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.: NMNM0074939

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 B 14E 11L 1H

2. Name of Operator: BURNETT OIL COMPANY INCORPORATED

9. API Well No.: 30 015 47342

3a. Address: Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9, For

3b. Phone No. *(include area code)*: (817) 583-8730

10. Field and Pool, or Exploratory: LOCO HILLS/GLORIETA YESO

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

At surface: NWSW / 2199 FSL / 660 FWL / LAT 32.833282 / LONG -103.949036

At proposed prod. zone: NWSW / 2540 FSL / 660 FWL / LAT 32.848725 / LONG -103.949028

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 13/T17S/R30E/NMP

14. Distance in miles and direction from nearest town or post office*: 27 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): 660 feet

16. No of acres in lease: 240

17. Spacing Unit dedicated to this well: 160.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 336 feet

19. Proposed Depth: 6023 feet / 11373 feet

20. BLM/BIA Bond No. in file: FED: NMB000197

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3698 feet

22. Approximate date work will start*: 01/01/2020

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

25. Signature: (Electronic Submission)

Name *(Printed/Typed)*: LESLIE GARVIS / Ph: (817) 583-8730

Date: 12/12/2019

Title: Regulatory Coordinator

Approved by *(Signature)*: (Electronic Submission)

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

Date: 08/07/2020

Title: Assistant Field Manager Lands & Minerals

Office: 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

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 47342	96718	LOCO HILLS GLORIETA YESO

Property Code	Property Name	Well Number
X2389 328969	GISSLER B 14E 11L	1H

OGRID No.	Operator Name	Elevation
03080	BURNETT OIL COMPANY, INC.	3698'

Surface Location

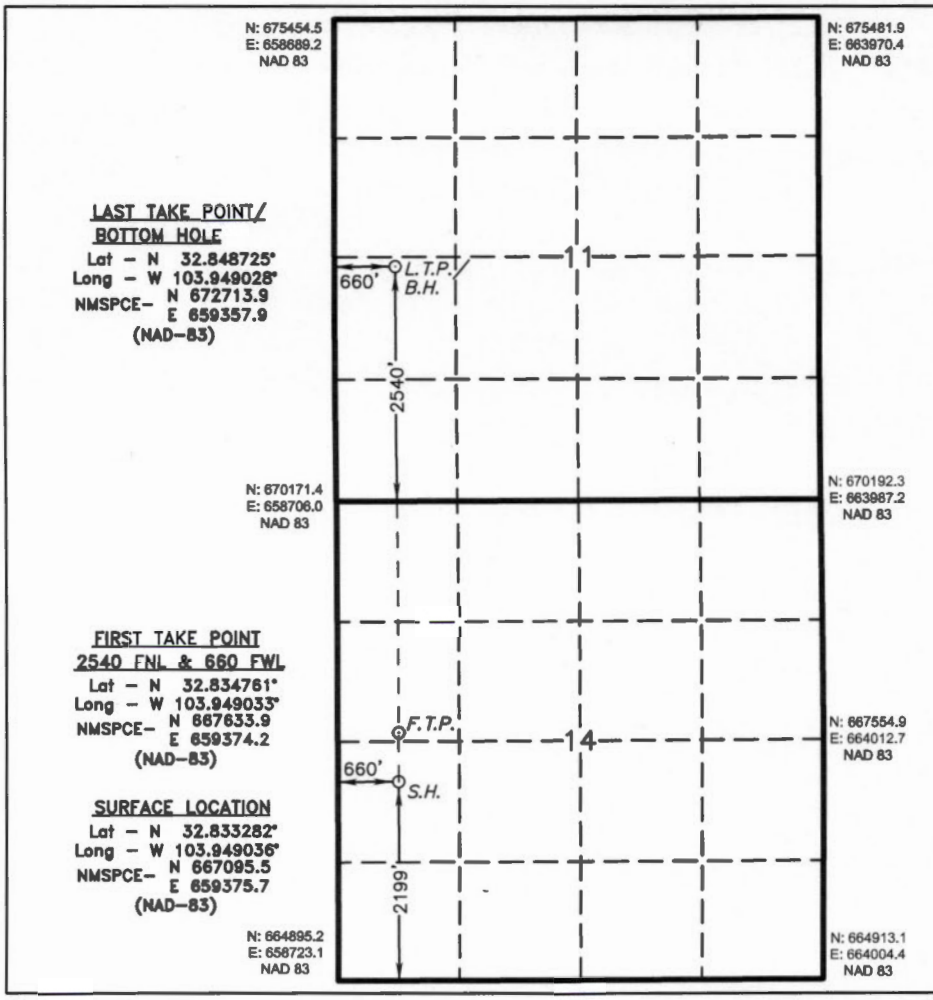
UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
L	14	17 S	30 E		2199	SOUTH	660	WEST	EDDY

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
L	11	17 S	30 E		2540	SOUTH	660	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



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 11/21/19

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.

NOVEMBER 1, 2019

Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number Gary L. Jones 7977

BASIN SURVEYS

0' 1000' 2000' 3000' 4000' N

SCALE: 1" = 2000'

WO Num.: 34927

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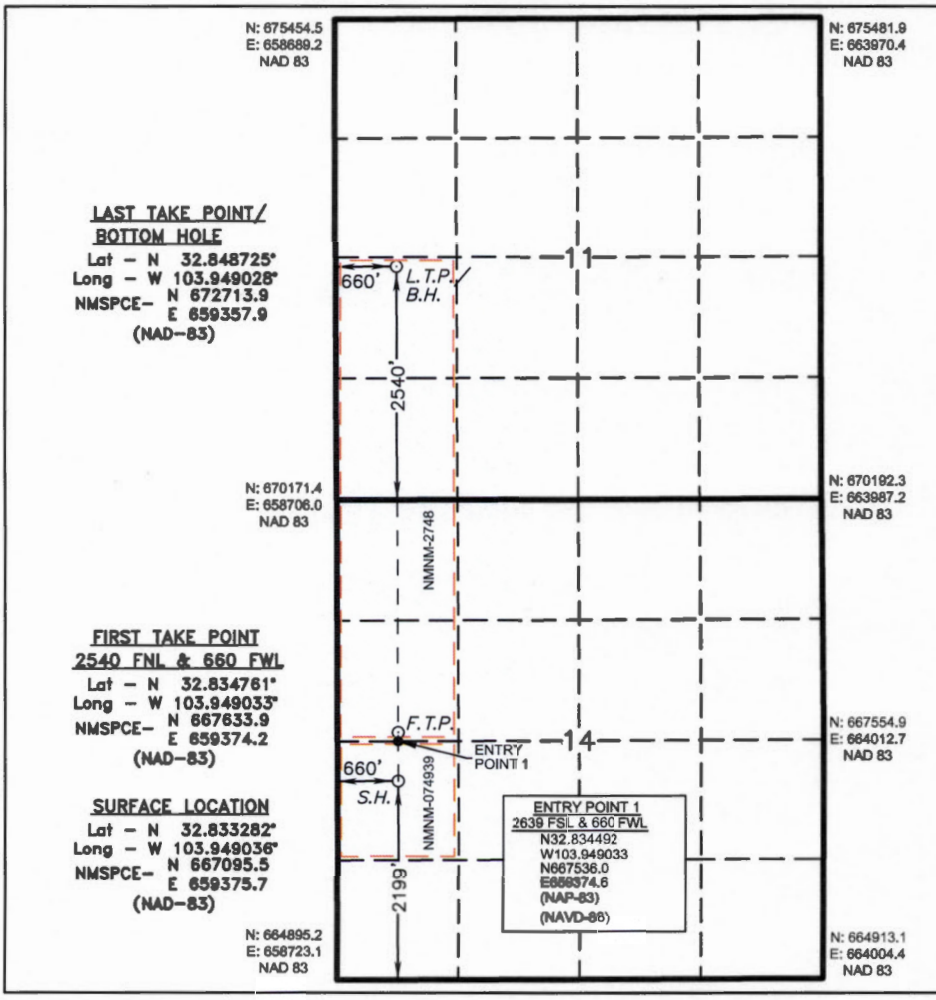

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Signature 11/21/19 Date

Leslie Garvis
Printed Name

lgarvis@burnettoil.com
Email Address

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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.

NOVEMBER 1, 2019
Date Surveyed

Signature & Seal of Professional Surveyor

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Certificate No. Gary L. Jones 7977 BASIN SURVEYS

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Submit Original
to Appropriate
District Office

GAS CAPTURE PLAN

Date: 8/17/20

☒ 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 B 14E 11L 1H	TBD	L-14+/5Q+10C	2199' FSL 660' FWL	400 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
GISSLER B 14E 11L 1H
HORIZONTAL LOCO HILLS GLORIETA YESO WELL
CONFIDENTIAL

1. Geological Name of Surface Formation with Estimated Depth:

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

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

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

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

(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)

a. Design Safety Factors:

Type	Hole Size	Depth Interval	OD CSG	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
Conductor	24”	0-90’	20”	Contractor	Discretion	----------	----------	----------	----------
Surface	17-1/2”	0-544’	13-3/8”	48#	ST&C	J-55	1.125	1.00	1.80
Intermediate	12-1/4”	0’-2000’	9-5/8”	36#	ST&C	J-55	1.125	1.00	1.80
Production	8-1/2”	0’-4800’	7”	26#	LT&C	L-80	1.125	1.00	1.80
	8-1/2”	4800’-11373’	5-1/2”	17#	LT&C	L-80	1.125	1.00	1.80

b. Surface Casing Info

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

c. Intermediate casing

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

d. Production casing

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

3. Cementing Program

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

a. 13 3/8" Surface Casing:

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

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

b. 9 5/8" Intermediate Casing:

- Cement to surface

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

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

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

4. Pressure Control Equipment:

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

5. Auxiliary Well Control and Monitoring Equipment:

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

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

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

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

6. Proposed Mud Circulation System (Closed Loop System)

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

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

Pason equipment will be used to monitor the mud system.

7. Logging, Coring and Testing program:

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

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

c. No open hole logs will be run.

8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in the production hole. Water flows can occur periodically at various depths in the production hole. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom hole pressure is 2680#. This is based upon the following formula of .445 x BH ft. estimate. The anticipated bottom hole temperature is 105°F. This is based upon logs of drilled wells surrounding this well.

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

9. Anticipated Start Date and Duration of Operation

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

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER B 14E 11L **Well Number:** 1H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumption_20191121091424.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumption_20191121091438.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	Other	0
SURFACE	Lead		0	544	330	1.75	13.5	576	100	ExtendaCem	CZ 0.1250 lbm Poly-E-Flake
SURFACE	Tail		0	544	340	1.35	14.8	457	100	HalCem 2% Calcium Chloride	flake
INTERMEDIATE	Lead		0	2000	475	1.75	13.5	831	50	ExtendaCem	CZ 0.1250 lbm Poly-E-Flake

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: GISSLER B 14E 11L **Well Number:** 1H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		0	2000	205	1.33	14.8	272	50	HalCem	0
PRODUCTION	Lead	4700	0	4800	1135	1.48	13	1680	20	PVL + 1.3% (BWOW) PF44 Salt + 5% PF174 Expanding Cement	+ 0.5% PF606 Fluidloss + 0.2% PF13 Retarder + 0.1%PF153 Antisettling + 0.4 pps PF45 Defoamer
PRODUCTION	Lead		4800	11373	305	1.82	12.9	555	35	35/65 PerLite/C	+ 5% (BWOW) PF44 Salt + 6% PF20 Bentonite + 0.2% PF13 Retarder + 3 pps PF42 Kol-Seal + 0.4 pps PF45 Defoamer + 0.125 pps PF29 Cellophane
PRODUCTION	Tail		4800	11373	150	1.48	13	222	35	PVL + 1.3% (BWOW) PF44 Salt + 5% PF174 Expanding Cement	+ 0.5% PF606 Fluidloss + 0.1% PF153 Antisettling + 0.4 pps PF45 Defoamer

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: The necessary mud products for weight addition and fluid loss will be on locations at all times.

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

Circulating Medium Table

COMPANY: Burnett Oil Company
WELL: Gissler B 14E-11L 1H
COUNTY: Eddy County, N.M. (NAD 83)
DATUM: North American Datum 1983
RIG:
GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 6.70°

STRYKER DIRECTIONAL
OFFICE: 936.582.7296

GEODETIC ZONE: New Mexico Eastern Zone
3698+19 @ 3717.0usft
GROUND ELEVATION: 3698.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	667096.30	659375.90	32° 49' 59.822 N	103° 56' 56.525 W	

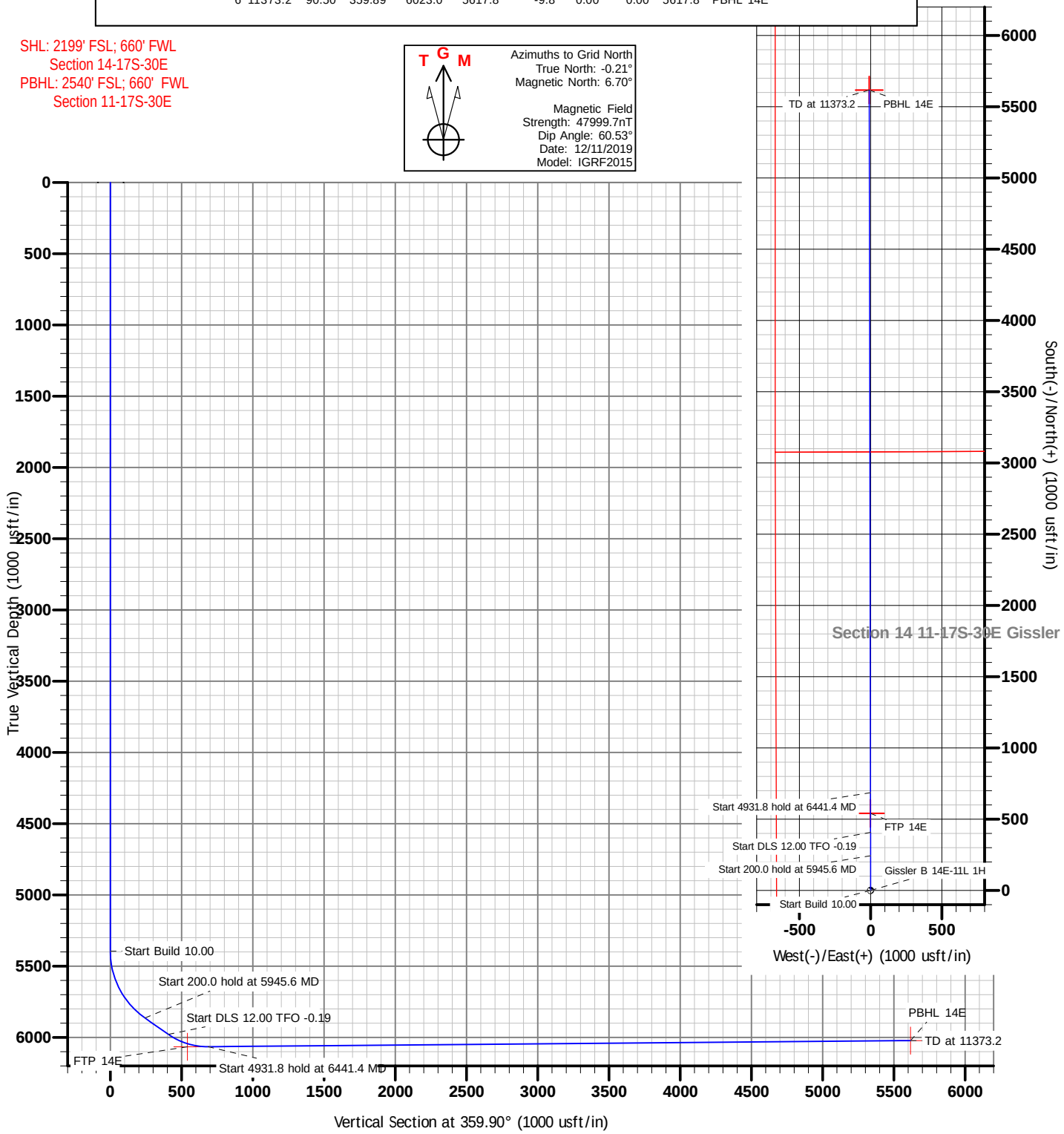
PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5395.6	0.00	0.00	5395.6	0.0	0.0	0.00	0.00	0.0	
3	5945.6	55.00	0.00	5864.9	244.3	0.0	10.00	0.00	244.3	
4	6145.6	55.00	0.00	5979.7	408.2	0.0	0.00	0.00	408.2	
5	6441.4	90.50	359.89	6066.0	686.2	-0.3	12.00	-0.19	686.2	
6	11373.2	90.50	359.89	6023.0	5617.8	-9.8	0.00	0.00	5617.8	PBHL 14E

SHL: 2199' FSL; 660' FWL
Section 14-17S-30E
PBHL: 2540' FSL; 660' FWL
Section 11-17S-30E

Azimuths to Grid North
True North: -0.21°
Magnetic North: 6.70°

Magnetic Field
Strength: 47999.7nT
Dip Angle: 60.53°
Date: 12/11/2019
Model: IGRF2015



Burnett Oil Company

Eddy County, N.M. (NAD 83)
Section 14 11-17S-30E Gissler
Gissler B 14E-11L 1H

Original Hole

Plan: Plan #2

Standard Planning Report

12 December, 2019

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

Project Eddy County, N.M. (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Section 14 11-17S-30E Gissler

Site Position:		**Northing:**	667,096.30 usft	**Latitude:**	32° 49' 59.822 N
From:	Map	**Easting:**	659,375.90 usft	**Longitude:**	103° 56' 56.525 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.21 °

Well Gissler B 14E-11L 1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	667,096.30 usft	**Latitude:**	32° 49' 59.822 N
	+E/-W	0.0 usft	**Easting:**	659,375.90 usft	**Longitude:**	103° 56' 56.525 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	19.0 usft	**Ground Level:**	3,698.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/11/19	6.91	60.53	47,999.65761881

Design Plan #2

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	359.90

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,395.6	0.00	0.00	5,395.6	0.0	0.0	0.00	0.00	0.00	0.00	
5,945.6	55.00	0.00	5,864.9	244.3	0.0	10.00	10.00	0.00	0.00	
6,145.6	55.00	0.00	5,979.7	408.2	0.0	0.00	0.00	0.00	0.00	
6,441.4	90.50	359.89	6,066.0	686.2	-0.3	12.00	12.00	-0.04	-0.19	
11,373.2	90.50	359.89	6,023.0	5,617.8	-9.8	0.00	0.00	0.00	0.00	PBHL 14E

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
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Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

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)
5,395.6	0.00	0.00	5,395.6	0.0	0.0	0.0	0.00	0.00	0.00
5,400.0	0.44	0.00	5,400.0	0.0	0.0	0.0	10.00	10.00	0.00
5,500.0	10.44	0.00	5,499.4	9.5	0.0	9.5	10.00	10.00	0.00
5,600.0	20.44	0.00	5,595.7	36.1	0.0	36.1	10.00	10.00	0.00
5,700.0	30.44	0.00	5,685.9	79.0	0.0	79.0	10.00	10.00	0.00
5,800.0	40.44	0.00	5,767.2	136.9	0.0	136.9	10.00	10.00	0.00
5,900.0	50.44	0.00	5,837.3	208.0	0.0	208.0	10.00	10.00	0.00
5,945.6	55.00	0.00	5,864.9	244.3	0.0	244.3	10.00	10.00	0.00
6,000.0	55.00	0.00	5,896.1	288.9	0.0	288.9	0.00	0.00	0.00
6,100.0	55.00	0.00	5,953.5	370.8	0.0	370.8	0.00	0.00	0.00
6,145.6	55.00	0.00	5,979.7	408.2	0.0	408.2	0.00	0.00	0.00
6,200.0	61.53	359.98	6,008.3	454.4	0.0	454.4	12.00	12.00	-0.05
6,300.0	73.53	359.94	6,046.4	546.6	-0.1	546.6	12.00	12.00	-0.04
6,400.0	85.53	359.90	6,064.5	644.8	-0.2	644.8	12.00	12.00	-0.03
6,441.4	90.50	359.89	6,066.0	686.2	-0.3	686.2	12.00	12.00	-0.03
6,500.0	90.50	359.89	6,065.5	744.7	-0.4	744.7	0.00	0.00	0.00
6,600.0	90.50	359.89	6,064.6	844.7	-0.6	844.7	0.00	0.00	0.00
6,700.0	90.50	359.89	6,063.7	944.7	-0.8	944.7	0.00	0.00	0.00
6,800.0	90.50	359.89	6,062.9	1,044.7	-1.0	1,044.7	0.00	0.00	0.00
6,900.0	90.50	359.89	6,062.0	1,144.7	-1.2	1,144.7	0.00	0.00	0.00
7,000.0	90.50	359.89	6,061.1	1,244.7	-1.4	1,244.7	0.00	0.00	0.00
7,100.0	90.50	359.89	6,060.2	1,344.7	-1.6	1,344.7	0.00	0.00	0.00
7,200.0	90.50	359.89	6,059.4	1,444.7	-1.8	1,444.7	0.00	0.00	0.00
7,300.0	90.50	359.89	6,058.5	1,544.7	-1.9	1,544.7	0.00	0.00	0.00
7,400.0	90.50	359.89	6,057.6	1,644.7	-2.1	1,644.7	0.00	0.00	0.00
7,500.0	90.50	359.89	6,056.8	1,744.7	-2.3	1,744.7	0.00	0.00	0.00
7,600.0	90.50	359.89	6,055.9	1,844.7	-2.5	1,844.7	0.00	0.00	0.00
7,700.0	90.50	359.89	6,055.0	1,944.7	-2.7	1,944.7	0.00	0.00	0.00
7,800.0	90.50	359.89	6,054.1	2,044.7	-2.9	2,044.7	0.00	0.00	0.00
7,900.0	90.50	359.89	6,053.3	2,144.7	-3.1	2,144.7	0.00	0.00	0.00
8,000.0	90.50	359.89	6,052.4	2,244.7	-3.3	2,244.7	0.00	0.00	0.00
8,100.0	90.50	359.89	6,051.5	2,344.7	-3.5	2,344.7	0.00	0.00	0.00
8,200.0	90.50	359.89	6,050.7	2,444.7	-3.7	2,444.7	0.00	0.00	0.00
8,300.0	90.50	359.89	6,049.8	2,544.7	-3.9	2,544.7	0.00	0.00	0.00
8,400.0	90.50	359.89	6,048.9	2,644.7	-4.1	2,644.7	0.00	0.00	0.00
8,500.0	90.50	359.89	6,048.0	2,744.7	-4.3	2,744.7	0.00	0.00	0.00
8,600.0	90.50	359.89	6,047.2	2,844.7	-4.5	2,844.7	0.00	0.00	0.00
8,700.0	90.50	359.89	6,046.3	2,944.7	-4.6	2,944.7	0.00	0.00	0.00
8,800.0	90.50	359.89	6,045.4	3,044.7	-4.8	3,044.7	0.00	0.00	0.00
8,900.0	90.50	359.89	6,044.6	3,144.7	-5.0	3,144.7	0.00	0.00	0.00
9,000.0	90.50	359.89	6,043.7	3,244.6	-5.2	3,244.7	0.00	0.00	0.00
9,100.0	90.50	359.89	6,042.8	3,344.6	-5.4	3,344.6	0.00	0.00	0.00
9,200.0	90.50	359.89	6,041.9	3,444.6	-5.6	3,444.6	0.00	0.00	0.00
9,300.0	90.50	359.89	6,041.1	3,544.6	-5.8	3,544.6	0.00	0.00	0.00
9,400.0	90.50	359.89	6,040.2	3,644.6	-6.0	3,644.6	0.00	0.00	0.00
9,500.0	90.50	359.89	6,039.3	3,744.6	-6.2	3,744.6	0.00	0.00	0.00
9,600.0	90.50	359.89	6,038.5	3,844.6	-6.4	3,844.6	0.00	0.00	0.00
9,700.0	90.50	359.89	6,037.6	3,944.6	-6.6	3,944.6	0.00	0.00	0.00
9,800.0	90.50	359.89	6,036.7	4,044.6	-6.8	4,044.6	0.00	0.00	0.00
9,900.0	90.50	359.89	6,035.8	4,144.6	-7.0	4,144.6	0.00	0.00	0.00
10,000.0	90.50	359.89	6,035.0	4,244.6	-7.2	4,244.6	0.00	0.00	0.00
10,100.0	90.50	359.89	6,034.1	4,344.6	-7.3	4,344.6	0.00	0.00	0.00
10,200.0	90.50	359.89	6,033.2	4,444.6	-7.5	4,444.6	0.00	0.00	0.00
10,300.0	90.50	359.89	6,032.4	4,544.6	-7.7	4,544.6	0.00	0.00	0.00

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,400.0	90.50	359.89	6,031.5	4,644.6	-7.9	4,644.6	0.00	0.00	0.00
10,500.0	90.50	359.89	6,030.6	4,744.6	-8.1	4,744.6	0.00	0.00	0.00
10,600.0	90.50	359.89	6,029.7	4,844.6	-8.3	4,844.6	0.00	0.00	0.00
10,700.0	90.50	359.89	6,028.9	4,944.6	-8.5	4,944.6	0.00	0.00	0.00
10,800.0	90.50	359.89	6,028.0	5,044.6	-8.7	5,044.6	0.00	0.00	0.00
10,900.0	90.50	359.89	6,027.1	5,144.6	-8.9	5,144.6	0.00	0.00	0.00
11,000.0	90.50	359.89	6,026.3	5,244.6	-9.1	5,244.6	0.00	0.00	0.00
11,100.0	90.50	359.89	6,025.4	5,344.6	-9.3	5,344.6	0.00	0.00	0.00
11,200.0	90.50	359.89	6,024.5	5,444.6	-9.5	5,444.6	0.00	0.00	0.00
11,300.0	90.50	359.89	6,023.6	5,544.6	-9.7	5,544.6	0.00	0.00	0.00
11,373.2	90.50	359.89	6,023.0	5,617.8	-9.8	5,617.8	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
PBHL 14E - plan hits target center - Point	0.00	0.00	6,023.0	5,617.8	-9.8	672,714.10	659,366.10	32° 50' 55.410 N	103° 56' 56.400 W
FTP 14E - plan misses target center by 20.4usft at 6300.0usft MD (6046.4 TVD, 546.6 N, -0.1 E) - Point	0.00	0.00	6,066.0	541.0	-1.7	667,637.30	659,374.20	32° 50' 5.176 N	103° 56' 56.522 W

Burnett Oil Company

Eddy County, N.M. (NAD 83)
Section 14 11-17S-30E Gissler
Gissler B 14E-11L 1H

Original Hole

Plan: Plan #2

Standard Planning Report - Geographic

12 December, 2019

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

Project Eddy County, N.M. (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Section 14 11-17S-30E Gissler

Site Position:		**Northing:**	667,096.30 usft	**Latitude:**	32° 49' 59.822 N
From:	Map	**Easting:**	659,375.90 usft	**Longitude:**	103° 56' 56.525 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.21 °

Well Gissler B 14E-11L 1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	667,096.30 usft	**Latitude:**	32° 49' 59.822 N
	+E/-W	0.0 usft	**Easting:**	659,375.90 usft	**Longitude:**	103° 56' 56.525 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	19.0 usft	**Ground Level:**	3,698.0 usft

Wellbore Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/11/19	6.91	60.53	47,999.65761881

Design Plan #2

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	359.90

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,395.6	0.00	0.00	5,395.6	0.0	0.0	0.00	0.00	0.00	0.00	
5,945.6	55.00	0.00	5,864.9	244.3	0.0	10.00	10.00	0.00	0.00	
6,145.6	55.00	0.00	5,979.7	408.2	0.0	0.00	0.00	0.00	0.00	
6,441.4	90.50	359.89	6,066.0	686.2	-0.3	12.00	12.00	-0.04	-0.19	
11,373.2	90.50	359.89	6,023.0	5,617.8	-9.8	0.00	0.00	0.00	0.00	PBHL 14E

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

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	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
100.0	0.00	0.00	100.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
200.0	0.00	0.00	200.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
300.0	0.00	0.00	300.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
400.0	0.00	0.00	400.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
500.0	0.00	0.00	500.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
600.0	0.00	0.00	600.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
700.0	0.00	0.00	700.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
800.0	0.00	0.00	800.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
900.0	0.00	0.00	900.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W
5,395.6	0.00	0.00	5,395.6	0.0	0.0	667,096.30	659,375.90	32° 49' 59.822 N	103° 56' 56.525 W

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,400.0	0.44	0.00	5,400.0	0.0	0.0	667,096.32	659,375.90	32° 49' 59.823 N	103° 56' 56.525 W
5,500.0	10.44	0.00	5,499.4	9.5	0.0	667,105.79	659,375.90	32° 49' 59.916 N	103° 56' 56.524 W
5,600.0	20.44	0.00	5,595.7	36.1	0.0	667,132.38	659,375.90	32° 50' 0.179 N	103° 56' 56.523 W
5,700.0	30.44	0.00	5,685.9	79.0	0.0	667,175.28	659,375.90	32° 50' 0.604 N	103° 56' 56.521 W
5,800.0	40.44	0.00	5,767.2	136.9	0.0	667,233.19	659,375.90	32° 50' 1.177 N	103° 56' 56.519 W
5,900.0	50.44	0.00	5,837.3	208.0	0.0	667,304.35	659,375.90	32° 50' 1.881 N	103° 56' 56.516 W
5,945.6	55.00	0.00	5,864.9	244.3	0.0	667,340.63	659,375.90	32° 50' 2.240 N	103° 56' 56.514 W
6,000.0	55.00	0.00	5,896.1	288.9	0.0	667,385.19	659,375.90	32° 50' 2.681 N	103° 56' 56.513 W
6,100.0	55.00	0.00	5,953.5	370.8	0.0	667,467.10	659,375.90	32° 50' 3.491 N	103° 56' 56.509 W
6,145.6	55.00	0.00	5,979.7	408.2	0.0	667,504.46	659,375.90	32° 50' 3.861 N	103° 56' 56.507 W
6,200.0	61.53	359.98	6,008.3	454.4	0.0	667,550.70	659,375.89	32° 50' 4.319 N	103° 56' 56.506 W
6,300.0	73.53	359.94	6,046.4	546.6	-0.1	667,642.94	659,375.82	32° 50' 5.231 N	103° 56' 56.503 W
6,400.0	85.53	359.90	6,064.5	644.8	-0.2	667,741.09	659,375.69	32° 50' 6.202 N	103° 56' 56.500 W
6,441.4	90.50	359.89	6,066.0	686.2	-0.3	667,782.48	659,375.61	32° 50' 6.612 N	103° 56' 56.499 W
6,500.0	90.50	359.89	6,065.5	744.7	-0.4	667,841.05	659,375.50	32° 50' 7.192 N	103° 56' 56.498 W
6,600.0	90.50	359.89	6,064.6	844.7	-0.6	667,941.05	659,375.30	32° 50' 8.181 N	103° 56' 56.496 W
6,700.0	90.50	359.89	6,063.7	944.7	-0.8	668,041.04	659,375.11	32° 50' 9.170 N	103° 56' 56.494 W
6,800.0	90.50	359.89	6,062.9	1,044.7	-1.0	668,141.04	659,374.92	32° 50' 10.160 N	103° 56' 56.492 W
6,900.0	90.50	359.89	6,062.0	1,144.7	-1.2	668,241.04	659,374.73	32° 50' 11.149 N	103° 56' 56.490 W
7,000.0	90.50	359.89	6,061.1	1,244.7	-1.4	668,341.03	659,374.53	32° 50' 12.139 N	103° 56' 56.488 W
7,100.0	90.50	359.89	6,060.2	1,344.7	-1.6	668,441.03	659,374.34	32° 50' 13.128 N	103° 56' 56.486 W
7,200.0	90.50	359.89	6,059.4	1,444.7	-1.8	668,541.02	659,374.15	32° 50' 14.118 N	103° 56' 56.484 W
7,300.0	90.50	359.89	6,058.5	1,544.7	-1.9	668,641.02	659,373.96	32° 50' 15.107 N	103° 56' 56.482 W
7,400.0	90.50	359.89	6,057.6	1,644.7	-2.1	668,741.02	659,373.76	32° 50' 16.097 N	103° 56' 56.480 W
7,500.0	90.50	359.89	6,056.8	1,744.7	-2.3	668,841.01	659,373.57	32° 50' 17.086 N	103° 56' 56.478 W
7,600.0	90.50	359.89	6,055.9	1,844.7	-2.5	668,941.01	659,373.38	32° 50' 18.076 N	103° 56' 56.476 W
7,700.0	90.50	359.89	6,055.0	1,944.7	-2.7	669,041.00	659,373.18	32° 50' 19.065 N	103° 56' 56.474 W
7,800.0	90.50	359.89	6,054.1	2,044.7	-2.9	669,141.00	659,372.99	32° 50' 20.054 N	103° 56' 56.472 W
7,900.0	90.50	359.89	6,053.3	2,144.7	-3.1	669,241.00	659,372.80	32° 50' 21.044 N	103° 56' 56.470 W
8,000.0	90.50	359.89	6,052.4	2,244.7	-3.3	669,340.99	659,372.61	32° 50' 22.033 N	103° 56' 56.468 W
8,100.0	90.50	359.89	6,051.5	2,344.7	-3.5	669,440.99	659,372.41	32° 50' 23.023 N	103° 56' 56.466 W
8,200.0	90.50	359.89	6,050.7	2,444.7	-3.7	669,540.98	659,372.22	32° 50' 24.012 N	103° 56' 56.464 W
8,300.0	90.50	359.89	6,049.8	2,544.7	-3.9	669,640.98	659,372.03	32° 50' 25.002 N	103° 56' 56.462 W
8,400.0	90.50	359.89	6,048.9	2,644.7	-4.1	669,740.98	659,371.84	32° 50' 25.991 N	103° 56' 56.460 W
8,500.0	90.50	359.89	6,048.0	2,744.7	-4.3	669,840.97	659,371.64	32° 50' 26.981 N	103° 56' 56.458 W
8,600.0	90.50	359.89	6,047.2	2,844.7	-4.5	669,940.97	659,371.45	32° 50' 27.970 N	103° 56' 56.456 W
8,700.0	90.50	359.89	6,046.3	2,944.7	-4.6	670,040.96	659,371.26	32° 50' 28.960 N	103° 56' 56.454 W
8,800.0	90.50	359.89	6,045.4	3,044.7	-4.8	670,140.96	659,371.06	32° 50' 29.949 N	103° 56' 56.452 W
8,900.0	90.50	359.89	6,044.6	3,144.7	-5.0	670,240.96	659,370.87	32° 50' 30.938 N	103° 56' 56.450 W
9,000.0	90.50	359.89	6,043.7	3,244.6	-5.2	670,340.95	659,370.68	32° 50' 31.928 N	103° 56' 56.448 W
9,100.0	90.50	359.89	6,042.8	3,344.6	-5.4	670,440.95	659,370.49	32° 50' 32.917 N	103° 56' 56.446 W
9,200.0	90.50	359.89	6,041.9	3,444.6	-5.6	670,540.94	659,370.29	32° 50' 33.907 N	103° 56' 56.444 W
9,300.0	90.50	359.89	6,041.1	3,544.6	-5.8	670,640.94	659,370.10	32° 50' 34.896 N	103° 56' 56.442 W
9,400.0	90.50	359.89	6,040.2	3,644.6	-6.0	670,740.94	659,369.91	32° 50' 35.886 N	103° 56' 56.440 W
9,500.0	90.50	359.89	6,039.3	3,744.6	-6.2	670,840.93	659,369.72	32° 50' 36.875 N	103° 56' 56.438 W
9,600.0	90.50	359.89	6,038.5	3,844.6	-6.4	670,940.93	659,369.52	32° 50' 37.865 N	103° 56' 56.436 W
9,700.0	90.50	359.89	6,037.6	3,944.6	-6.6	671,040.92	659,369.33	32° 50' 38.854 N	103° 56' 56.434 W
9,800.0	90.50	359.89	6,036.7	4,044.6	-6.8	671,140.91	659,369.14	32° 50' 39.844 N	103° 56' 56.432 W
9,900.0	90.50	359.89	6,035.8	4,144.6	-7.0	671,240.91	659,368.94	32° 50' 40.833 N	103° 56' 56.430 W
10,000.0	90.50	359.89	6,035.0	4,244.6	-7.2	671,340.90	659,368.75	32° 50' 41.822 N	103° 56' 56.428 W
10,100.0	90.50	359.89	6,034.1	4,344.6	-7.3	671,440.90	659,368.56	32° 50' 42.812 N	103° 56' 56.426 W
10,200.0	90.50	359.89	6,033.2	4,444.6	-7.5	671,540.89	659,368.37	32° 50' 43.801 N	103° 56' 56.424 W
10,300.0	90.50	359.89	6,032.4	4,544.6	-7.7	671,640.89	659,368.17	32° 50' 44.791 N	103° 56' 56.422 W
10,400.0	90.50	359.89	6,031.5	4,644.6	-7.9	671,740.89	659,367.98	32° 50' 45.780 N	103° 56' 56.420 W
10,500.0	90.50	359.89	6,030.6	4,744.6	-8.1	671,840.88	659,367.79	32° 50' 46.770 N	103° 56' 56.418 W

Database:	EDM5000	**Local Co-ordinate Reference:**	Site Section 14 11-17S-30E Gissler
Company:	Burnett Oil Company	**TVD Reference:**	3698+19 @ 3717.0usft
Project:	Eddy County, N.M. (NAD 83)	**MD Reference:**	3698+19 @ 3717.0usft
Site:	Section 14 11-17S-30E Gissler	**North Reference:**	Grid
Well:	Gissler B 14E-11L 1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,600.0	90.50	359.89	6,029.7	4,844.6	-8.3	671,940.88	659,367.60	32° 50' 47.759 N	103° 56' 56.416 W
10,700.0	90.50	359.89	6,028.9	4,944.6	-8.5	672,040.87	659,367.40	32° 50' 48.749 N	103° 56' 56.414 W
10,800.0	90.50	359.89	6,028.0	5,044.6	-8.7	672,140.87	659,367.21	32° 50' 49.738 N	103° 56' 56.412 W
10,900.0	90.50	359.89	6,027.1	5,144.6	-8.9	672,240.87	659,367.02	32° 50' 50.728 N	103° 56' 56.410 W
11,000.0	90.50	359.89	6,026.3	5,244.6	-9.1	672,340.86	659,366.82	32° 50' 51.717 N	103° 56' 56.408 W
11,100.0	90.50	359.89	6,025.4	5,344.6	-9.3	672,440.86	659,366.63	32° 50' 52.706 N	103° 56' 56.406 W
11,200.0	90.50	359.89	6,024.5	5,444.6	-9.5	672,540.85	659,366.44	32° 50' 53.696 N	103° 56' 56.404 W
11,300.0	90.50	359.89	6,023.6	5,544.6	-9.7	672,640.85	659,366.25	32° 50' 54.685 N	103° 56' 56.402 W
11,373.2	90.50	359.89	6,023.0	5,617.8	-9.8	672,714.10	659,366.10	32° 50' 55.410 N	103° 56' 56.400 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
PBHL 14E - plan hits target center - Point	0.00	0.00	6,023.0	5,617.8	-9.8	672,714.10	659,366.10	32° 50' 55.410 N	103° 56' 56.400 W
FTP 14E - plan misses target center by 20.4usft at 6300.0usft MD (6046.4 TVD, 546.6 N, -0.1 E) - Point	0.00	0.00	6,066.0	541.0	-1.7	667,637.30	659,374.20	32° 50' 5.176 N	103° 56' 56.522 W

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Mewbourne Oil Company**
LEASE NO.:	**NMNM0074939**
WELL NAME & NO.:	GISSLER B 14E 11L1H
SURFACE HOLE FOOTAGE:	2199'/S & 660'/W
BOTTOM HOLE FOOTAGE	2540'/S & 660'/W
LOCATION:	Section 13, T.17 S., R.30 E., NMP
COUNTY:	Eddy County, New Mexico

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 **9-5/8** inch intermediate casing shall be set at approximately **2000** feet. 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.

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.

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 did not tie-back at least 200 feet into previous casing string 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.

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 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.

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.

Tyler Deans – Engineering Manager **Cell – 423.553.4699**

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**

Leslie Garvis **Office – 817.583.8730**
Regulatory & 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 & 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