OCD Artesia Form 3160-3 FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014 (March 2012) UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NMNM074939 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No DRILL REENTER la. Type of work: 8. Lease Name and Well No. lb. Type of Well: ✓ Oil Well Gas Well ✓ Single Zone Multiple Zone Gissler B 95 9. API Well No. Name of Operator Burnett Oil Co., Inc. Address 3b. Phone No. (include 801 Cherry Street, Suite 1500 817-332-5108 x6326 Fort Worth, Texas 76102 Cedar Lake Glorieta Yeso 11. Sec., T. R. M. or Blk. and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State At surface 330' FNL & 330' FWL, Unit D Section 24, T. 17S, R. 30E At proposed prod. zone MAR 06 2013 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* Eddy NM Approximately 2 Miles North of Loco Hills, NM NMOCD ARTES! Distance from proposed* cing Unit dedicated to this well 15 16. I 240 location to nearest 40 property or lease line, ft (Also to nearest drig, unit line, if any) 20. BLM/BIA Bond No. on file 18. Distance from proposed location* to nearest well, drilling, completed, 19. Proposed Depth NM-B000197 6100' TVD applied for, on this lease, ft. 6100' MD Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3679' GL 03/14/2013 30 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Operator certification SUPO must be filed with the appropriate Forest Service Office) Such other site specific information and/or plans as may be required by the Name (Printed/Typed) Date Leslie M. Garvis 02/20/2013 Regulatory Coordinator Approved by (Signature) | Don Peterson Date MAR Name (Printed/Typed) 2013 Title Office FIFT TYANAGER 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. APPROVAL FOR TWO YEARS 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

Roswell Controlled Water Basin

(Continued on page 2)

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

Approval Subject to General Requirements

& Special Stipulations Attached

*(Instructions on page 2)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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 Far: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised August 1, 2011

Submit one copy to appropriate District Office

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

30-0/5	30-015-41176			Pool Code		Pool Name Cedar Lake Glorieta Yeso			
Property 2389	- ·			Property Nam GISSLER	• • • • • • • • • • • • • • • • • • •			umber	
03080	o. ,		Operator Name BURNETT OIL COMPANY, INC.				Elevation 3679'		
			_		Surface Loca	ation	-		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	24	.17 S	30 E		330	NORTH	330	WEST	EDDY
	<u> </u>		Bottom	Hole Loc	cation If Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D-3:1-3 4	Taint -	r Infill Co	1:3-4:	7-4- 1: 0-	J N			·	<u> </u>
Dedicated Acres	s agint c	or mini Co	nsolidation (Code Or	der No.				

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

1070 11 7000 12			777
3670 1' 3698 1'	SURFACE LOCATION Lat - N 32.826210914* Long - W 103.932411948* NMSPCE- N 664520.226 E 623156.600 (NAD-27)		N.: 664861.7 E.: 628104.3 NAD 27 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 compulsery pooling from heretofore entered by the division.
	+		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 correct to the best of my belief. Date Surveyed Market Standard Contract Standard Contract Co
N.: 659569.1 E.: 622842.1 NAD 27			N.: 659582.8 E:: 628119.9 NAD 27 BASIN SURVEYS 27900



FINAL CERTIFICATION MEMO

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that Burnett Oil Co. Inc. is responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 29 day of 2012.

Sianed:

Printed Name: Mark A. Jacoby

Position: VP of Production, Permian Basin

Company: Burnett Oil Co., Inc.

Address: 801 Cherry Street, Suite 1500, Unit #9, Fort Worth, Texas 76108

Telephone: 817.332.5108 Email: mjacoby@burnettoil.com



BURNETT OIL CO., INC.

DRILLING PLAN ALL VERTICAL LOCO HILLS & CEDAR LAKE GLORIETA YESO WELLS

1. Geological Name of Surface Formation with Estimated Depth:

Geological Name	Estimate Top	Anticipated Fresh Water, Oil or Gas
a. Alluvium	Surface	Fresh Water, Sand
b. Anhydrite	216'	
c. Salt	430'	
d. Base Salt	1168'	
e. Yates	1334'	
f. Seven Rivers	1629'	Oil
g. Queen	2252'	Oil
h. Grayburg	2643'	Oil
i. San Andres	3011'	Oil
j. Glorieta	4505'	Oil
k. Yeso	4597'	Oil
 Total Depth 	Refer to APD	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Deepest water is expected to be above 400'. We will set 10-3/4" casing @ approx. +/- 410' in the Anhydrite, above the salt and circulate cement to surface.

We will isolate the oil zones by running 7" casing to total depth and circulating cement to surface.

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

(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)

a. Design Safety Factors:

<u>Type</u>	<u>Hole</u> Size	<u>interval</u>	OD Csg	<u>Weight</u>	Collar	<u>Grade</u>	Collapse Design <u>Factor</u>	Burst Design <u>Factor</u>	Tension Design <u>Factor</u>
Conductor	24"	0'-90'	16"	Contr	actor Disc	cretion			
Surface	14-3/4"	0' - 410'	10-3/4"	32.75#	ST & C	H40	1.125	1.00	1.80
Production	8-3/4"	0' - TD	7"	23.00#	LT & C	J55	*1.125	1.00	1.80

DRILLING PLAN ALL VERTICAL LOCO HILLS & CEDAR LAKE GLORIETA YESO WELLS

* 500' of fresh water gradient (.433 psi/ft) fluid will be maintained inside casing to keep SF 1.125. We will assure that the casing will be kept liquid filled in order to meet the SF collapse standard.

Sec COA

b. Surface Casing Info

The proposed casing setting depth is 410' based on the attached cross sections which show the estimated top of the rustler and top of salt (See enclosed disc). 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 has drilled many wells in this area and is able to easily identify the hard streak on the top of the salt.

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. 10-3/4" Surface Cement to surface

- Lead with 150 sx Class C thix. cement + 10#/sk Cal-Seal 60 (Accelerator), +10#/sx LCM, 1% CaCl, 0.125#/sk Poly-E-Flake (LC), 14.2 ppg, 1.67 CF/Sk Yield.
- Tail with 250 sks Class C cement + 2% CaCl.14.2 ppg, <u>1.35 CF/Sx yield</u>. <u>TOC Surface</u>. Excess cement 100%.

If cement does not circulate to surface, BLM will be notified of same, plus the plans 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. 7" Production Casing

Stage 1 Cement: 550 sks VERSACEM – C (50:50 Poz (Fly Ash): Class C cement + 2% Bentonite) + 0.4% LAP-1 (FLC) + 0.3 % CFR-3 (Disp) + .025 lb/sk D-Air 5000 + 3 lb/sx Kol-Seal (LC) + 0.125 lb/sk Poly-E-Flake (LC) . 14.2 ppg, <u>Yield 1.28 CF/Sx.</u> **DV @ approx. 2600'. 30% excess cement.**

Stage 2 Cement: Lead with 525 sks/ ECONOCEM (35:65) Poz (Fly Ash): Class C cement + 6% Bentonite) + .125 lbs/sx Poly-E-Flake (LC) + 2% CaCl, , 12.7 ppg, <u>Yield 1.87 CF/Sx</u>. Tail with 100 sx Class C + 2% CaCl. 14.8 ppg, <u>Yield 1.32 CF/sx</u>, <u>TOC Surface</u>. 140% excess cement.

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

4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) shown in **Exhibits G & H** 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 10-3/4" 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

See COA

DRILLING PLAN ALL VERTICAL LOCO HILLS & CEDAR LAKE GLORIETA YESO WELLS

accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating.

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 7" 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' - 410'	8.6 - 9.5			Fresh Water	•
410' - 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: See CBA

- 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 subsequent to setting the 7" production casing. The specific Intervals will be based on log evaluation, geological sample shows and drill stem tests.

8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in production 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 drilled wells surrounding this well

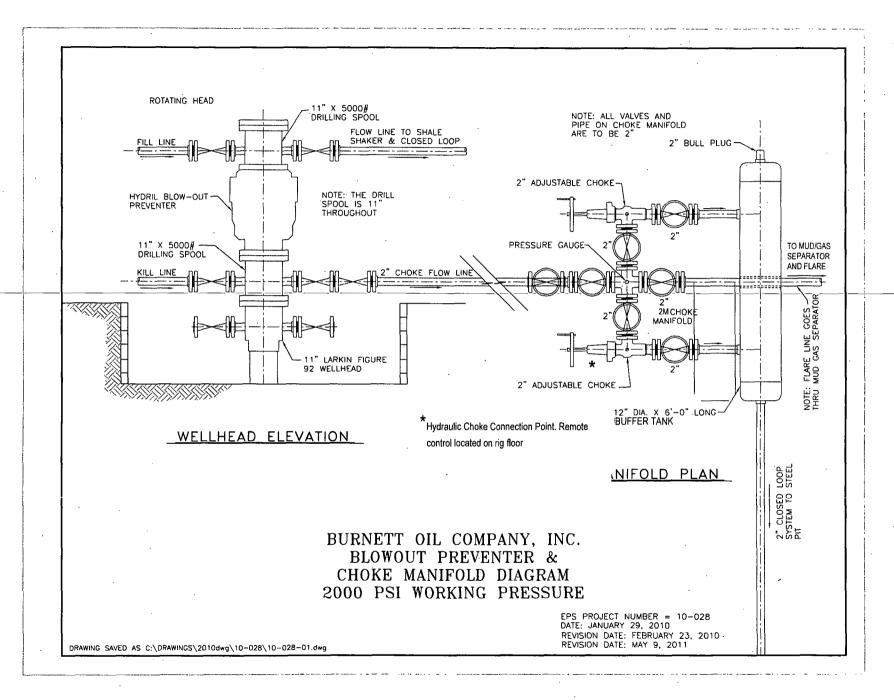
See

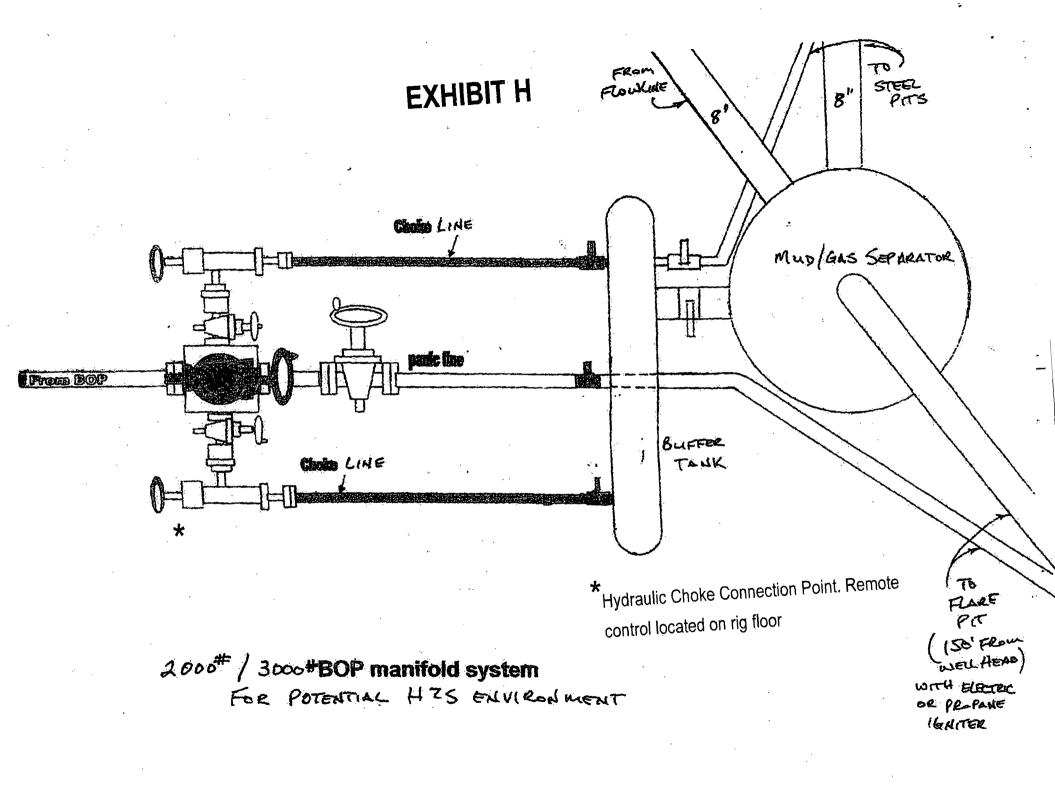
There is known H2S in this area. In the event that it is necessary to follow the H2S plan, a remote choke will be installed as required in Onshore Order 6. Refer to the attached H2S plan for details.

DRILLING PLAN ALL VERTICAL LOCO HILLS & CEDAR LAKE GLORIETA YESO WELLS

9. Anticipated Start Date and Duration of Operation

Road and location construction will be gin 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 and drilling is expected to take approximately 14 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.

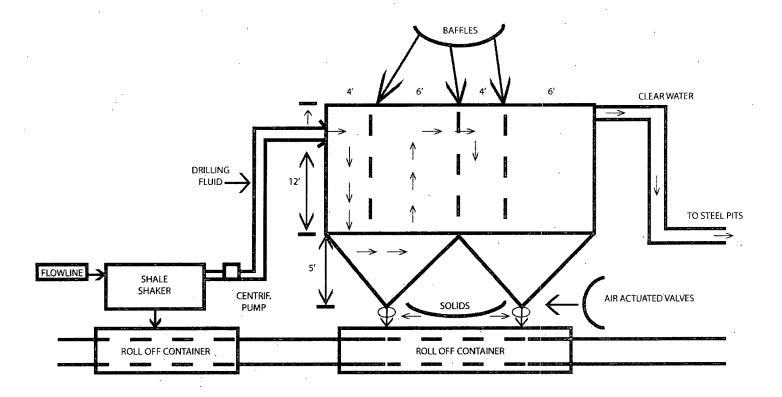






BURNETT OIL Co., INC.

EXHIBIT I



OPERATIONS & MAINTENANCE

Drilling Fluids from the wellbore will go through the flow line across the shale shaker. Solids will drop into roll off containers with baffles as drawn above. Baffles slow fluid velocity to allow solids to fall down through 6" air actuated valves into roll off containers. Clean water goes back out to the drilling fluid steel pits. Solids and any leftover liquid will be hauled to disposal.

INSPECTION

The closed loop equipment will be inspected daily by each tour and any necessary maintenance performed. Any leak in the system will be repaired and .or contained immediately. OCD will be notified within 48 hours. Remediation process started.

CLOSURE PLAN

During drilling operations, all liquids, drilling fluids and cutting will be hauled off via CRO (Controlled Recovery Incorporated Permit R-9166)



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 O
- f. ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBIT P.

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 K - HYDROGEN SULFIDE (H2S) CONTIGENCY PLAN

A. Emergency Procedures

In the event of a release of gas containing H2S, the first responder(s) must

- 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 <u>Gravity</u>	Threshold <u>Limit</u>	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 L - EMERGENCY NOTIFICATION LIST

BU	RNET	T CC	ATN	CTS

Burnett's New Mexico Office

575.677.2313

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.

Belton Mathews – BOCI District Superintendent (NM)

Cell - 575.703.9601

Burnett Oil Home Office

817.332.5108

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

Mark Jacoby – BOCI Engineering Manager (TX)

Cell - 817-312-2751

SHERIFF/POLICE CONTACTS

Eddy County Sheriff New Mexico State Police 911 or 575.677.2313

575.746.2701

FIRE DEPARTMENT

Loco Hills Fire Department (VOLUNTEER ONLY) For Medical and Fire (Artesia)

911 or 575.677.2349

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	(Albug)	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	a)	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

EXHIBIT M

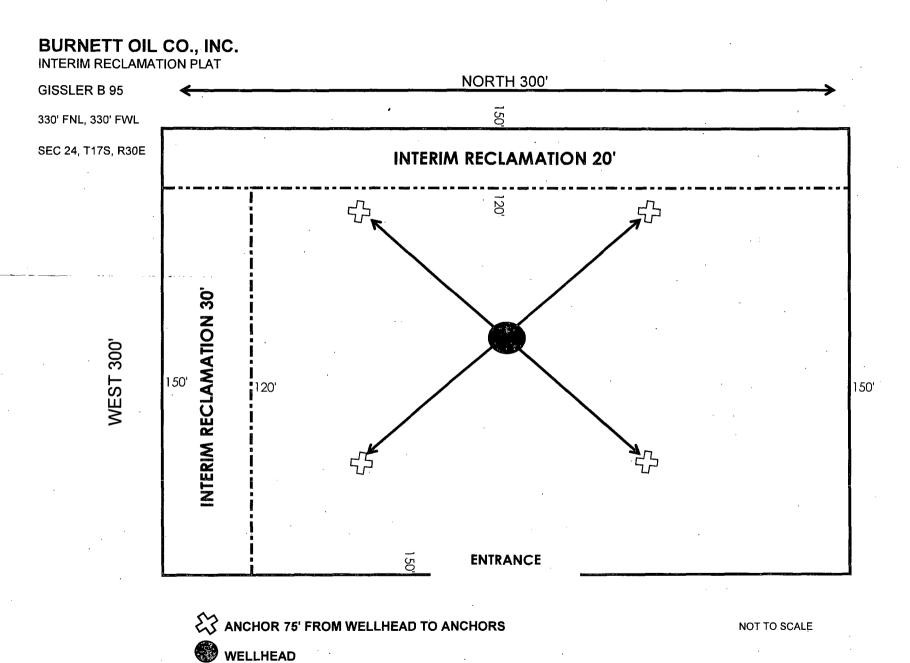
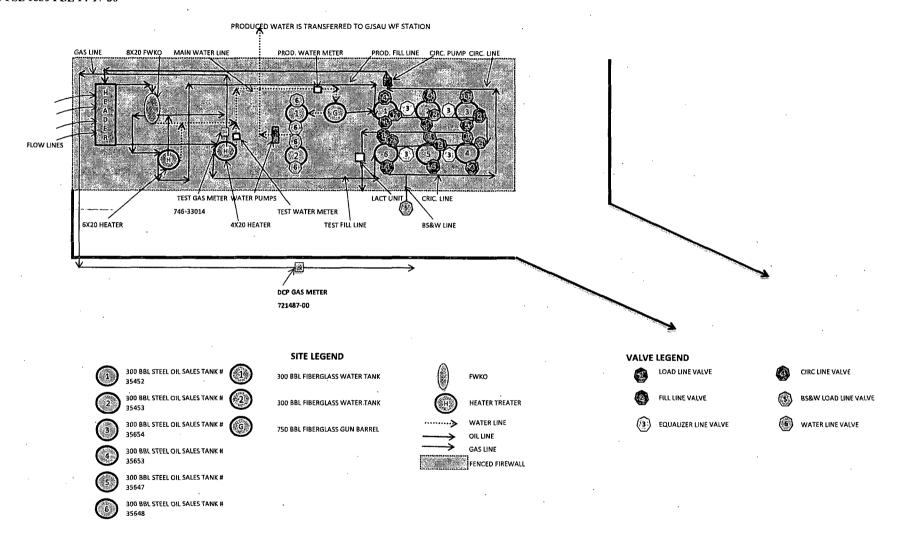


EXHIBIT N

BURNETT OIL CO. INC. GISSLER A#2 BTRY. 1650 FSL 1650 FEL 14-17-30



BURNETT OIL CO. INC. GISSLER A#2 BTRY. 1650 FSL 1650 FEL 14-17-30

ATTACHMENT TO SITE FACILITY DIAGRAM

General sealing of valves, sales by tank guage

Production Phase:

Load Line Valves sealed closed. Fill valve to tank that is in production will be open.

Equalizer valve to tank that is in production will be open. Circulation valves will be opened as necessary, then resealed. BS&W Load Line valve will be sealed at all times, unless cleaning tanks, then resealed once tank maintenance is complete.

Sales Phase:

The tank from which sales are being made will be isolated by sealing closed the fill line valve, circulating valve, and the equalizer valve during sales and opening the sales valve. Upon completion of the sale, the sales valve will be resealed. Sales by truck will be by tank gauge. Sales by LACT will be by LACT meter.

VALVE	LOAD LINE VALVE	PRODUCTION PHASE CLOSED	SALES PHASE OPEN	<u>CIRCULATING</u> CLOSED	NOTE
	PRODUCTION FILL LINE VALVE	OPEN OR CLOSED	CLOSED	CLOSED OR OPEN	
(3)	EQUALIZER LINE VALVE	OPEN	CLOSED	CLOSED OR OPEN	
	CIRCULATING LINE VALVE	OPEN OR CLOSED	CLOSED	OPEN	RE-SEALED ONCE CIRCULATING IS COMPLETE
	BS&W LOAD LINE VALVE	CLOSED	CLOSED	CLOSED	OPEN FOR TANK MAINTENANCE, RESEALED ONCE MAINTENANCE IS COMPLETE
6	WATER LINE VALVE	OPEN .	NA	NA	WATER TANKS ARE ISOLATED FROM OIL PRODUCTION TANKS

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
LC029338A
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
BURNETT OIL
LC029338A
95-GISSLER B
330' FNL & 330' FEL
Section 24, T. 17 S., R 30 E., NMPM
COUNTY:

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie-Chicken Timing Stipulations
Ground-level Abandoned Well Marker
Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
☑ Drilling
H2S Requirements-Onshore Order #6
Logging Requirements
Waste Material and Fluids
⊠ Production (Post Drilling)
Well Structures & Facilities
Pipelines
Interim Reclamation
Final Abandonment & Reclamation

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:
Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period.
Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted.
Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

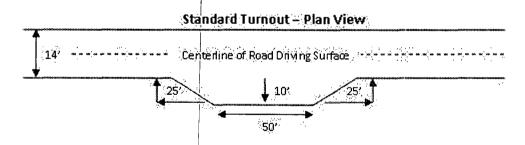
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

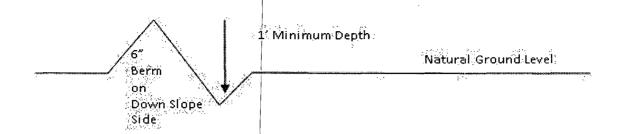


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\frac{400'}{4\%}$$
 + 100' = 200' lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

shoulder-1001 minimon
listervisible turnauts shall be constructed an
oil single kine roads on all blind curves with
additional tunouts as needed to keep spacing
below 1000 feet. full turnout width Typical Turnout Plan height of fill et shoulder emboekmen! slope **Embankment Section** type earth suitace .03° -- .05° €/# aggregate surf 02:-.04 1/8 .02 - .03 1/4 Depth measured from the bottom of the disch Side Hill Section slope 2 - 4% (slope 2 - 4%) **Typical Outsloped Section Typical Inslope Section**

Figure 1 - Cross Sections and Plans For Typical Road Sections

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests
 - Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Grayburg formation. 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.
- 2. 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface 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.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. 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.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible water flows in the Salado and Artesia Groups.

Possible lost circulation in the Grayburg and San Andres Formations.

- 1. The 10-3/4 inch surface casing shall be set at approximately 410 feet (in the base of the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, operator shall set the casing above the salt.
 - a. Effective June 6, 2012, the BLM will no longer approve a tag with 1" to determine cement top. 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 is to include the lead cement slurry.
 - 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.

Production casing to be kept fluid filled while running into hole to meet minimum collapse requirements.

- 2. The minimum required fill of cement behind the 7 inch production casing is:
 - a. First stage to DV tool
 - Ement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 3. 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.

C. 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. In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).
- 3. 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. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. 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.

e. 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.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. 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.

CRW 022613

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, <u>Shale Green</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

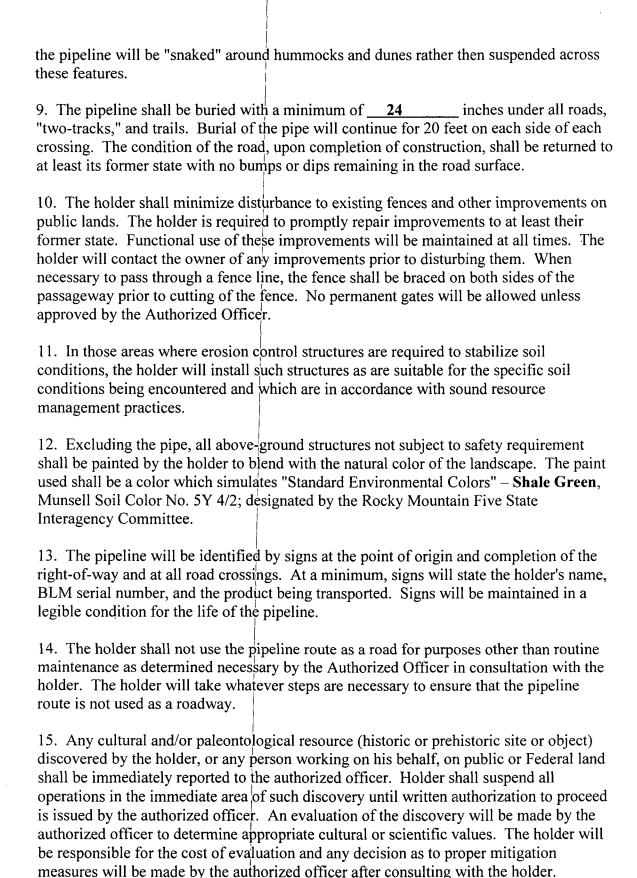
B. PIPELINES

The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

		J .
provided by 43 Cliability for damage	FR Sec. 2883.1-4 ge or injury to the	mage or injury to the United States to the extent. The holder shall be held to a standard of strict. United States resulting from pipe rupture, fire, or vated by any of the following within the right-of-way
a.		the holder including, but not limited to construction, nce, and termination of the facility.
b.	Activities of	other parties including, but not limited to:
(2)	Land clearing.Earth-disturbingBlasting.Vandalism and	g and earth-moving work. sabotage.
c.	Acts of God	i.
dollars (\$1,000,0	00) for any one e	strict liability damages shall not exceed one million vent, and any liability in excess of such amount shall be f negligence of the jurisdiction in which the damage or
		t liability for damage or injury resulting primarily from tacts or omissions of the United States.
pipeline, any oil, system, impacting of such oil, salt w the holder, regard up such discharge therefrom, on the deems necessary where appropriate	salt water, or oth g Federal lands, to vater, or other polities of fault. Up to on or affecting Federal lands, the to control and clee, the aquatic envoluter. Such action	struction, operation, maintenance, or termination of the er pollutant should be discharged from the pipeline he control and total removal, disposal, and cleaning up lutant, wherever found, shall be the responsibility of on failure of the holder to control, dispose of, or clean Federal lands, or to repair all damages resulting he Authorized Officer may take such measures as he can up the discharge and restore the area, including, ironment and fish and wildlife habitats, at the full in by the Authorized Officer shall not relieve the holder therein.
6. All construction way width of		ace activity will be confined to the authorized right-of- eet.
7. No blading or by the Authorized		regetation will be allowed unless approved in writing
8. The holder sha	all install the pipe	eline on the surface in such a manner that will minimize

suspension of the pipeline across low areas in the terrain. In hummocky of duney areas,



16. Special Stipulations:

Lesser Prairie-Chicken

Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

(March 1989)

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species		l <u>b/acre</u>
Sand dropseed (Sporobolus cryptan		1.0
Sand love grass (Eragrostis trichode	•	1.0
Plains bristlegrass (Setaria macrosta	ichya)	2.0

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed