Form 3160-5 (June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137

DUDEAU OF LAND MANACEMENT	Expires: January 31, 2018		
BUREAU OF LAND MANAGEMENT	5. Lease Serial No.		
SUNDRY NOTICES AND REPORTS ON WELLS	NMLC029338A		
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.	6. If Indian, Allottee or Tribe Name		

abandoned wel	l. Use form 3160-3 (API	D) for such prop	osals.		o. If Indian, Another of	THE Name
SUBMIT IN 1	RIPLICATE - Other inst	ructions on pag	e 2		7. If Unit or CA/Agreen	ment, Name and/or No.
1. Type of Well Gas Well Oth		8. Well Name and No. GISSLER A 50				
Name of Operator     BURNETT OIL COMPANY INC		LESLIE GARVIS rnettoil.com			9. API Well No. 30-015-43528-00	)-X1
3a. Address 801 CHERRY STREET UNIT FORT WORTH, TX 76102-68		10. Field and Pool or E LOCO HILLS-QU				
4. Location of Well (Footage, Sec., T.		)			11. County or Parish, S	tate
Sec 14 T17S R30E NENE 102	20FNL 990FEL			A REF	C'EDDY COUNTY	ENM
12. CHECK THE AP	PPROPRIATE BOX(ES)	TO INDICATE 1	NATURE O	F NOTICE,	REPORT, OR OTH	ER DATA
TYPE OF SUBMISSION			TYPE OF	ACTION		
Notice of Intent	☐ Acidize	□ Deepen		☐ Producti	on (Start/Resume)	☐ Water Shut-Off
<del>-</del>	☐ Alter Casing	🗖 Hydrauli	c Fracturing	□ Reclama	tion	■ Well Integrity
☐ Subsequent Report	Casing Repair	■ New Cor	struction	□ Recomp	lete	Other
☐ Final Abandonment Notice	Change Plans	Plug and	Abandon	☐ Tempora	rily Abandon	Change to Original A PD
	☐ Convert to Injection	Plug Bac	k	□ Water D	isposal	
following completion of the involved testing has been completed. Final Ab determined that the site is ready for fit.  Burnett Oil would like to change From/To  1. 10-3/4" Surface Casing to 8 2. 7" Production Casing to 5-1.  See attached revised Drilling F	nandonment Notices must be fil nal inspection. ge the casing on the well: -5/8" Surface Casing /2" Surface Casing	ed only after all requi	rements, includ	ing reclamation	, have been completed an	nd the operator has
See attached revised Drilling F	riaii.				710 7 0 7 20	,,,
All previous SOA	sshllapple	1-		0	NSTRICT (I-ARTES)	A O.C.D.
14. I dereby certify that the foregoing is	Electronic Submission #	OIL COMPANY IN	C, sent to the	e Carlsbad	•	
Name (Printed/Typed) LESLIE G	ARVIS	Titl	Title REGULATORY MANAGER			
Signature (Electronic S	Submission)	Dat	e 09/26/2	018		
	THIS SPACE FO	R FEDERAL C	RSTATE	OFFICE US	SE	
Approved By ZOTA STEVENS  Conditions of approval, if any, are attached certify that the applicant holds legal or equ		not warrant or	lePETROLE	UM ENGINE	ER	Date 11/04/2018
which would entitle the applicant to condu	ct operations thereon.	Of	fice Carlsbac	<u> </u>		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s				willfully to ma	ke to any department or a	agency of the United



# DRILLING PLAN Gissler A 50

# SHL/BHL: 1020' FNL, 990' FEL, Unit A, Sec. 14, T17S, R30E VERTICAL CEDAR LAKE GLORIETA YESO WELL

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

<b>Geological Name</b>	<b>Estimate Top</b>	Anticipated Fresh Water, Oil or Gas
a. Alluvium	Surface	Fresh Water, Sand
b. Anhydrite	284'	
c. Salt	541'	
d. Base Salt	1186'	
e. Yates	1352'	
f. Seven Rivers	1645'	Oil
g. Queen	2250'	Oil
h. Grayburg	2647'	Oil
i. San Andres	2973'	Oil
j. Glorieta	4430'	Oil
k. Yeso	4514'	Oil
I. 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. 520' 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	<u>Interval</u>	OD Csg	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	Collapse Design <u>Factor</u>	Burst Design <u>Factor</u>	Tension Design <u>Factor</u>
Conductor		0'-90'	14"	Contr	actor Disc	cretion			
Surface	12-1/4"	0' - +/- 520'	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

# DRILLING PLAN VERTICAL LOCO HILLS GLORIETA YESO WELL

#### b. Surface Casing Info

The proposed casing setting depth is +/- 520' 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 ppg, 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 (Defaomer), mixed at 12.5 ppg, Yield 2.11 with 11.364 gal water per sack.

**Tail:** 330 sx C +0.3%PF13 (Retarder), mixed at 14.8 ppg, 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 (Kolseal) +0.4#/sx PF45 (Defaomer), mixed at 12.5 ppg, Yield 2.11 with 11.362 gal water per sack.

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

140% excess cement.

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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) shown in **Exhibit L** 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.

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.
- 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

<u>Depth</u>	Mud Wt	<u>Visc</u>	Fluid Loss	Type System	Max Volume
0' - +/-520'	8.6 - 9.5			Fresh Water	
+/- 520' - TD' MD	10.0 max			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.

# DRILLING PLAN VERTICAL LOCO HILLS GLORIETA YESO WELL

#### 8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in production 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 2715#. 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 wells in this area.

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 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.