.7	0.0	16.7	0.00	0.00	0.00
2,100.0	1.87	180.00	2,099.7	-20.0	0.0	20.0	0.00	0.00	0.00
2,200.0	1.87	180.00	2,199.6	-23.3	0.0	23.3	0.00	0.00	0.00
2,300.0	1.87	180.00	2,299.6	-26.5	0.0	26.5	0.00	0.00	0.00
2,400.0	1.87	180.00	2,399.5	-29.8	0.0	29.8	0.00	0.00	0.00
2,500.0	1.87	180.00	2,499.5	-33.0	0.0	33.0	0.00	0.00	0.00
2,600.0	1.87	180.00	2,599.4	-36.3	0.0	36.3	0.00	0.00	0.00
2,700.0	1.87	180.00	2,699.4	-39.6	0.0	39.6	0.00	0.00	0.00
2,800.0	1.87	180.00	2,799.3	-42.8	0.0	42.8	0.00	0.00	0.00
2,900.0	1.87	180.00	2,899.3	-46.1	0.0	46.1	0.00	0.00	0.00
3,000.0	1.87	180.00	2,999.2	-49.4	0.0	49.4	0.00	0.00	0.00
3,100.0	1.87	180.00	3,099.2	-52.6	0.0	52.6	0.00	0.00	0.00
3,200.0	1.87	180.00	3,199.1	-55.9	0.0	55.9	0.00	0.00	0.00
3,300.0	1.87	180.00	3,299.0	-59.1	0.0	59.1	0.00	0.00	0.00
3,400.0	1.87	180.00	3,399.0	-62.4	0.0	62.4	0.00	0.00	0.00
3,500.0	1.87	180.00	3,498.9	-65.7	0.0	65.7	0.00	0.00	0.00
3,600.0	1.87	180.00	3,598.9	-68.9	0.0	68.9	0.00	0.00	0.00
3,700.0	1.87	180.00	3,698.8	-72.2	0.0	72.2	0.00	0.00	0.00
3,800.0	1.87	180.00	3,798.8	-75.5	0.0	75.5	0.00	0.00	0.00
3,876.6	1.87	180.00	3,875.4	-78.0	0.0	78.0	0.00	0.00	0.00
3,900.0	1.52	180.00	3,898.7	-78.7	0.0	78.7	1.50	-1.50	0.00
4,000.0	0.02	180.00	3,998.7	-80.0	0.0	80.0	1.50	-1.50	0.00
4,001.3	0.00	0.00	4,000.0	-80.0	0.0	80.0	1.50	-1.50	0.00
4,100.0	0.00	0.00	4,098.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,198.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,298.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,398.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,498.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,598.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,698.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,798.7	-80.0	0.0	80.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,898.7	-80.0	0.0	80.0	0.00	0.00	0.00

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Jackson A #58
Company:	Burnett Oil Company	**TVD Reference:**	3755+19 @ 3774.0usft
Project:	Eddy County, N.M.	**MD Reference:**	3755+19 @ 3774.0usft
Site:	I-13-17S-30E	**North Reference:**	Grid
Well:	Jackson A #58	**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)
5,000.0	0.00	0.00	4,998.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,098.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,198.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,298.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,398.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,498.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,598.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,698.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,798.7	-80.0	0.0	80.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,898.7	-80.0	0.0	80.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,998.7	-80.0	0.0	80.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,098.7	-80.0	0.0	80.0	0.00	0.00	0.00
6,101.3	0.00	0.00	6,100.0	-80.0	0.0	80.0	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Offset A 58 - plan hits target center - Point	0.00	0.00	4,000.0	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W

Burnett Oil Company

Eddy County, N.M.
I-13-17S-30E
Jackson A #58

Original Hole

Plan: Plan #1

Standard Planning Report - Geographic

05 November, 2019

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Jackson A #58
Company:	Burnett Oil Company	**TVD Reference:**	3755+19 @ 3774.0usft
Project:	Eddy County, N.M.	**MD Reference:**	3755+19 @ 3774.0usft
Site:	I-13-17S-30E	**North Reference:**	Grid
Well:	Jackson A #58	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #1		

Project Eddy County, N.M.

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 I-13-17S-30E

Site Position:		**Northing:**	667,250.20 usft	**Latitude:**	32° 50' 1.197 N
From:	Map	**Easting:**	627,766.70 usft	**Longitude:**	103° 55' 2.531 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.23 °

Well Jackson A #58

Well Position	**+N/-S**	0.0 usft	**Northing:**	667,250.20 usft	**Latitude:**	32° 50' 1.197 N
	+E/-W	0.0 usft	**Easting:**	627,766.70 usft	**Longitude:**	103° 55' 2.531 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	19.0 usft	**Ground Level:**	3,755.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/04/19	6.90	60.53	48,013.33437978

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	180.00

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	
1,425.0	0.00	0.00	1,425.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,549.7	1.87	180.00	1,549.6	-2.0	0.0	1.50	1.50	0.00	180.00	
3,876.6	1.87	180.00	3,875.4	-78.0	0.0	0.00	0.00	0.00	0.00	
4,001.3	0.00	0.00	4,000.0	-80.0	0.0	1.50	-1.50	0.00	180.00	Offset A 58
6,101.3	0.00	0.00	6,100.0	-80.0	0.0	0.00	0.00	0.00	0.00	

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Jackson A #58
Company:	Burnett Oil Company	**TVD Reference:**	3755+19 @ 3774.0usft
Project:	Eddy County, N.M.	**MD Reference:**	3755+19 @ 3774.0usft
Site:	I-13-17S-30E	**North Reference:**	Grid
Well:	Jackson A #58	**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	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
100.0	0.00	0.00	100.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
200.0	0.00	0.00	200.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
300.0	0.00	0.00	300.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
400.0	0.00	0.00	400.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
500.0	0.00	0.00	500.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
600.0	0.00	0.00	600.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
700.0	0.00	0.00	700.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
800.0	0.00	0.00	800.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
900.0	0.00	0.00	900.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,425.0	0.00	0.00	1,425.0	0.0	0.0	667,250.20	627,766.70	32° 50' 1.197 N	103° 55' 2.531 W
1,500.0	1.13	180.00	1,500.0	-0.7	0.0	667,249.47	627,766.70	32° 50' 1.189 N	103° 55' 2.531 W
1,549.7	1.87	180.00	1,549.6	-2.0	0.0	667,248.17	627,766.70	32° 50' 1.176 N	103° 55' 2.531 W
1,600.0	1.87	180.00	1,600.0	-3.7	0.0	667,246.53	627,766.70	32° 50' 1.160 N	103° 55' 2.531 W
1,700.0	1.87	180.00	1,699.9	-6.9	0.0	667,243.27	627,766.70	32° 50' 1.128 N	103° 55' 2.531 W
1,800.0	1.87	180.00	1,799.8	-10.2	0.0	667,240.00	627,766.70	32° 50' 1.096 N	103° 55' 2.531 W
1,900.0	1.87	180.00	1,899.8	-13.5	0.0	667,236.74	627,766.70	32° 50' 1.063 N	103° 55' 2.532 W
2,000.0	1.87	180.00	1,999.7	-16.7	0.0	667,233.48	627,766.70	32° 50' 1.031 N	103° 55' 2.532 W
2,100.0	1.87	180.00	2,099.7	-20.0	0.0	667,230.21	627,766.70	32° 50' 0.999 N	103° 55' 2.532 W
2,200.0	1.87	180.00	2,199.6	-23.3	0.0	667,226.95	627,766.70	32° 50' 0.966 N	103° 55' 2.532 W
2,300.0	1.87	180.00	2,299.6	-26.5	0.0	667,223.69	627,766.70	32° 50' 0.934 N	103° 55' 2.532 W
2,400.0	1.87	180.00	2,399.5	-29.8	0.0	667,220.42	627,766.70	32° 50' 0.902 N	103° 55' 2.532 W
2,500.0	1.87	180.00	2,499.5	-33.0	0.0	667,217.16	627,766.70	32° 50' 0.870 N	103° 55' 2.532 W
2,600.0	1.87	180.00	2,599.4	-36.3	0.0	667,213.90	627,766.70	32° 50' 0.837 N	103° 55' 2.533 W
2,700.0	1.87	180.00	2,699.4	-39.6	0.0	667,210.63	627,766.70	32° 50' 0.805 N	103° 55' 2.533 W
2,800.0	1.87	180.00	2,799.3	-42.8	0.0	667,207.37	627,766.70	32° 50' 0.773 N	103° 55' 2.533 W
2,900.0	1.87	180.00	2,899.3	-46.1	0.0	667,204.11	627,766.70	32° 50' 0.740 N	103° 55' 2.533 W
3,000.0	1.87	180.00	2,999.2	-49.4	0.0	667,200.84	627,766.70	32° 50' 0.708 N	103° 55' 2.533 W
3,100.0	1.87	180.00	3,099.2	-52.6	0.0	667,197.58	627,766.70	32° 50' 0.676 N	103° 55' 2.533 W
3,200.0	1.87	180.00	3,199.1	-55.9	0.0	667,194.32	627,766.70	32° 50' 0.644 N	103° 55' 2.533 W
3,300.0	1.87	180.00	3,299.0	-59.1	0.0	667,191.05	627,766.70	32° 50' 0.611 N	103° 55' 2.534 W
3,400.0	1.87	180.00	3,399.0	-62.4	0.0	667,187.79	627,766.70	32° 50' 0.579 N	103° 55' 2.534 W
3,500.0	1.87	180.00	3,498.9	-65.7	0.0	667,184.53	627,766.70	32° 50' 0.547 N	103° 55' 2.534 W
3,600.0	1.87	180.00	3,598.9	-68.9	0.0	667,181.27	627,766.70	32° 50' 0.514 N	103° 55' 2.534 W
3,700.0	1.87	180.00	3,698.8	-72.2	0.0	667,178.00	627,766.70	32° 50' 0.482 N	103° 55' 2.534 W
3,800.0	1.87	180.00	3,798.8	-75.5	0.0	667,174.74	627,766.70	32° 50' 0.450 N	103° 55' 2.534 W
3,876.6	1.87	180.00	3,875.4	-78.0	0.0	667,172.24	627,766.70	32° 50' 0.425 N	103° 55' 2.534 W
3,900.0	1.52	180.00	3,898.7	-78.7	0.0	667,171.55	627,766.70	32° 50' 0.418 N	103° 55' 2.535 W
4,000.0	0.02	180.00	3,998.7	-80.0	0.0	667,170.21	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,001.3	0.00	0.00	4,000.0	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,100.0	0.00	0.00	4,098.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,200.0	0.00	0.00	4,198.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,300.0	0.00	0.00	4,298.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,400.0	0.00	0.00	4,398.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,500.0	0.00	0.00	4,498.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,600.0	0.00	0.00	4,598.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,700.0	0.00	0.00	4,698.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,800.0	0.00	0.00	4,798.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
4,900.0	0.00	0.00	4,898.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,000.0	0.00	0.00	4,998.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W

Database:	EDM5000	**Local Co-ordinate Reference:**	Well Jackson A #58
Company:	Burnett Oil Company	**TVD Reference:**	3755+19 @ 3774.0usft
Project:	Eddy County, N.M.	**MD Reference:**	3755+19 @ 3774.0usft
Site:	I-13-17S-30E	**North Reference:**	Grid
Well:	Jackson A #58	**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
5,100.0	0.00	0.00	5,098.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,200.0	0.00	0.00	5,198.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,300.0	0.00	0.00	5,298.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,400.0	0.00	0.00	5,398.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,500.0	0.00	0.00	5,498.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,600.0	0.00	0.00	5,598.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,700.0	0.00	0.00	5,698.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,800.0	0.00	0.00	5,798.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
5,900.0	0.00	0.00	5,898.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
6,000.0	0.00	0.00	5,998.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
6,100.0	0.00	0.00	6,098.7	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W
6,101.3	0.00	0.00	6,100.0	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W

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
Offset A 58 - plan hits target center - Point	0.00	0.00	4,000.0	-80.0	0.0	667,170.20	627,766.70	32° 50' 0.405 N	103° 55' 2.535 W

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mewbourne Oil Company**
LEASE NO.:	**NMLC0029338A**
WELL NAME & NO.:	GISSLER A 58
SURFACE HOLE FOOTAGE:	2360'/S & 480'/E
BOTTOM HOLE FOOTAGE	2310'/S & 330'/E
LOCATION:	Section 14, T.17 S., R.30 E., NMP
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 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

Casing Design:

1. The **8 5/8** inch surface casing shall be set at approximately **430** 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 **5-1/2** inch production casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess cement calculates to -7%, 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 to surface. If cement does not circulate see B.1.a, c-d above.

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.

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

e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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

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.

OTA05282020

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.

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 VP of Operations – Permian Basin/New Mexico	**Office - 817.583.8871** **Cell - 817.343.5567**
Tyler Deans Engineering Manager	**Office – 575.677.2313** **Cell – 432.553.4699**
Leslie Garvis Regulatory & Government Affairs Manager	**Office – 817.583.8730** **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 & 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