

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

SEP 18 2009

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER5. Lease Serial No.  
NMSF080245B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.  
A. B. GEREN 6B

9. API Well No.

30-045-35022

10. Field and Pool, or Exploratory  
BASIN FRUITLAND COAL11. Sec., T, R., M., or Blk. and Survey or Area  
Sec 29 T29N R9W Mer

H

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone2. Name of Operator  
KOCH EXPLORATION COMPANY, LLC

Contact: DON JOHNSON

E-mail: johnso4d@kochind.com

3a. Address  
PO BOX 489  
AZTEC, NM 874103b. Phone No. (include area code)  
Ph: 505-334-9111  
Fx: 505-334-1688

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface SENE 1707FNL 666FEL 36.69899 N Lat, 107.79582 W Lon

At proposed prod. zone SENE 1707FNL 666FEL 36.69899 N Lat, 107.79582 W Lon

14. Distance in miles and direction from nearest town or post office\*

12. County or Parish  
SAN JUAN13. State  
NM15. Distance from proposed location to nearest property or  
lease line, ft. (Also to nearest drig. unit line, if any)16. No. of Acres in Lease  
640.0017. Spacing Unit dedicated to this well  
320.00 E/218. Distance from proposed location to nearest well, drilling,  
completed, applied for, on this lease, ft.19. Proposed Depth  
2198 MD20. BLM/BIA Bond No. on file  
10412836621. Elevations (Show whether DF, KB, RT, GL, etc.)  
5718 GL22. Approximate date work will start  
10/26/200923. Estimated duration  
30 DAYS  
OCT 15 '09

24. Attachments

OIL CONS. DIV.

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

DIST. 3

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature  
(Electronic Submission)Name (Printed/Typed)  
DARLENE TADLOCK Ph: 505-334-9111Date  
09/17/2009Title  
FIELD ADMINISTRATIVE TECH

Approved by (Signature)

Name (Printed/Typed)

Date  
10/5/09

Title

Office

Application approval does not warrant or certify 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.

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.

Electronic Submission #74471 verified by the BLM Well Information System  
For KOCH EXPLORATION COMPANY, LLC, sent to the Farmington

OCT 19 2009

NMOC

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

7/30/09

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, N.M. 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, N.M. 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-045-35022</b>		<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name BASIN FRUITLAND COAL
<sup>4</sup> Property Code 18432	<sup>5</sup> Property Name A.B. GEREN		<sup>6</sup> Well Number 6B
<sup>7</sup> GRID No. 12807	<sup>8</sup> Operator Name KOCH EXPLORATION		<sup>9</sup> Elevation 5718

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	29	29 N	9 W		1707	NORTH	666	EAST	SAN JUAN

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres 320 E/2	<sup>13</sup> Joint or Infill Y	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. R-13132
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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

<sup>16</sup> S 89°45' W 2695.44' (R) LOT 2 (38.53) 2608.98' (R) N 0°01' E 2693.74' N 18°32'12" E S 89°32'16" W	LOT 1 (38.38) LOT 4 (34.86) LOT 5 (34.01) LOT 8 (38.89)	S 89°50'53" W A.B. GEREN #6 NAD 83 LAT: 36.6989888° N LONG: 107.7958226° W SECTION 29 A.B. GEREN #6A O = PROPOSED LOCATION ● = EXISTING LOCATION	2632.27' 1707' 666' 2615.93' 2622.81'	<sup>17</sup> OPERATOR CERTIFICATION 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 compulsory pooling order heretofore entered by the division. Signature: <i>Donald L. Johnson</i> Date: 7/8/09 Printed Name: Donald L. Johnson
				<sup>18</sup> 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. Date of Survey: 6/17/09 Signature and Seal of Professional Surveyor: <i>Marshall W. Linden</i> 17078 Certificate Number: 17078

**A. B. Geren 6B**

Surface: S29 T29N R09W, 1707' FNL & 666' FEL

San Juan Co., New Mexico

Lease #SF-080245-B

**Drilling Program****1) Geological name of surface formation -**

Estimated tops of important geological markers:

San Jose	Surface
Ojo	1003'
Kirtland Shale	1108'
Fruitland Coal	1748'
Pictured Cliffs	2098'
TD	2198'

**2) Estimated depths at which oil, gas, water, and mineral bearing formation will be found:**

Useable Water	0' to 1108'
Salt Water	1108' to 1748'
Oil and Gas	1748' to 2198'

**3) Pressure Control Equipment:**

- a. 10-inch 900 series or 2,000 psi test double gate hydraulic with 4-1/2" pipe rams and cross spool with flanged outlets. See BOP diagram at **Exhibit F-1** for drawing of choke lines, kill lines and choke manifold. Procedures will include waiting on cement 12 hours, nipple up blowout preventer (BOP) assembly and test to 70% of yield of casing or 600 psi maximum. The production casinghead pressure rating will be 5,000 psi.
- b. Type of BOP rams: Blind rams and pipe rams are used as shown on the BOP diagram at **Exhibit F-1**. Occasionally, the position of the rams is reversed depending on the drilling contractor's methods.
- c. The choke manifold and header will have 2-inch choke outlets, a 2-inch straight through the line with 2-inch adjustable chokes installed. The inlet line will be a 2-inch line. All of the above are rated at 1,500 psi working pressure (WP). The choke manifold and header system will have manual control valves; no hydraulic valves will be installed. Casing testing procedure – Surface casing will be tested at 600 psi maximum for 30 minutes, after cementing in place and before drilling out of shoe. Production casing will be tested to 3,800 psi for 30 minutes, after drilling to the required depth, and after cementing in place.
- d. The BOPS are hydraulic controlled.
- e. BOP testing procedures and frequency:

BOP tests will be performed using an appropriately sized test plug. The test will be performed and recorded using a test pump, calibrated test gauges, and a properly calibrated strip or chart recorder. The test will be recorded in the driller's log and will include a low pressure test of 250 psi held for five minutes and a high pressure test of 2,000 psi for ten minutes as described in Onshore Order No. 2.
- f. Casinghead connections will be 2-inch; these outlets will usually be bull plugged during drilling operations. No pumping through these connections is allowed except in emergency to keep from wearing out the head.

**A. B. Geren 6B**

Surface: S29 T29N R09W, 1707' FNL & 666' FEL

San Juan Co., New Mexico

Lease #SF-080245-B

- g. The drilling spool will be a series 900 2,000 psi WP with a 2-inch kill line and a 2-inch outlet.

**4) Proposed Casing Program:**

Surface Casing Program:	Hole Size				Depth
Surface Casing	12 1/4"	8 5/8"	24.0#	J-55 STC	New @ 160'
Production Casing	6 3/4"	4 1/2"	10.5#	J-55 LTC	New @ 2198'

**Proposed setting depth, amount and type of cement including additives:**

8 5/8" Surface Casing – Surface to 160' – Cement with 112 sks Class B (15.60 ppg, yield 1.18 cf/sk) Cement + 3% Calcium Chloride + 1/4 lbs/sk. Celloflake, volume: 132.16 cf., includes 100% excess or equivalent cement dependent on availability. Centralizers will be run on bottom 3 joints starting at the shoe joint. *circulate to surface*

4 1/2" Production Liner – Surface to 2198' - Lead cement with 250 sks. Premium Lite FM + 3% Calcium Chloride + 1/4 lb/sk Cello Flake + 5 lb/sk LCM-1 + 8% Bentonite (wt. 12.1 ppg, yield 2.12) volume: 530.0 cf., includes 50% excess. Tail with 53 sks. Type III cement + 1/4 lb/sk Cello Flake + 3 lb sk LCM-1 (wt 14.6 ppg, yield 1.37) volume: 72.61 cf., includes no excess or equivalent cement dependent on availability. Centralizers will be run on the bottom 2 joints, then every 10<sup>th</sup> joint thereafter or +/- 400', and Centralizers, to impact a swirling action, will be placed just below and into the base of the Ojo Alamo. *cf*  
*circulate to surface*

**5) Mud Program:**

Mud will be used as designed by Mud Company engineer during drilling process. See attached mud program (**Exhibit E**).

**6) Testing, Logging, and Coring Program:**

No drill stem tests, cores, will be taken, a CBL log will be run if cement does not circulate to surface on production casing, and an Open hole log will be run before running casing.

**7) Expected Pressures –**

Fruitland Fm. 200 psi  
Bottom Hole 200 psi

No abnormal pressures, temperature or poisonous gas anticipated.

- 8) Drilling Tools:** 2 - 5 3/4" Drill Collars with 3-1/2" IF Connections  
3 - 1/2" Drill Pipe with 3-1/2" IF Connections  
Or contractor specific

**Anticipated Spud Date:**  
**Anticipated Completion Date:**

October 26, 2009  
November 16, 2009

**KOCH EXPLORATION COMPANY, LLC**

**A. B. Geren 6B**

Surface: S29 T29N R09W, 1707' FNL & 666' FEL

San Juan Co., New Mexico

Lease #SF-080245-B

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0'- 160'	Spud Mud/Water treated with gel lime	8.4-9.0	40-50	no control
160'- 2198'	Lime mud/Water/Polymer.	8.4-9.0	30-60	no control

Circulating media will be contractor dependent.

**Alternate Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0'- 160'	Spud Mud/Water treated w/ gel lime/Air/Air Mist	8.4-9.0	40-50	no control
160'- 2198'	LSND/Clear Water	8.4-9.0	30-60	no control

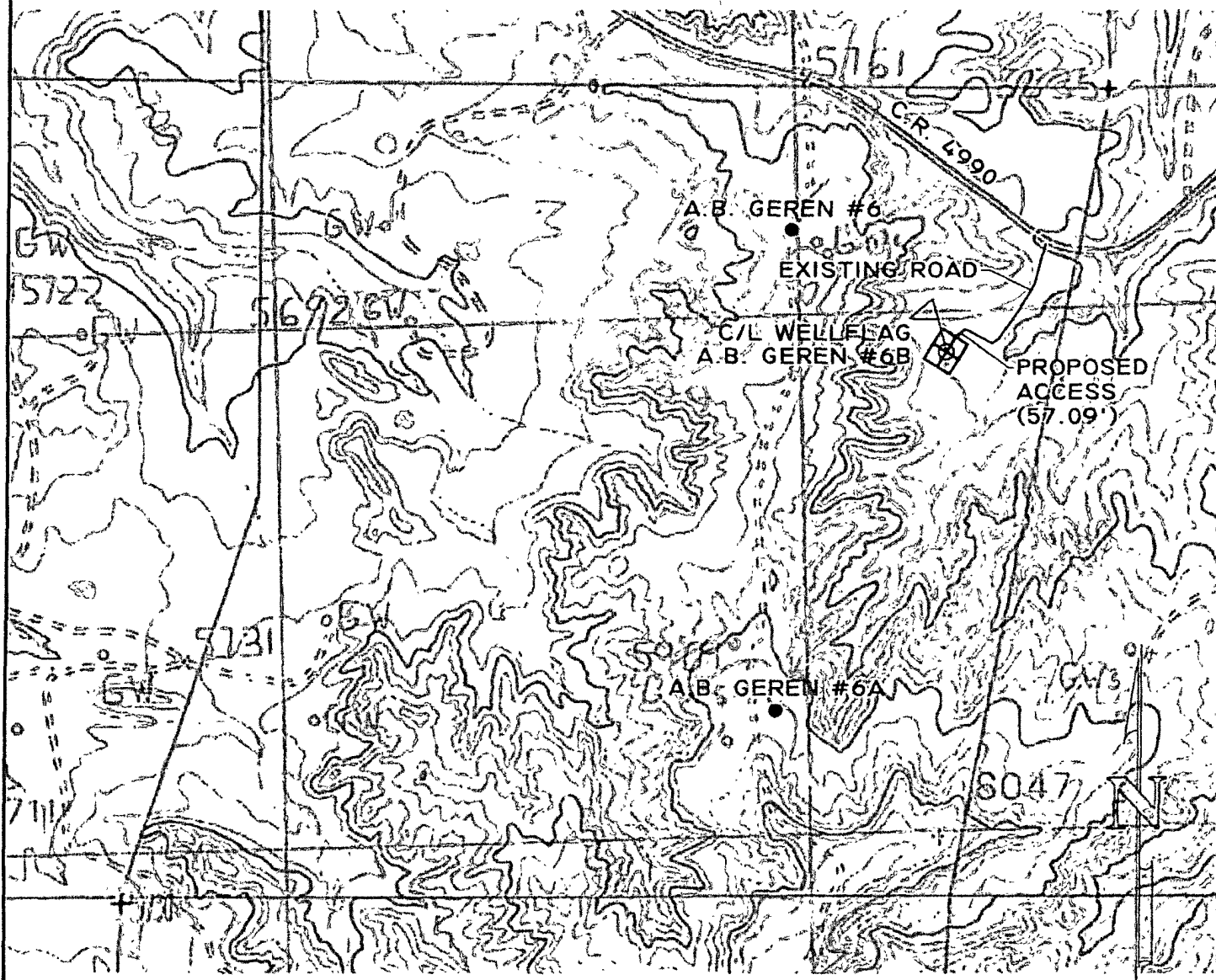
Circulating media will be contractor dependent.

Pit levels will be visually monitored to detect gain or loss of fluid control.

# KOCH EXPLORATION

A.B. GEREN #6B

NE/4 SEC. 29, T-29-N, R-9-W, N.M.P.M.,  
SAN JUAN COUNTY, NEW MEXICO



BLANCO QUADRANGLE



○ = PROPOSED LOCATION

● = EXISTING LOCATION

0 500 1000  
SCALE: 1"=1000'

LEASE: A.B. GEREN #6B

FOOTAGE: 1707' FNL, 666' FEL

SEC. 29 TWN. 29 N RNG. 9 W N.M.P.M.

LATITUDE: 36.6989888°N LONGITUDE: 107.7958226°W

ELEVATION: 5718

KOCH EXPLORATION

AZTEC, NEW MEXICO

SURVEYED: 6/17/09

REV. DATE:

APP. BY M.W.L.

DRAWN BY: H.S.

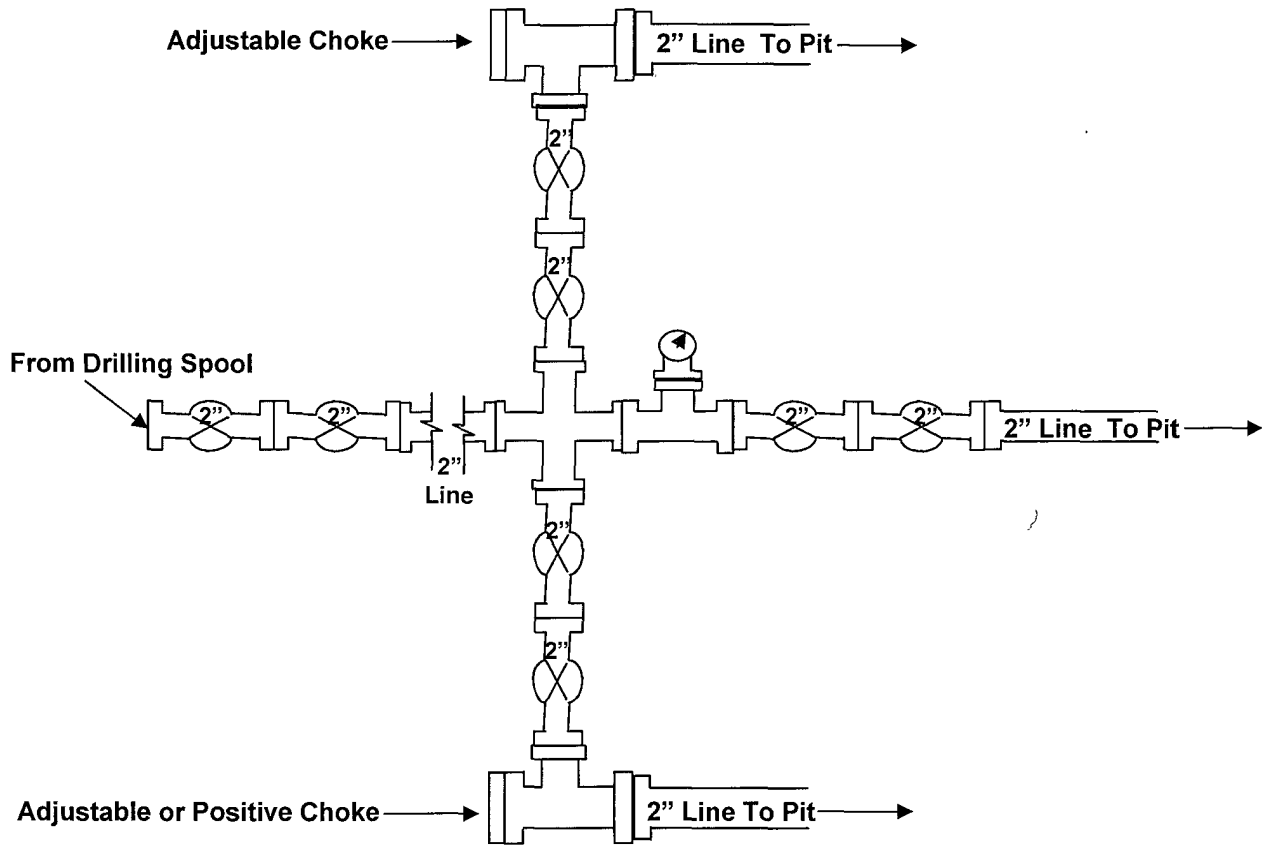
DATE DRAWN: 6/19/09

FILE NAME: 9348T01



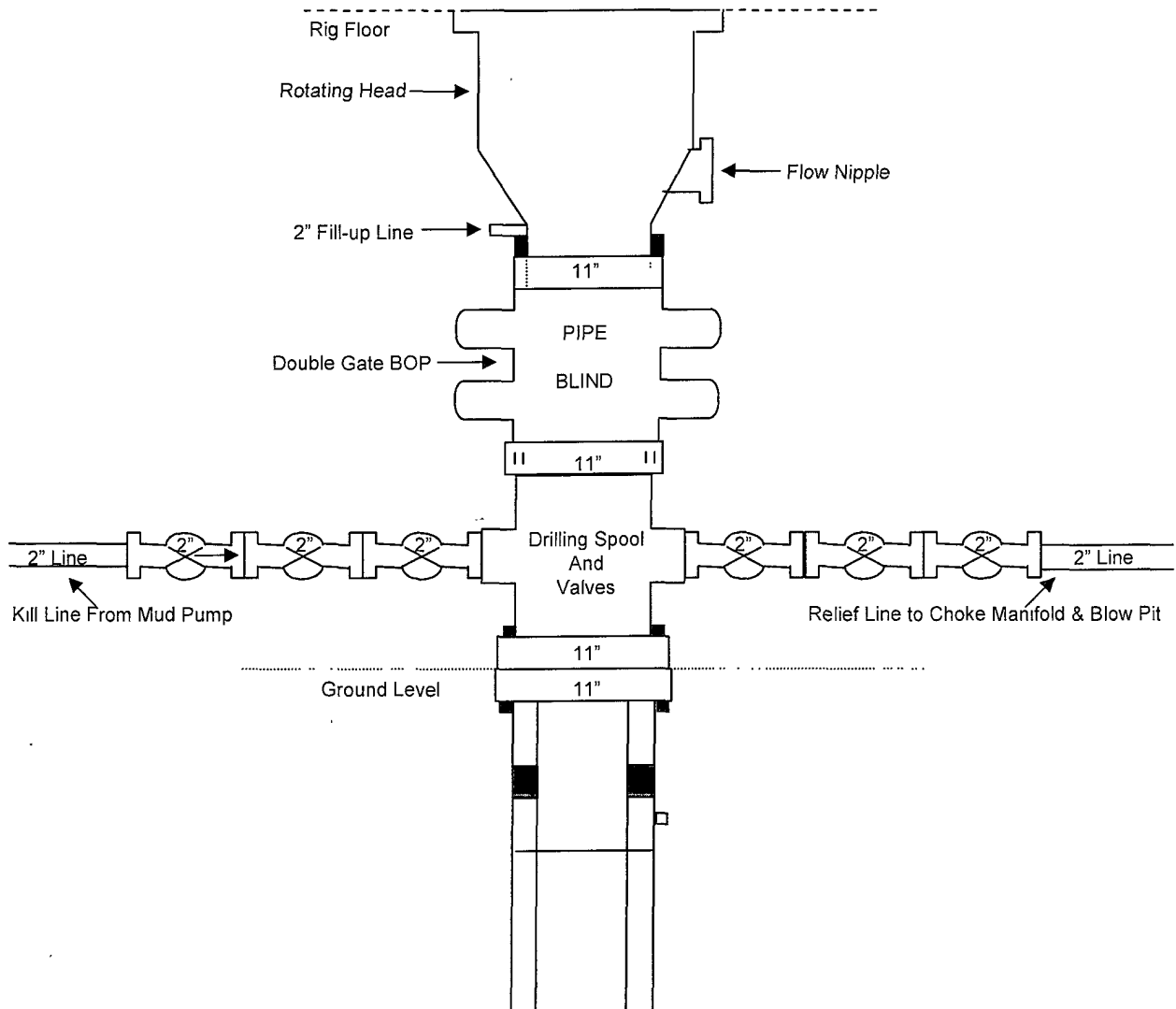
P.O. BOX 3651  
FARMINGTON, NM 87499  
OFFICE: (505) 334-0408

# Drilling Rig Choke Manifold Configuration 2000 psi System



2000 psi working pressure equipment with two chokes.

## DRILLING RIG 2000 psi System



11" Bore (10" Nominal). 2000 psi working pressure minimum double Gate BOP to be equipped with blind and pipe rams. A rotating head On the top of the rams. All BOP equipment is 2000 psi working pressure.

NOTE: A floor safety valve and upper kelly cock with handle will be available.

**EXHIBIT F-1**