

Form 3160-3  
(August 2007)

HOBBS OCD

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

EA 11-551

MAY 10 2011

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC029415A
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BURNETT OIL CO., INC. <3080>		7. If Unit or CA Agreement, Name and No.
3a. Address 801 Cherry St. Ste. 1500 Fort Worth, Texas 76102	3b. Phone No. (include area code) 817-332-5108	8. Lease Name and Well No. Partition Federal 3 (38634)
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1780' FNL, 980' FWL (E) 1929 840 At proposed prod. zone same as above		9. API Well No. 30-015- 39063
10. Field and Pool, or Exploratory FREN (Glorieta Yeso) (26770)		11. Sec., T. R. M. or Blk. and Survey or Area Unit E Sec. 24 17S 31E
14. Distance in miles and direction from nearest town or post office*		12. County or Parish EDDY
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'		13. State NM
16. No. of acres in lease 640	17. Spacing Unit dedicated to this well 40	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 330'	19. Proposed Depth 7200	20. BLM/BIA Bond No. on file 00197
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start* 11/08/2011	23. Estimated duration 18 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature <i>Mary Carter Starkey</i>	Name (Printed/Typed) Mary Carter Starkey	Date 2/10/11
Title Regulatory Coordinator		

Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date MAY 10 2011
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

Roswell Controlled Water Basin

SEE ATTACHED FOR  
CONDITIONS OF APPROVALApproval Subject to General Requirements  
& Special Stipulations Attached

MAY 10 2011

RECEIVED

**MASTER DEVELOPMENT PLAN**  
**BURNETT OIL CO., INC.**  
**ALL VERTICAL Fren (Glorieta Yeso) WELLS**  
**FEDERAL LEASE (NM) LC029415B, NMLC029415A**  
 Section 12, 13, 24, Township 17 South, Range 31 East, Eddy County, New Mexico

**A: DRILLING PROGRAM****1. Estimated Tops Of Important Geological Markers:**

- a. Quaternary..... Surface
- b. Anhydrite..... 700'
- c. Salt..... 880'
- d. Base Salt..... 1850'
- e. Yates..... 2000'
- f. Seven Rivers..... 2375'
- g. Queen..... 2375'
- h. Grayburg..... 3450'
- i. San Andres..... 3718'
- j. Glorieta..... 5225'
- k. Yeso..... 5325'

**2. Estimated Tops of Anticipated Fresh Water, Oil or Gas:**

- a. Seven Rivers..... 2375'      Water, Sand 150' Fresh Water
- b. Queen..... 2975'      Oil/Gas
- c. Grayburg..... 3450'      Oil/Gas
- d. San Andres..... 3718'      Oil/Gas
- e. Glorieta..... 5225'      Oil/Gas
- f. Yeso..... 5325'      Oil/Gas

No other formations are expected to yield oil, gas or fresh water in measurable volumes. We will set 10-3/4" casing @ approx. +/- 750' 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.

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

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
<b>(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)</b>								
14-3/4"	0'-750' 6 1/2"	10-3/4"	32.75#	ST&C	H40	1.125	1.00	1.80
8-3/4"	0'-5500'	7"	23.00#	LT&C	J55	* 1.125	1.00	1.80
8-3/4"	5501'-7200'	7"	26.00#	LT&C	L80	* 1.92	1.93	13.60

\* The 7 " production casing will be kept full of water while running into hole.

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

**BLM WILL BE NOTIFIED TO HAVE THE OPTION TO WITNESS ALL CEMENTING AND TAG OPERATIONS.**

- a. **10-3/4" Surface** Cement to surface Lead with 150 sx Class C cement +10% A-10, + 10#/sx LCM-1 1% CaCl, 0.01 gps FP-6L, 14.6 ppg, 1.67 CF/Sk Yield. Tail with 500 sks Class C cement + 2% CaCl + 0.01 gps FP-6L, 14.8 ppg, 1.35 CF/Sx yield. **TOC Surface**. 100% excess cement.

See COA

See COA  
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. ~~Evaluation of return fluid and pumping pressure will determine whether 1" can be run to tag top of cement.~~

Appropriate cement volumes will be pumped through 1" to bring cement to surface.

See COA  
b. 7" Production Casing

**Stage 1 Cement:** 550 sks (50:50) Poz (Fly Ash): Class C cement + 2% Bentonite + 0.01 gps FP-6L + 0.3% FL-52A + 1.2% CD-32 + 5% Sodium Chloride. 14.2 ppg, Yield 1.27 CF/Sx. DV @ approx. 2600' Excess 35% cement.

**Stage 2 Cement:** Lead with 1800 sks (35:65) Poz (Fly Ash): Class C cement + 6% Bentonite + 5 lbs/sx LCM-1 + 0.125 lbs/sx Cello Flake + .01 gps FP-6L + 5% Sodium Chloride, 12.6 ppg, Yield 1.89 CF/Sx. Tail with 100 sx Class C + 1% CaCl + 0.01 gps FP-6L. 14.8 ppg, Yield 1.62 CF/Sx, TOC Surface. 65% excess cement.

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

5. **Pressure Control Equipment:**

The blowout prevention equipment (BOPE) shown in **Drilling Exhibit E & E1** 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 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 accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating.

6. **Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0'-400' <i>610</i>	8.6-9.5			Fresh Water
400' - 7200' TD	10.0 max.			Brine Water

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

7. **Auxiliary Well Control and Monitoring Equipment:**

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

8. **Hydrogen Sulfide Plan and Training:**

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.

**All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on each well:**

- The hazards and characteristics of Hydrogen Sulfide (H2S).
- The proper use and maintenance of personal protective equipment and life support systems.
- 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 A**
- f. **ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBIT B.**

**In addition, supervisory personnel will 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.)

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.

**a. Protective equipment for essential personnel:**

- 1. Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area (to be determined.)

**b. H2S detection and monitoring equipment:**

- 1. 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.
- 2. An H2S Safety compliance set up is on location during all operations.

**c. Visual warning systems:**

- 1. Wind direction indicators will be positioned for maximum visibility.
- 2. 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.

**d. Mud program:**

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.

**e. Communication:**

- 1. Cellular Telephone and/or 2-way radio will be provided at well site.
- 2. Landline telephone is located in our field office.

**f. Metallurgy:**

- 1. All drill strings, casings, tubing, wellheads, Hydril BOPS, drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service.
- 2. All elastomers used for packing and seals shall be H2S trim.

**9. Logging, Coring and Testing program: See COA**

- a. Any drill stem tests will be based on geological sample shows and planned before spudding.
- b. The openhole 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 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.

**10. Potential Hazards:**

No abnormal pressures or temperatures are expected. There is known H<sub>2</sub>S in this area. The operator will comply with the provisions of Onshore Oil and Gas Order #6. No lost circulation is expected to occur. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottomhole pressure is 1000#. The maximum anticipated bottom hole temperature is 92°F.

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

Road and location construction will begin after BLM has approved the APD and has approved the start of the location work. Anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in and drilling is expected to take approx 25 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.

**B: SURFACE USE PROGRAM**

**1. EXISTING ROADS:**

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. This well was staked by Basin Surveys or John West Survey.
- b. All roads into the location are shown on the Vicinity Map (Surface Exhibit A.)
- c. Directions to location: from intersection of US Hwy. #82 and Hagermann Cutoff (**CR 217**) go north on CR 217 and follow Surface Exhibit A and A2 to the proposed well pad.

**2. New or Reconstructed Access Roads:**

- a. The well site layout, Form C-102 and Surface Exhibit A1 & A2 show the existing area. **Any additional required access road will be shown on Surface Exhibit A2 and Exhibit B.**
- b. All construction material will be native caliche. It may be available at the proposed location. If unavailable on location or road, caliche will be hauled from nearest BLM approved caliche pit.

**3. Location of existing wells:**

See attached Surface Exhibit B plat showing all wells within a ½ mile radius of the proposed well site.

**4. Location of existing and/or proposed production facilities:**

See Surface Exhibit B, C and C1 and TANK EXHIBIT for the location of Partition new tank battery facility on lease facility on this Federal Lease NMLC029415B.

- a. This battery is a new above ground tank on lease production facility.
- b. The well site will require electricity for the prime mover. We will contact the electric cooperative. to provide the electric power poles and the electric line from their nearest connection. The routing and pole placement will be provided in their ROW application. All electrical installation will be done in accordance with all existing state and federal regulations.
- c. All flowline from the new well pad site is on Federal leases. (See Surface Exhibit B, C and C1 plat.) The required flowline will be laid, above ground, along existing road and flowline routing. All flowline will be 3" poly pipe.

**5. Location and Type of Water Supply:**

All water to be used in drilling this well will be brine or fresh water transported by truck over existing and above proposed lease road from Loco Hills, New Mexico or produced water furnished from our existing waterflood facilities in the area. We may install a pump and lay a **temporary 2" poly line** on the lease from the battery to the rig for this drilling water.

**6. Construction Materials:**

All construction material for the roadway and drilling pad will be native caliche from the nearest BLM approved pit or from existing available deposits found on the location. All will be in accordance with the drilling stipulations for this well.

**7. Methods of Handling Waste Disposal:**

- a. Drill cuttings will be disposed of in a closed loop system using steel haul off tanks. All drilling fluids will be hauled off location to a contracted off lease disposal location.
- b. Trash, waste paper, garbage and junk will be placed in a portable, screened trash container on location. All trash and debris will be transported to an authorized off-lease disposal station within 30 days following the completion activities.
- c. A properly maintained Porto-john will be provided for the crews during drilling and completion operations. All will be removed after all completion operations have ended.
- d. Oil produced during testing will be put into steel storage tank for later sales.
- e. Water produced during testing operations will be put in the steel frac. tanks pit until well is turned to the lease tank battery. All produced water will be disposed of through one of our approved disposal methods.

**8. Ancillary Facilities:** There are no planned ancillary facilities for this well.

**9. Well Site Layout:**

Surface Exhibit D shows the relative location and dimensions of the drilling pad and related components. Only minor differences, if any, in length and/or width of the drilling pad are anticipated, depending on which drilling contractor is selected to drill the well. Only minor leveling of the drilling site is anticipated.

**10. Plans for surface Reclamation:**

- a. After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operations will be removed.
- b. Burnett Oil respectfully requests two (2) years to downsize the drilling location in order to have room for equipment to fracture stimulate 3 to 4 intervals. Each one requires a large volume fracture treatment with several pumps, a large sand mover, several frac tanks, a treating van and various other vehicles and equipment. Burnett will, if all fracs are completed before the 2 years, contact BLM to downsize the location.

See attached plat outlining the resulting location after downsizing, and showing the sides of location where the caliche would be left for use of kill trucks, hot oil trucks, foam units or whatever is needed to service the well during its life. It is very unsafe rig up equipment inside the safety guide wires of the service unit which is what has to happen if the location is reclaimed on all 4 sides to the safety anchors.

- c. The pad size will be reduced to the amount required for normal operation of the producing well. This reduced portion will be restored to the BLM stipulations in section a.
- d. If a well is abandoned, the surface location and unneeded road will be restored according to BLM stipulations within 90 days of final abandon and sit re-seeded with BLM (B) seed mix.

**11. Surface ownership:**

All lands are owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is multiple uses with the primary use of the region for the production of oil and gas and the grazing of livestock.

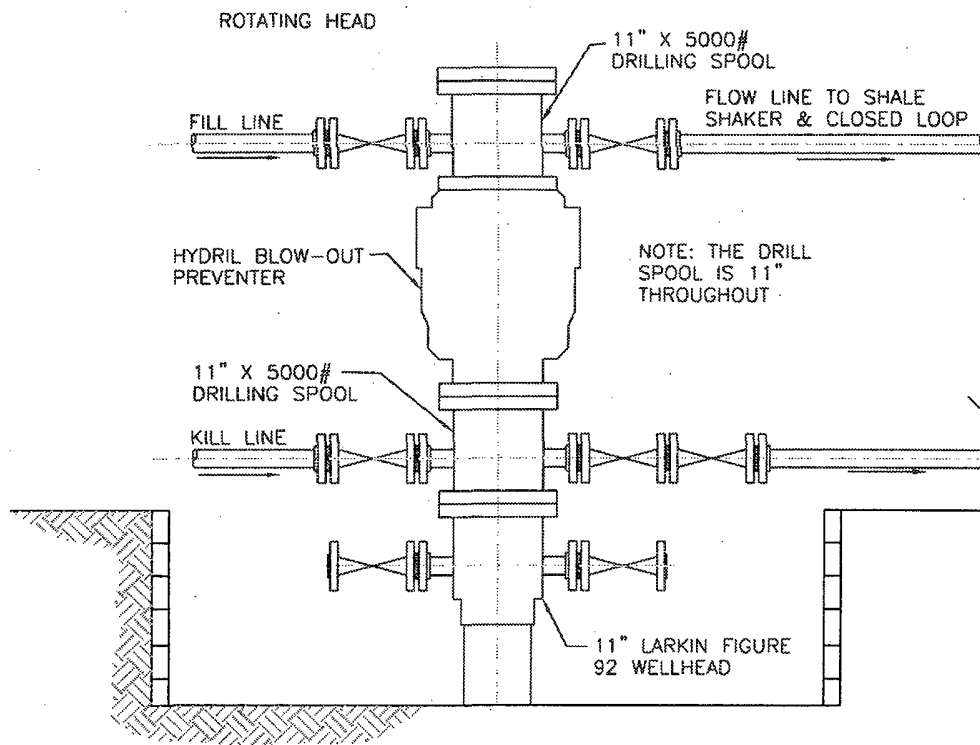
**12. Other information:**

- a. The area surrounding the well site is grassland. The area is relatively flat with small hills and sand dunes. The topsoil is fine, deep sand underlain by caliche. Vegetation cover is generally sparse and consists of mesquite, yucca, shinnery oak and sparse native grasses. Wildlife in the area includes deer, coyotes, rabbits, rodents, reptiles, dove and quail.

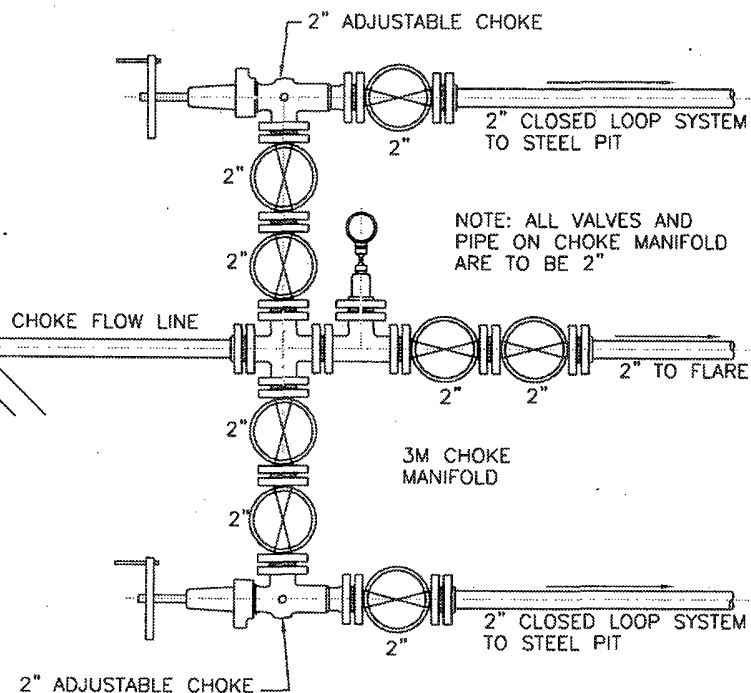
- b. No permanent or live water is found in the general proximity of this area.
- c. No dwellings are found within two (2) miles of this location.
- d. There is intermittent cattle grazing and hunting in the area; however, the principal land use is for oil and gas production.
- e. An archaeological clearance report from Boone Archaeological Services will be sent to the BLM office in Carlsbad, N.M.

**13. Bond Coverage:**

Current Bond is BLM Bond # NMB000197. The Surety Bond is # B000863. Both are effective May 21, 2004 and remain in place



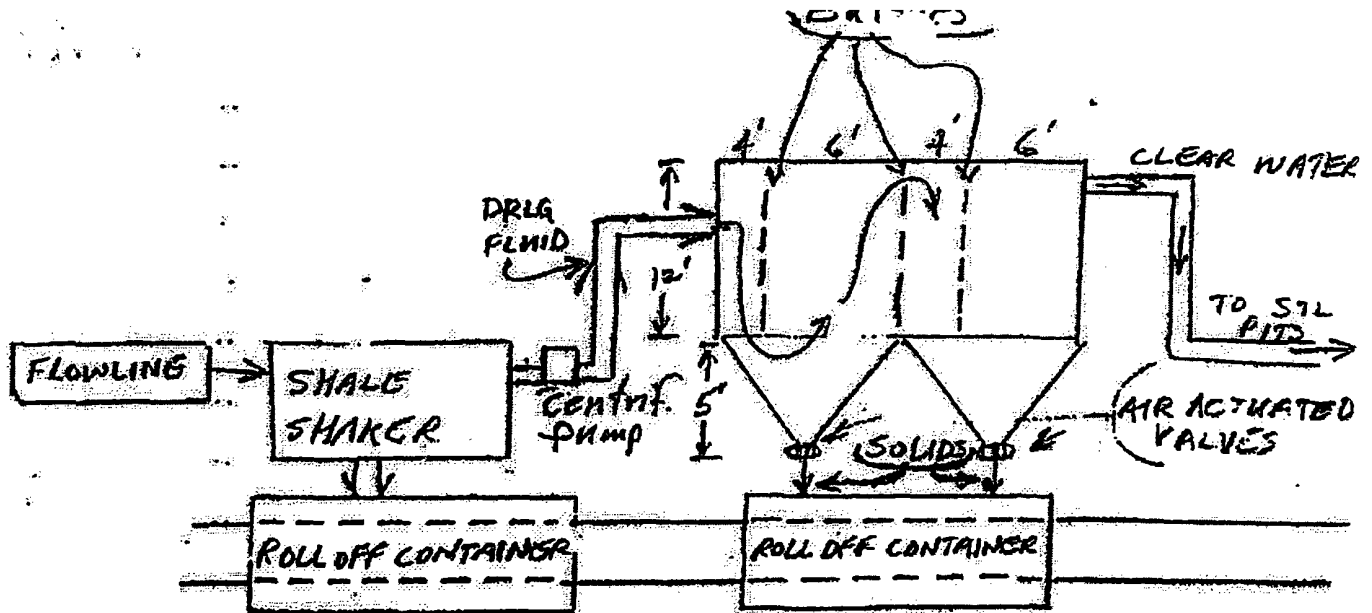
WELLHEAD ELEVATION



CHOKE MANIFOLD PLAN

**BUNETT OIL COMPANY, INC.  
BLOWOUT PREVENTER &  
CHOKE MANIFOLD DIAGRAM  
2000 PSI WORKING PRESSURE**





#### OPERATIONAL & MAINTENANCE

DRILLING FLUIDS FROM THE WELLBORE WILL GO THROUGH FLOWLINE ACROSS 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 OUT BACK TO THE DRILLING FLUID STEEL PITS. SOLIDS ARE HAULED TO DISPOSAL. ANY LEFTOVER LIQUID WILL BE HAULED TO DISPOSAL.

BURNETT OIL CO., INC.

SURFACE EXHIBIT D1

#### Operations and Maintenance

Closed Loop equipment will be inspected daily by each tour and any necessary maintenance performed. Any leak in system will be repaired and/or contained immediately.

OCD 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.)

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator BURNETT OIL CO INC OGRID # 3080  
38634 Well Name & # PARTITION FED # 3 Surface Type (F) (S) (P)  
 Location: UL E, Sect 24, Township 12 s, RNG 31 e, Sub-surface Type (F) (S) (P)

A. Date C101 rec'd      /      /      C101 reviewed      /      /     

B. 1. Check mark, Information is OK on Forms:

OGRID X BONDING FED PROP CODE X WELL # X SIGNATURE     

2. Inactive Well list as of:      /      /      # wells     , # Inactive wells     

a. District Grant APD but see number of inactive wells:

No letter required     ; Sent Letter to Operator     , to Santa Fe     

3. Additional Bonding as of:      /      /     

a. District Denial because operator needs addition bonding:

No Letter required     ; Sent Letter to Operator     , To Santa Fe     

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required     ; Sent Letter to Operator     , To Santa Fe     

C. C102 YES     , NO     , Signature     

1. Pool FREN; GLOR-YESO, Code 26770

a. Dedicated acreage 40, What Units E

b. SUR. Location Standard X; Non-Standard Location     

c. Well shares acres: Yes     , No     , # of wells      plus this well #     

2. 2<sup>nd</sup>. Operator in same acreage, Yes     , No     

Agreement Letter     , Disagreement letter     

3. Intent to Directional Drill Yes     , No X

a. Dedicated acreage     , What Units     

b. Bottomhole Location Standard     , Non-Standard Bottomhole     

4. Downhole Commingle: Yes     , No X

a. Pool #2     , Code     , Acres     

Pool #3     , Code     , Acres     

Pool #4     , Code     , Acres     

5. POTASH Area Yes     , No FED

D. Blowout Preventer Yes X, No     

E. H2S Yes     , No      PART FED APD

F. C144 Pit Registration Yes     , No X need

G. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes     , No X, NSL #     

2. Non-Standard Proration: Yes     , No X, NSP #     

3. Simultaneous Dedication: Yes     , No X, SD #     

Number of wells      Plus #     

4. Injection order Yes     , No X; PMX #      or WFX #     

5. SWD order Yes     , NO X, SWD #     

6. DHC from SF     ; DHC-HOB     ; Holding     

7. OCD Approval Date 5/20/11

API #30-0 15-- 39063

8. Reviewers PK