

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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SEP 06 2007

Bureau of Land Management  
Farmington Field Office

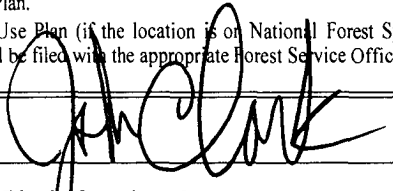
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF-078511</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>NA</b>
2. Name of Operator <b>Koch Exploration Company, LLC</b>		7. If Unit or CA Agreement, Name and No. <b>NA</b>
3a. Address <b>PO Box 489, Aztec, NM 87410</b>	3b. Phone No. (include area code) <b>505-334-9111</b>	8. Lease Name and Well No. <b>Quinn 338T</b>
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface <b>1711' FNL &amp; 898' FWL Lat. 36.900395 N Long. 107.719875 W</b> At proposed prod. zone <b>same</b>		9. API Well No. <b>30-045-34420</b>
14. Distance in miles and direction from nearest town or post office*		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any)		11. Sec., T. R. M. or Blk. and Survey or Area <b>F S18, T31N, R8W "F"</b>
16. No. of acres in lease <b>2,197.12</b> <b>330.16</b>	17. Spacing Unit dedicated to this well <b>219.36</b> <b>330.16</b> <b>N/2 330.16 NW 1/8 SW 1/4</b>	12. County or Parish <b>San Juan</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19. Proposed Depth <b>3376'</b>	13. State <b>NM</b>
20. BLM/BIA Bond No. on file <b>104128366</b>	21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6441' GL</b>	22. Approximate date work will start* <b>10/10/2007</b>
23. Estimated duration <b>8 days</b>		

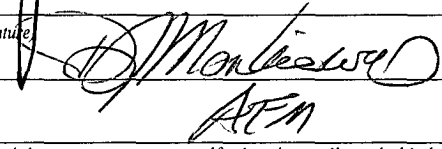
24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall 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 shall 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 authorized officer.

25. Signature  Name (Printed/Typed) **John Clark** Date **9-5-07**

Title **District Superintendent**

Approved by (Signature)  Name (Printed/Typed) **AFM** Date **10/18/07**

Title **AFM** Office **FFO**

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.

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.

\*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

Obtain a pit permit from NMOCD prior to constructing location

NMOCD  
OCT 30 2007  
AV

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

BLM'S APPROVAL OR ACCEPTANCE OF THIS  
ACTION DOES NOT RELIEVE THE LESSEE AND  
OPERATOR FROM OBTAINING ANY OTHER  
AUTHORIZATION REQUIRED FOR OPERATIONS  
ON FEDERAL AND INDIAN LANDS

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 30-045-34420	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code 7407	<sup>5</sup> Property Name QUINN	<sup>6</sup> Well Number 338T
<sup>7</sup> OGRID No 12807	<sup>8</sup> Operator Name KOCH EXPLORATION	<sup>9</sup> Elevation 6441

<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
F	18	31 N	8 W		1711	NORTH	898	WEST	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
								RCVD NOV 2 '07	

<sup>12</sup> Dedicated Acres 219.36 (W/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. R-12723A	OIL CONS. DIV.
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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 DIST. 3

	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>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.</p> <p>Signature: <u>Donald L. Johnson</u> Date: <u>11/2/07</u></p> <p>Printed Name: <u>Donald Johnson</u></p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey: <u>6/06/07</u></p> <p>Signature and Seal of Professional Surveyor: _____</p> <p>Certificate Number: _____</p>

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Energy, Minerals & Natural Resources Department

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Form C-102

Revised October 12, 2005

Appropriate District Office

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WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045- <b>34420</b>	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code <b>7407</b>	<sup>5</sup> Property Name <b>QUINN</b>	<sup>6</sup> Well Number <b>338T</b>
<sup>7</sup> GRID No. 12807	<sup>8</sup> Operator Name <b>KOCH EXPLORATION</b>	<sup>9</sup> Elevation <b>6441</b>

<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
<b>F</b>	<b>18</b>	<b>31 N</b>	<b>8 W</b>		<b>1711</b>	<b>NORTH</b>	<b>898</b>	<b>WEST</b>	<b>SAN JUAN</b>

<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 <b>330.36</b>	<sup>13</sup> Joint or Infill <b>whis</b>	<sup>14</sup> Consolidation Code <b>7</b>	<sup>15</sup> Order No. <b>R-12723A</b>
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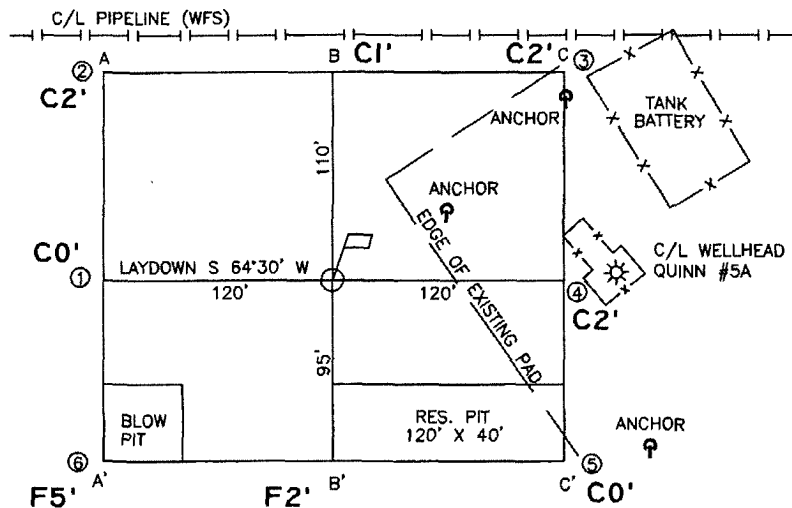
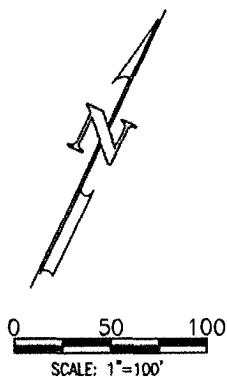
NO ALLOWABLE ~~well~~ BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
+ SW/4 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<b>16</b>	S 89°52'36" E 2577.00'	1831.23'	S 89°52'35" E 2658.60'	<b>17 OPERATOR CERTIFICATION</b> 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: <u>Donald L. Johnson</u> Date: <u>7/16/07</u> Printed Name: <u>Donald L. Johnson</u>
	1711'			
	898'	NAD 83 LAT: 36.900395° N LONG: 107.719875° W		
	N 2°08'01" W	<b>SECTION 18</b>		
	2605.90'			<b>18 SURVEYOR CERTIFICATION</b> 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: <u>6/06/07</u> Signature and Seal of Professional Surveyor: <u>Robert L. Pounds</u> Certificate Number: <u>6846</u>
	N 0°40'37" E		4400.33'	
	N 89°40'59" W			

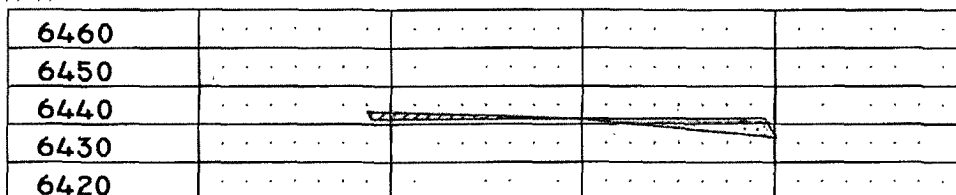
W/2 18

SW/4 7

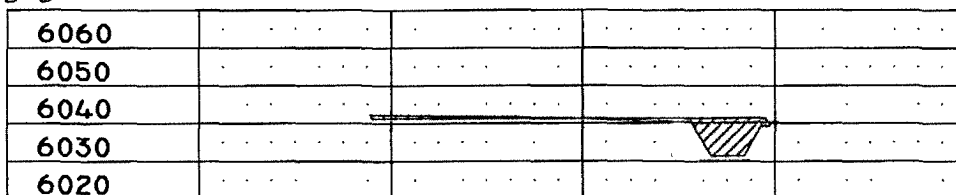
BEFORE DIGGING  
CALL FOR UTILITY  
LINE LOCATION!



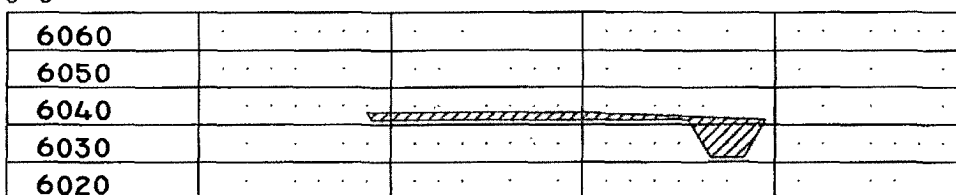
ELEVATION A-A'



B-B'



C-C'



CROSS SECTIONS  
HORIZONTAL: 1"=100'  
VERTICAL: 1"=50'

LEASE: QUINN #338T

FOOTAGE: 1711' FNL, 898' FWL

SEC. 18 TWN. 31 N RNG. 8 W N.M.P.M.

LATITUDE: 36.900395° N LONGITUDE: 107.719875° W

ELEVATION: 6441

KOCH EXPLORATION  
AZTEC, NEW MEXICO

SURVEYED: 6/06/07

REV. DATE:

APP. BY R.L.P.

DRAWN BY: H.S.

DATE DRAWN: 6/08/07

FILE NAME: 7733C01



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

## **QUINN 338T**

S18 T31N R8W, 1711' FNL & 898' FWL

San Juan Co., New Mexico

Lease SF 078511

### **Drilling Program**

#### **1) Geological name of surface formation -**

Estimated tops of important geological markers:

San Jose	Surface
Ojo	2066'
Kirtland Shale	2116'
Fruitland Coal	2926'
Pictured Cliffs	3276'
TD	3376'

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

Useable Water	0' to 2066'
Salt Water	2066' to 2926'
Oil and Gas	2926' to 3376'*

\*NOTE: We will be drilling 100' into Pictured Cliffs formation, which is a non-producing zone in this area, to allow completions with a sump.

#### **3) Pressure Control Equipment:**

- a. 10-inch 900 series or 2,000 psi test double gate hydraulic with 4-1/2" pipe rams and 10-inch series 900 hydril above 10-inch series casinghead 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 1,500 psi maximum. The production casinghead pressure rating will be 3,000 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 with 1,000 psi maximum for 30 minutes, after cementing in place and before drilling out of shoe. Intermediate and production casing will be tested to 1,500 psi for 30 minutes, after cementing in place and after drilling to the required depth.
- d. Hydraulic controls to close the BOPs are located on the rig floor; the hydraulic remote control is located in the bottom doghouse. There will be no manual controls on the BOP.

**QUINN 338T**

S18 T31N R8W, 1711' FNL &amp; 898' FWL

San Juan Co., New Mexico

Lease SF 078511

- 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 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.
- 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:	<u>Hole Size</u>				<u>Depth</u>
Surface Casing	12 1/4"	9 5/8"	36.0#	J-55 STC	New @ 350'
Intermediate Casing	8 3/4"	7"	23#	J-55 LTC	New @ 2950'
Production Liner	6 1/4"	5 1/2"	15.5#	J-55 LTC	New @ 3376'

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

9 5/8" Surface Casing – Surface to 350' – Cement with 171 sks Type III (15.2 ppg, yield 1.28 cf/sk) Cement + 3% Calcium Chloride + 0.25 lbs/sk. Celloflake, volume: 219.14 cf., includes 100% excess. Centralizers will be run on all joints.

7" Intermediate Casing – Surface to 2950' –

Lead cement with 350 sks. Premium Lite FM + 3% Calcium Chloride + 0.25 lb/sk Celloflake, (wt. 12.1 ppg, yield 1.75) volume: 611.97 cf., includes 75% excess. Tail with 72 sks. Type III cement + 1% Calcium Chloride + 0.25 lb sk Celloflake + 0.2% FL-52 (wt 14.6 ppg, yield 1.38) volume: 99.36 cf. Centralizers will be run every other joint above the shoe to the turbolizers then every 4<sup>th</sup> joint to the surface pipe. Turbolizers, to impact a swirling action, will be placed at the base of the Ojo Alamo, and 1 joint up in the Ojo Alamo.

5 1/2" Production Liner 2900' to 3376' – Will not cement liner.

**5) Mud Program:**

Mud will be used as designed by Mud Company engineer during drilling process.

**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 intermediate casing.

**QUINN 338T**

S18 T31N R8W, 1711' FNL & 898' FWL

San Juan Co., New Mexico

Lease SF 078511

We will drill through the Fruitland Coal and 100' of non-productive Pictured Cliff with mud loggers.

**7) Expected Pressures –**

Fruitland Fm. 200 psi

Bottom Hole 200 psi

No abnormal pressures, temperature or poisonous gas anticipated.

**8) Drilling Tools:** 20 4-3/4" Drill Collars with 3-1/2" IF Connections  
3-1/2" Drill Pipe with 3-1/2" IF Connections

**Anticipated Spud Date:** October 10, 2007

**Anticipated Completion Date:** October 17, 2007

**KOCH EXPLORATION COMPANY, LLC**  
**QUINN 338T**  
S18 T31N R8W, 1711' FNL & 898' FWL  
San Juan Co., New Mexico  
**Lease SF 078511**

**Mud Program:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0'-350'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
350'-Intermediate TD	LSND/Clear Water	8.4-9.0	30-60	no control
Intermediate TD-TD	Air/Mist			
Circulating media will be contractor dependent.				

**Alternate Mud Program:**

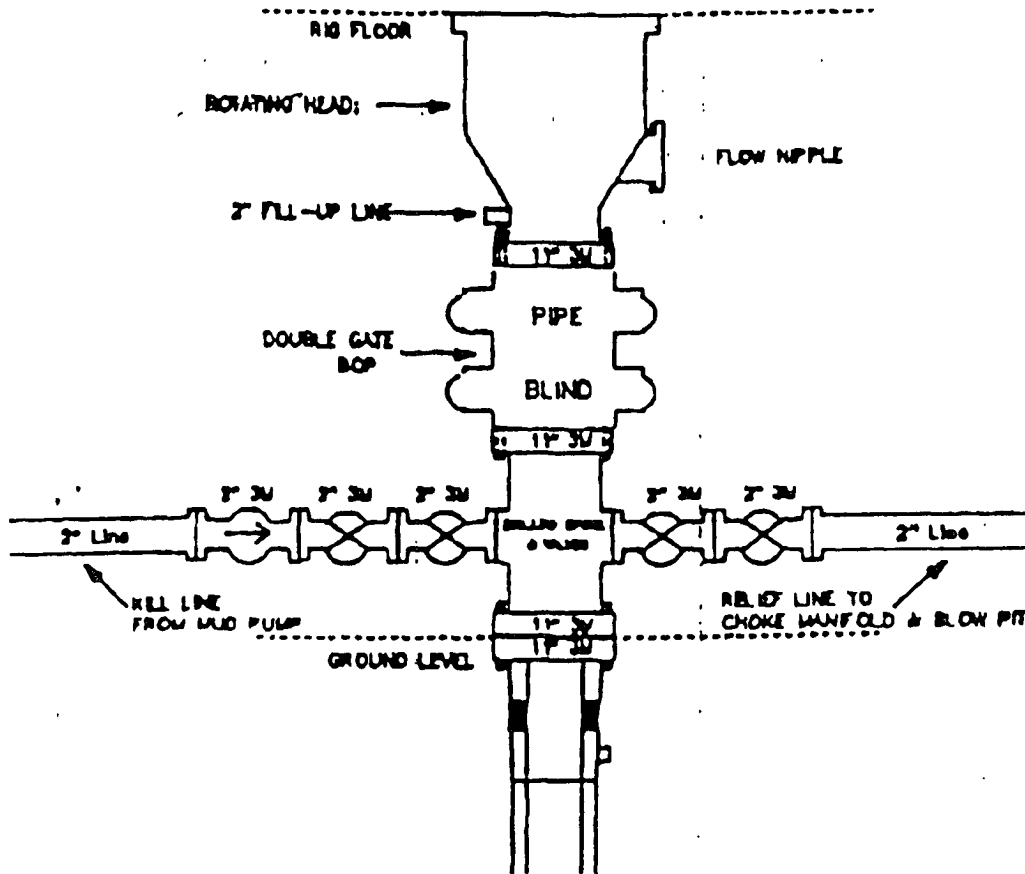
<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0'-350'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
350'-Intermediate TD	LSND/Clear Water	8.4-9.0	30-60	no control
Intermediate TD-TD	Air/Mist			
Circulating media will be contractor dependent.				

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



KEY FOUR CORNERS  
P. O. BOX 1067  
5651 U.S. HWY. 84  
FARMINGTON, NEW MEXICO 87400  
TELEPHONE: (505) 326-3371  
FAX: (505) 326-3370

## Drilling Rig 3000 psi System

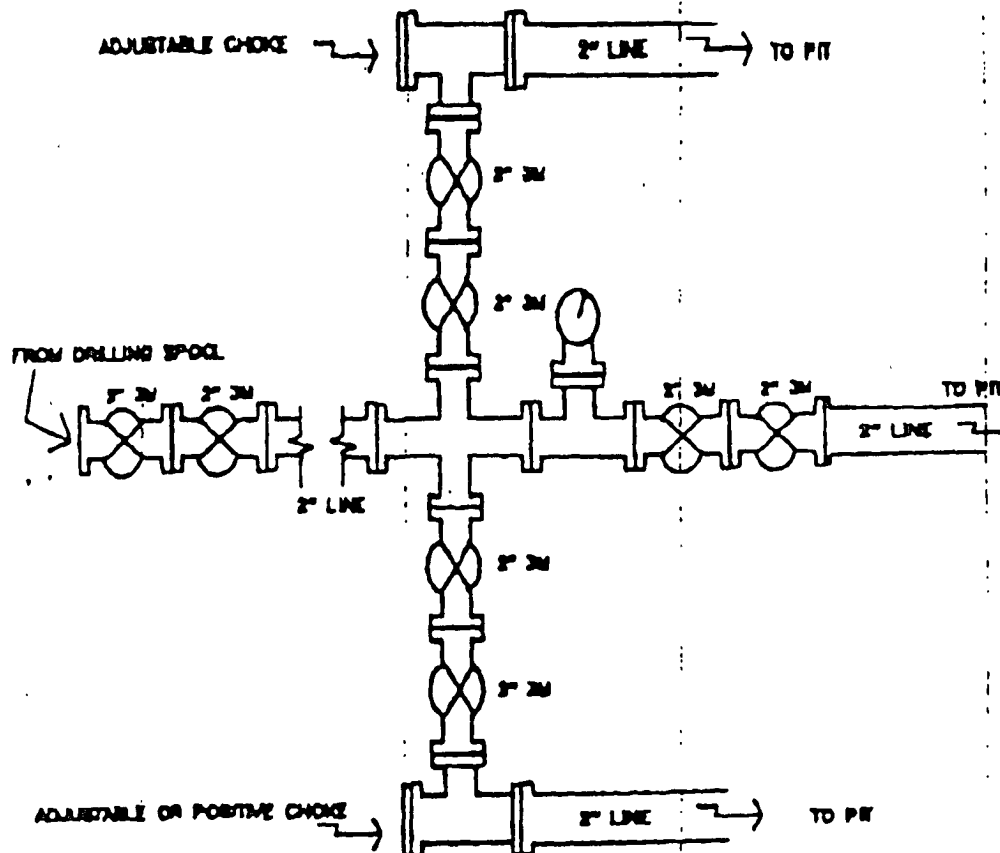


11" Bore (10" Nominal), 3000psi working pressure minimum double gate BOP to be equipped with blind and pipe rams. A rotating head on the top of the rams. All BOP equipment is 3000psi working pressure.

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

Exhibit "F-1"

# Drilling Rig Choke Manifold Configuration 3000 psi System



3000psi working pressure equipment with two chokes.

Exhibit "F-2"