

UNIVERSITY  
DEPARTMENT  
BUREAU OF

If earthen pits are used in  
association with the drilling of this  
well, an OCD pit permit must be  
obtained prior to pit construction.

Dist. 2  
LOCATE  
DATE  
210

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

BURNETT OIL CO., INC

(817/332-5108)

3080

## 3. ADDRESS OF OPERATOR

801 CHERRY STREET, SUITE 1500, FORT WORTH, TEXAS 76102

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

UNIT D, 990' FNL, 990' FWL

At proposed prod. zone

SAME AS SURFACE

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

APPROXIMATELY 6 MILES EAST OF LOCO HILLS, NEW MEXICO

## 16. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

330'

## 18. NO. OF ACRES IN LEASE

240

## 18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

330'

## 19. PROPOSED DEPTH

5400'

## 17. NO. OF ACRES ASSIGNED TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

ROTARY

## 21. ELEVATIONS (Show whether DF, BT, GR, etc.)

3702' GR

## 22. APPROX. DATE WORK WILL START\*

August 10, 2005

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 7/8"	9 5/8"	32.30#	375' 445'	300 Sks (Circ. to Surface)
8 3/4"	7"	23#	5390'	+/-1500 Sks in 2 Stages

(If water flows are encountered  
cementing program may vary.)

A 14 7/8" hole will be drilled to Rustler Anhydrite. We will set 9 5/8" casing @ this depth & cement to surface. After a 18 hour cement wait, casing & BOP will be tested before drill out of the shoe. An 8 3/4" hole will be drilled to approx. 5400' to effectively test the Cedar Lake Yeso interval. The 7" casing will be run and set @ TD and cemented to 600' above highest potential producing horizon( approx. 2100'). We will perforate and treat productive intervals as recommended by service company.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

Roswell Controlled Water Basin

NSL-5297

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

*Stirling Randle*

TITLE

PETROLEUM ENGINEER

DATE

May 26, 2005

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

/s/ Joe G. Lara

ACTIVE  
TITLE

FIELD MANAGER

DATE

SEP 21 2005

CONDITIONS OF APPROVAL, IF ANY:

Sa 17  
29.5

APPROVAL FOR 1 YEAR

\*See Instructions On Reverse Side

## State of New Mexico

Energy, Minerals and Natural Resources Department

## DISTRICT I

1625 N. FRENCH DR., HOHES, NM 86240

## DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015.	Pool Code 96718	Pool Name Loco Hills Paddock
Property Code 002389	Property Name GISSLER B	Well Number 37
OGRID No. 003080	Operator Name BURNETT OIL COMPANY	Elevation 3702'

## Surface Location

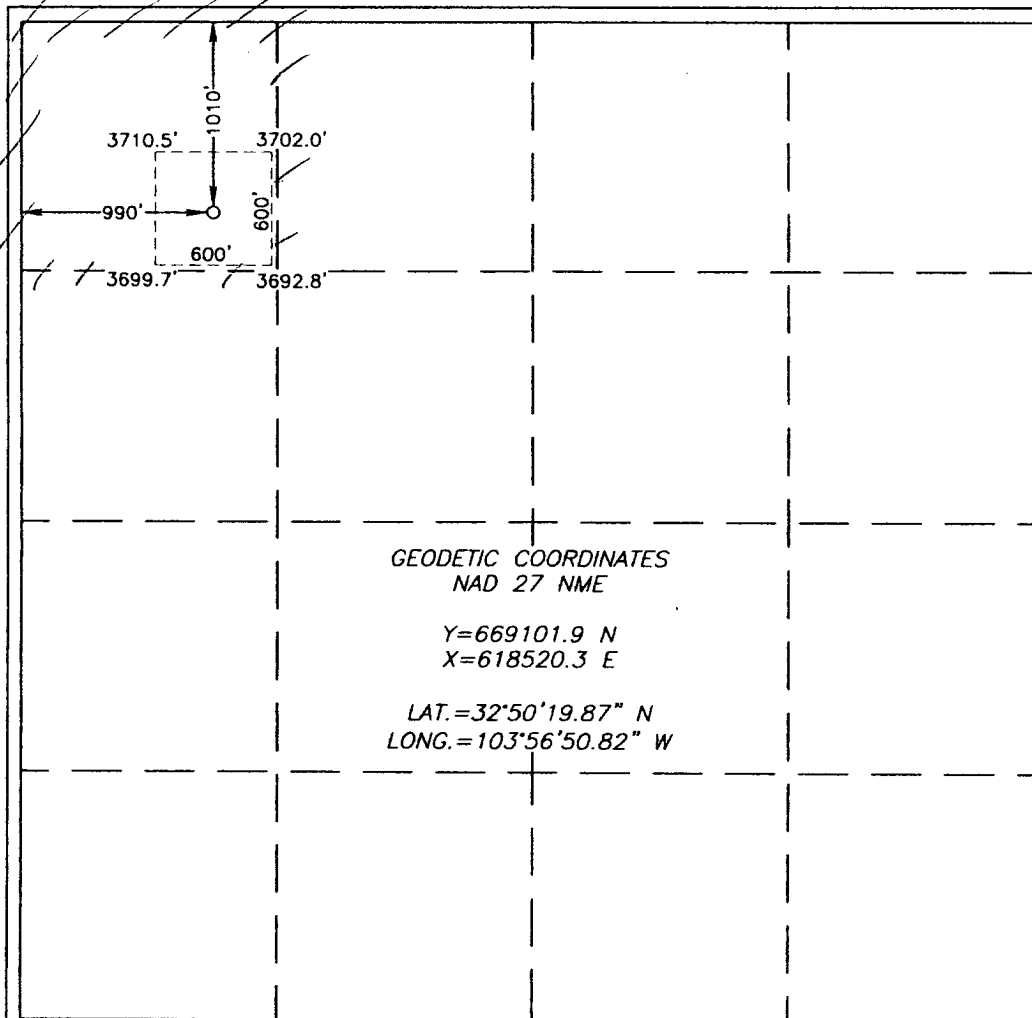
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	14	17-S	30-E		1010	NORTH	990	WEST	EDDY

## 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 Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



## OPERATOR CERTIFICATION

I hereby certify the the information  
contained herein is true and complete to the  
best of my knowledge and belief.

*Sterling Randolph*  
Signature

STERLING RANDOLPH

Printed Name

PETROLEUM ENGINEER

Title

August 15, 2005

Date

## 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  
supervision, and that the same is true and  
correct to the best of my belief.

APRIL 19, 2005

Date Surveyed

DEL

Signature & Seal of  
Professional Surveyor

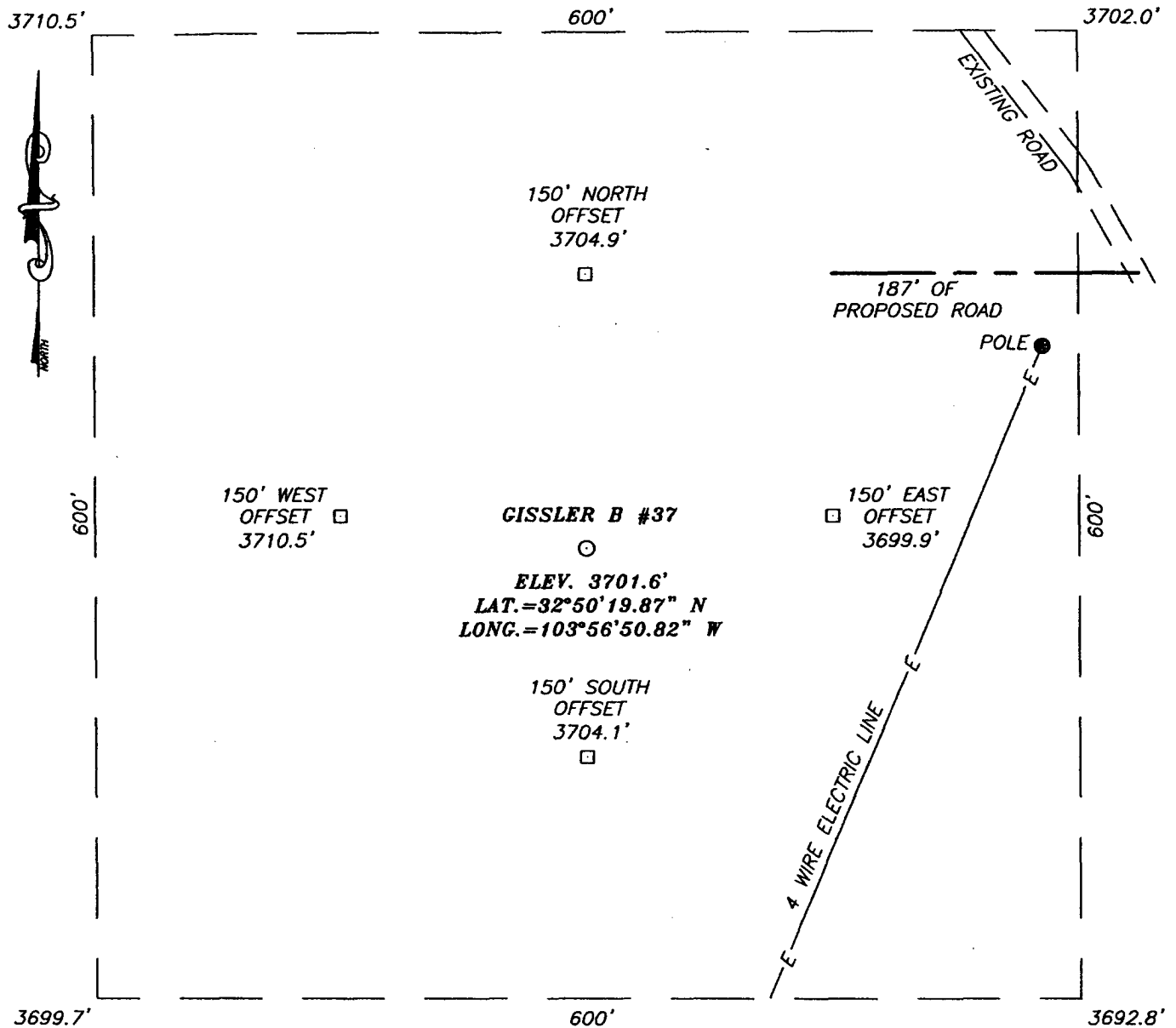
*Gary E. Edson*  
NEW MEXICO  
Professional Surveyor

05.11.0606

Certificate No. GARY EDSON

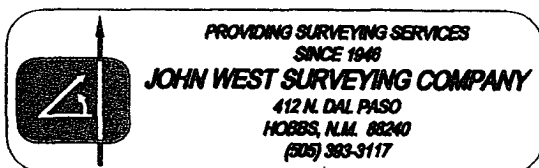
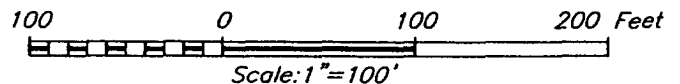
12641

**SECTION 13, TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,**  
**EDDY COUNTY, NEW MEXICO**



**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF U.S. HWY. #82 AND  
 CO. RD. #220. GO NORTH ON CO. RD. #220  
 APPROX. 1.2 MILES AND TURN LEFT (N-NW). GO  
 APPROX. 1.1 MILES. THIS LOCATION IS APPROX.  
 400' WEST OF ROAD.



**BURNETT OIL COMPANY**

**GISSLER B #37 WELL**  
 LOCATED 1010 FEET FROM THE NORTH LINE  
 AND 990 FEET FROM THE WEST LINE OF SECTION 14,  
 TOWNSHIP 17 SOUTH, RANGE 30 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.

Survey Date: 04/19/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.0606	Dr By: DEL
Date: 04/21/05	Disk: CD#4
05110606	Scale: 1"=100'



## DRILLING PLAN

BURNETT OIL CO., INC.  
LEASE NO. NMNM 074939  
GISSLER B LEASE, WELL NO. 37  
UNIT LETTER D  
990' FNL, 990' FWL  
SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST  
EDDY COUNTY, NEW MEXICO

### (A) DRILLING PROGRAM

#### (1) Estimated tops of geologic markers:

Alluvium.....Surface  
Anhydrite.....275'  
Salt.....505'  
Base Salt.....1295'  
Yates.....1387'  
Seven Rivers.....1723'  
Grayburg.....2708'  
San Andres.....3030'  
Glorieta.....4330'

#### (2) Estimated depths of producing formations:

Fresh water.....None  
Saltwater flows..(?)\*  
Oil and Gas.....1387'\*\*, 2708'\*\*

\* As waterflows, if any, are encountered, their depth will be recorded, and drilling will continue to total depth. Multiple stage cementers will be placed in the production casing string to enable us to confine the waterflows to their respective depths by cementing.

\*\* Oil and gas bearing zones, if any, will be determined by log analysis, and will be confined by cementing; subsequently perforated, stimulated and produced in a conventional manner.

#### (3) Blowout Preventer Specifications:

A 2000 PSI Hydril unit with hydraulic closing equipment. (See Exhibit E schematic). The preventer will be tested before drilling out below surface pipe setting depth. The exact description of the preventer and related equipment will depend on the successful contractor, who has not yet been selected. No high pressure hydrocarbon zones are anticipated.

#### (4) Supplementary drilling equipment information:

Not available at this time.

(5) Supplementary casing program information:

- a. Surface casing: Surface casing will consist of new 9-5/8" OD 32.30# H40 OR 36# J-55 ST&C R3 pipe and will be run into a 14-7/8" hole with notched Texas Pattern shoe on bottom, insert float valve in first collar, Two(2) centralizers around shoe joint and first collar. Bottom three (3) joints will be thread locked. Setting depth will be +/- 475' in the Rustler Anhydrite, depending on where a suitable casing seat can be found. Cement will be circulated back to the surface. Initial cement volume will be calculated to be 100% excess of the calculated annular volume between the 9-5/8" casing and the hole. **If circulation of cement to the surface is not achieved due to lost circulation, we would like permission (without having to call BLM) to fill this annular space using sufficient rat hole mix to bring cement to surface per BLM specification.** Eighteen (18) hours WOC will be allowed as per NMOCD. Casing will be tested to 1000 PSI before drilling out.
  - b. Production casing: Production casing will consist of new 7" OD 23# J55 R3 8rd LT&C pipe being run to total depth with float shoe on bottom, float collar in first collar, centralizers throughout intervals and above and below any multiple stage cementers, and be cemented with sufficient volume to bring top of cement 600' above the top of the highest potential producing horizon. If water flow is encountered, we will cement from TD back to the stage cementer, open stage cementer, cement from stage cementer with sufficient volume of Class C or equivalent to bring cement up to at least 600' above the highest potential producing horizon, then balancing hydrostatic weight of the cement by adjusting the flow of water to surface through the 7" casing, enabling the 2nd stage of cement to set up. Casing will be shut in after twelve (12) hours. If there is no flow of water to surface around the 7" casing, we will cement the water flow proper through the stage cementer with +/- 900 sacks. In case the 2nd stage is not successful in shutting off any annular flow, we will repeat the 2nd stage until successful. After drilling out and testing the casing to 2000 PSI, a cement bond log will be run to evaluate the cement job.
- (6) Mud program: Native mud (red beds and shale) will be used to total depth. The surface hole will be drilled with fresh water and lost circulation materials as needed. The remaining hole will be drilled with brine water with necessary additives.
- (7) Logging program: If no water flow(s) are encountered, we will run Neutron Litho density-DLL logs. If water flow(s) are encountered, no open hole logging will be attempted, and after casing is set, cased hole GR/CN logs will be run. No other testing or coring is anticipated.

- (8) Abnormal pressures or hazards: No abnormal pressures or potential hazards are anticipated. The maximum anticipated bottom hole pressure is 1000#. The maximum anticipated bottom hole temperature is 91°F.
- (9) Other facets of the operation to be pointed out:  
None.

## **(B) HYDROGEN SULFIDE DRILLING PROGRAM**

### (1) Hydrogen Sulfide Training

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 this 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 prevailing wind.
- d. The proper techniques for first aid and rescue procedures.

### 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 their 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 wellsite. All personnel will be required to carry documentation that they have received the proper training.

(2) H2S SAFETY EQUIPMENT AND SYSTEMS

Note: all H2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

a. Well Control Equipment:

1. Choke manifold with a minimum of one remote-controlled choke.
2. The Hydril BOP will accommodate all pipe sizes with a properly sized closing unit.

b. 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.)

c. H2S detection and monitoring equipment:

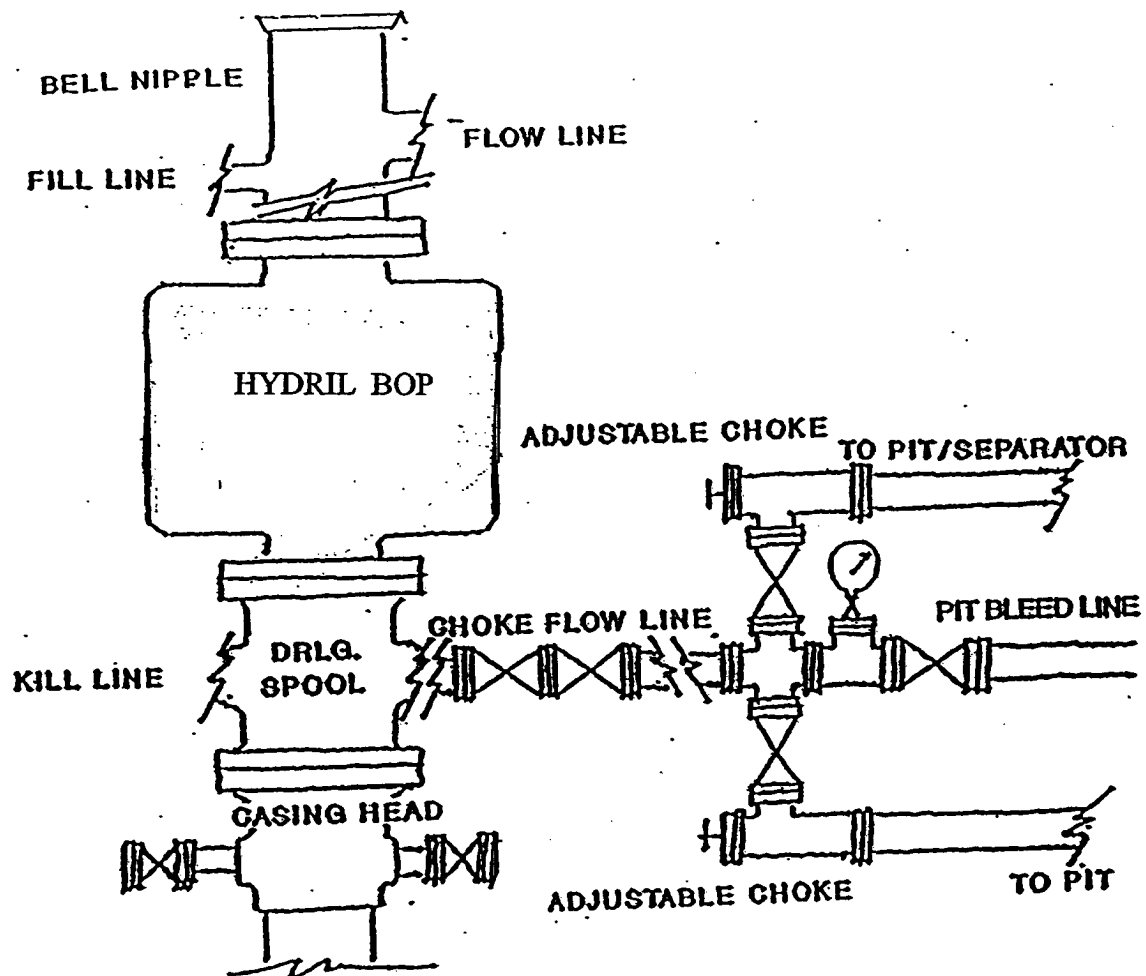
1. Three(3) portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

d. Visual warning systems:

1. Wind direction indicators will be positioned for maximum visibility.
2. Caution/Danger signs shall 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.

e. Mud program:

1. 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.



**BURNETT OIL CO., INC.**

**BLOWOUT PREVENTER &  
CHOKE MANIFOLD DIAGRAM  
2000 PSI WORKING PRESSURE  
SERIES 600 FLANGES**

**GISSLER B #37  
EXHIBIT E**



CCCC

May 25, 2005

New Mexico Oil Conservation Division  
1301 Grand Avenue  
Artesia, New Mexico 88210  
Attn: Mr. Byran Arrant

**RECEIVED**

**MAY 31 2005**

**ODD-ARTESIA**

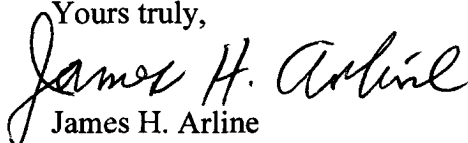
Re: H2S Rule 118 Contingency Plan.  
Gissler B #37, Unit D, 990' FNL, 990' FWL  
SEC.14, T17S, R30E- Eddy County, New Mexico

Dear Mr. Arrant:

Please accept this letter as our notice we do not believe the referenced plan is required for the referenced well. We have calculated the hazard volume as follows: highest H2S quantity 10,000 PPM, and using a production rate of 255 MCFGPD the 100 PPM radius is 181' and the 500 PPM radius is 83'. This footage does not get off our well locations.

Please contact our Mr. Sterling Randolph or the undersigned if you require additional information.

Yours truly,

  
James H. Arline  
Materials Coordinator



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

November 1, 2005

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

Burnett Oil Co., Inc.  
Burnett Plaza – Suite 1500  
801 Cherry Street – Unit #9  
Fort Worth, Texas 76102-6881

Attention: Sterling P. Randolph, P. E.  
Petroleum Engineer  
[randolph@burnettoil.com](mailto:randolph@burnettoil.com)

**RECEIVED**

NOV 04 2005

**ODD-ARTESIA**

*Administrative Order NSL-5297*

Dear Mr. Randolph:

Reference is made to the following: (i) yours and Mr. James H. Arline's application (*administrative application reference No. pSEM0-528027103*) filed with the New Mexico Oil Conservation Division ("Division") in Santa Fe, New Mexico on October 6, 2005; (ii) the Division's initial response by letter to Mr. James H. Arline dated October 20, 2005 from Mr. Michael E. Stogner, Engineer with the Division in Santa Fe requesting verification of certain information related to application; (iii) Mr. Arline's response by letter dated October 25, 2005 with the necessary information to complete this application; and (iv) the Division's records in Santa Fe: all concerning Burnett Oil Co., Inc.'s ("Burnett") request to drill its proposed Gissler "B" Well No. 37 as an initial well within a standard 40-acre oil spacing and proration unit in the Loco Hills-Paddock Pool (96718) comprising the NW/4 NW/4 (Unit D) of Section 14, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico, at an unorthodox oil well location 1010 feet from the North-line and 990-feet from the West line of Section 14.

Your application has been duly filed under the provisions of Division Rules 104.F and 1210.A (2) [formerly Division Rule 1207.A (2), see Division Order No. R-12327-A, issued by the New Mexico Oil Conservation Commission in Case No. 13482 on September 15, 2005].

By the authority granted me under the provision of Division Rule 104.F (2), as revised, the above-described unorthodox oil well location for Burnett's proposed Gissler "B" Well No. 37 within the Loco Hills-Paddock Pool is hereby approved.

Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Mark E. Fesmire, P. E.  
Director

MEF/ms

cc: New Mexico Oil Conservation Division – Artesia  
U. S. Bureau of Land Management – Carlsbad  
James H. Arline, Burnett Oil Co., Inc. – Fort Worth



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

October 20, 2005

**Mark Fesmire**

Director

Oil Conservation Division

**Burnett Oil Co., Inc.**  
**Burnett Plaza – Suite 1500**  
**801 Cherry Street – Unit #9**  
**Fort Worth, Texas 76102-6881**

**RECEIVED**

**NOV 02 2005**

**OCU-ARTESIA**

**Attention: James H. Arline**

**Re: *Administrative application for an exception to Division Rule 104.B (1) for Burnett Oil Co., Inc. ("Burnett") to drill its proposed Gissler "B" Well No. 37 at an unorthodox Paddock oil well location 1010 feet from the North line and 990 feet from the West line (Unit D) of Section 14, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico, within a standard 40-acre oil spacing and proration unit for the Loco Hills-Paddock Pool (96718) comprising the NW/4 NW/4 of Section 14.***

Dear Mr. Arline:

Your application (*administrative application reference No. pSES0-5280271031*) has been reviewed and I find that I need verification to assure that the notice requirements of Division Rule 1210.A (2) have been satisfactorily met. You state in your cover letter that Burnett is "the Operator of Record for all wells on all sides of this well site" and that "all of the interest ownership for this entire lease is exactly the same." However my records indicate that the N/2 NW/4 of Section 14 is a federal lease designated NM-2748 and the offsetting S/2 NW/4 of Section 14 is also a federal lease designated NM074939. Your statements therefore do not appear valid in this instance. Are the working interests between these two federal leases as to the Loco Hills-Paddock Pool identical? If not how are they different?

Once I receive your reply I can then process your application accordingly. Thank you.

Sincerely,

Michael E. Stogner  
Chief Hearing Officer/Engineer

cc: New Mexico Oil Conservation Division – Artesia  
U. S. Bureau of Land Management – Carlsbad