Form 3160-3 (June 2015) **UNITED STATES** DEPARTMENT OF THE INTERIOR

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

# 5. Lease Serial No.

BUREAU OF LAND MAN	AGEMI	ENT		NIVILCUU55958		
APPLICATION FOR PERMIT TO D	ORILL C	OR REENTER		6. If Indian, Allotee	or Tribe N	Name
1a. Type of work: P DRILL	REENTER			7. If Unit or CA Agr	eement, N	Name and No.
1b. Type of Well: Oil Well Gas Well C	Other			8. Lease Name and V	Vell No	
1c. Type of Completion: Hydraulic Fracturing S	lingle Zone	e  Multiple Zone		STEVENS B	Ven 140.	
2. Name of Operator BURNETT OIL COMPANY INCORPORATED				9. API Well No. 30 015 47496		
3a. Address	3b. Pho	ne No. (include area code	e)	10. Field and Pool, o	r Explora	atory
Burnett Plaza - Suite 1500, 801 Cherry Street - Unit 9, Fo	r (817) 5	83-8730		CEDAR LAKE/GLO	RIETA	YESO
<ol> <li>Location of Well (Report location clearly and in accordance         At surface NWNW / 330 FNL / 990 FWL / LAT 32.840         At proposed prod. zone NWNW / 330 FNL / 990 FWL / I</li> </ol>	837 / LOI	NG -103.930755	0755	11. Sec., T. R. M. or SEC 13/T17S/R30I		Survey or Area
14. Distance in miles and direction from nearest town or post of	fice*			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)	16. No	of acres in lease	17. Spacin	g Unit dedicated to th	nis well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 520 feet	1 1	20. Proposed Depth 20. BLM/BIA Bond No. in file FED: NMB000197				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3732 feet	11/30/2		start*	23. Estimated duration 10 days	on	
	24. A	ttachments				
The following, completed in accordance with the requirements of (as applicable)	of Onshore	Oil and Gas Order No. 1	, and the H	ydraulic Fracturing ru	ıle per 43	CFR 3162.3-3
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syste SUPO must be filed with the appropriate Forest Service Office</li> </ol>		Item 20 above). the 5. Operator certific	ation.	s unless covered by an mation and/or plans as		
25. Signature (Electronic Submission)		ame (Printed/Typed) ESLIE GARVIS / Ph: (8	317) 583-8	730	Date 12/05/2	019
Title Regulatory Coordinator	'					
Approved by (Signature) (Electronic Submission)		ame (Printed/Typed) ody Layton / Ph: (575)	234-5959		Date 09/11/2	020
Title Assistant Field Manager Lands & Minerals	Ca	ffice arlsbad Field Office		-		
Application approval does not warrant or certify that the applica applicant to conduct operations thereon.  Conditions of approval, if any, are attached.	nt holds le	gal or equitable title to th	ose rights i	n the subject lease wh	nich woul	d entitle the

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

**Approval Date: 09/11/2020** 

of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption APPROVED WITH CONDITIONS through the fresh water zone or zones and shall immediately set in cement the w protection string

Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

KP 9/21/2020 GEO Review

\*(Instructions on page 2)

SL

(Continued on page 2)

Entered - KMS NMOCD

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone (575) 393-8161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone (575) 748-1283 Fax: (575) 748-9720 DISTRICT III

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised August 13, 2011

Submit one copy to appropriate District Office

# OIL CONSERVATION DIVISION

1220 South St. Francis Dr. 1000 Rio Brazos Rd., Azteo, NM 87410 Phone (606) 334-6176 Fax: (608) 334-6170 Santa Fe. New Mexico 87505 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87606 Phone (508) 478-3469 Fax: (508) 478-2462 ☐ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Name API Number Pool Code 96831 CEDAR LAKE GLORIETA YESO 30 015 47496 Property Code Property Name Well Number 33178 STEVENS B 9 03080 No. Operator Name Elevation 3732 BURNETT OIL COMPANY, INC. Surface Location UL or lot No. Section Township Range Lot Idn FEET from the North/South line FEET from the East/West line County D 17 S 13 30 E 330 NORTH 990 WEST **EDDY** Bottom Hole Location If Different From Surface UL or lot No. Section Township Range Lot Idn FEET from the North/South line FEET from the East/West line County Dedicated Acres Joint or Jafill Consolidation Code Order No. NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED N: 670192.3 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 663987.3 NAD 83 3743.5 3738.5 N: 670199.2 OPERATOR CERTIFICATION E: 666626.7 E: 669266.2 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 winer of such a mineral or working interest, or to a voluntary pooling agreement or a compulsoup pooling order heretofore entered by the division. NAD 83 NAD 83 gan 3728.81 3734.2' SURFACE LOCATION Lat - N 32.840837 Long - W 103.930755 NMSPCE- N 669865.0 E 664980.2 (NAD-83) 12/5/19 Signature Date Leslie Garvis Printed Name Igarvis@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 DECEMBER. Orth, 2013 correct to the best of my belief. veyed MEXICO Signature & Sect of Professional Surveyor Certifica 7977 2000 0' 500' 1000 1500' 664913.1 N: 664925.4 E: 669283.1 SCALE: 1" = 1000' 664004.5 NAD 83 WO Num .: 29755 NAD 83

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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

Submit Original to Appropriate District Office

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

#### GAS CAPTURE PLAN

Date: 9/15/2020		
X Original	Operator & OGRID No.:	Burnett Oil Co., Inc./ 03080
☐ Amended - Reason for Amendment:		

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
Stevens B 9	TBD	D-13 <b>Ž#) EŽ%07</b>	330' FNL 990' FWL	300 MCF		Will go to gas sales line, first day of production
						, 1

# **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 <u>DCP</u> and will be connected to <u>DCP</u> 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. <u>Burnett Oil Co., Inc.</u> provides (periodically) to <u>DCP</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Burnett Oil Co., Inc.</u> and <u>DCP</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>DCP Linam Ranch</u> Processing Plant located in Sec.<u>6</u>, Twn.<u>19S</u>, Rng.<u>37E</u>, <u>Lea</u> 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 <u>DCP Gas</u> system at that time. Based on current information, it is <u>Burnett's</u> belief the system can take this gas upon completion of the well(s). <u>NOTE</u>: 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
  - o Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

**Operator Name:** BURNETT OIL COMPANY INCORPORATED

Well Name: STEVENS B Well Number: 9

2M\_BOP\_20200817153329.pdf

**BOP Diagram Attachment:** 

2M\_BOP\_20200817153338.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
	CONDUCT OR	20	14.0	NEW	API	N	0	90	0	90	3732	3642		OTH ER	0	N/A						
2	SURFACE	12.2 5	8.625	NEW	API	N	0	415	0	415	3732	3317	415	J-55	24	ST&C	1.12 5	1	DRY	1.8	DRY	1.8
	PRODUCTI ON	7.87 5	5.5	NEW	API	N	0	6200	0	6200	3691	-2468	6200	J-55	17	LT&C	1.12 5	1	DRY	1.8	DRY	1.8

# **Casing Attachments**

Casing ID: 1	String Type: CONDUCTOR
•	<b>O J</b> .

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Casing Design Assumptions and Worksheet(s):

Operator Name: 8	BURNE	ETT OIL	_ COM	PANY I	INCOR	PORA	TED				
Well Name: STEV	/ENS B	3					Wel	l Numi	ber: 9		
Casing Attachme	nts										
Casing ID: 2			tring T	Гуре:S	URFA(	CE					
Spec Docume	ent:										
Tapered Strin	g Spec	<b>:</b> :									
Casing Design		-			·	•					
Casing ID: 3			tring 1	Гуре:Р	RODU	CTION					
Spec Docume	ent:										
Tapered Strin	g Spec	<b>;</b> :									
Casing Design	n Assu	ımptior	ns and	l Works	sheet(	s):					
Casing_/	Assum	ption_2	01910	181256	315.pdf						
Section	4 - Ce	emen	t								
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead	0, 2	0	90	0	0	0	0	0	Contractor Discretion	0
										Disciplion	
SURFACE	Lead		0	415	330	1.34	14.8	442	100	C+2% PF1 (Calcium Chloride)	PF424 (Water Gelling Agent)
PRODUCTION	Lead		0	6200	340	2.11	12.5	717	140	35/65 P/C	+ 5% PF44 (BWOW)(Salt) +6%

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: STEVENS B Well Number: 9

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
											(Bentonite Gel)+0.2% PF153 (Anti Settling) +0.125#/sxPF29Cellofla ke) +3#/sxPF42 (Kolseal)+0.4#/sx PF45
PRODUCTION	Tail		0	6200	200	1.32				C Neat	N/A
PRODUCTION	Lead	2600	0	6200	260	2.11	12.5	548	30	35/65 P/C	+5% PF 44 (BWOW)(Salt)+6% (Bentonite Gel) +0.2%PF153 (Anti Settling). +0.3% PF13 (Retarder) +0.1 25#/sx PF29(Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx
PRODUCTION	Tail		0	6200	330	1.33	14.8	4.8	30	Class C	+0.3%PF13 (Retarder)

# **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)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	415	OTHER : Fresh Water	8.6	9.5							

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** | Mewbourne Oil Company

LEASE NO.: NMLC0055958
WELL NAME & NO.: STEVENS B 9

**SURFACE HOLE FOOTAGE:** 330'/N & 990'/W **BOTTOM HOLE FOOTAGE** 330'/N & 990'/W

**LOCATION:** | Section 13, T.17 S., R.30 E., NMPM

**COUNTY:** Eddy County, New Mexico

COA

H2S	• Yes	O No	
Potash	None	<ul><li>Secretary</li></ul>	© R-111-P
Cave/Karst Potential	• Low	O Medium	O High
Cave/Karst Potential	O Critical		
Variance	None	© Flex Hose	Other
Wellhead	Conventional	O Multibowl	OBoth
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	□ СОМ	☐ 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 **415** 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 -9%, 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
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a

digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing 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.

OTA09022020

Page 7 of 7



# **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.



# **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 <u>Formula</u>	Specific <u>Gravity</u>	Threshold <u>Limit</u>	Hazardous Limit	Lethal <u>Concentration</u>
Hydrogen Sulfide	H2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO2	2.21 Air = 1	2 ppm	NA	1000 ppm

#### D. Contacting Authorities

Burnett Oil Co., Inc. 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.



### **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
 Office - 575.677.2313

 Engineering Manager
 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