

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF065557
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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 McElvain Oil & Gas Properties, Inc.		7. If Unit or CA Agreement, Name and No.
3a. Address 1050 17th Street, Suite 1800 Denver, CO 80265-1801	3b. Phone No. (include area code) 303.893.0933X302	8. Lease Name and Well No. PRI No. 4
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 970' FNL - 1155' FWL, Section 13, T29N, R12W, NMPM At proposed prod. zone Same		9. APL Well No. 30-045-33014
10. Field and Pool, or Exploratory Fulcher Kutz Pictured Cliffs		11. Sec., T. R. M. or Blk. and Survey or Area D Section 13, T29N, R12W, NMPM
12. Distance in miles and direction from nearest town or post office* 4.5 miles southeast of Flora Vista, New Mexico	13. County or Parish San Juan	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 358 970	16. No. of acres in lease 626.48	17. Spacing Unit dedicated to this well NW/4 - 153.76 acs
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 600	19. Proposed Depth 2268'	20. BLM/BIA Bond No. on file LPM4138223
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5822' GL	22. Approximate date work will start* 05/15/2005	23. Estimated duration 10 days

24. Attachments

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

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Robert E. Fielder</i>	Name (Printed/Typed) Robert E. Fielder	Date 04/05/2005
---	---	--------------------

Title
Agent

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 5-19-05
---	-----------------------------	-----------------

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)

NMOCD

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33014		*Pool Code 77200	*Pool Name FULCHER KUTZ PICTURED CLIFFS
*Property Code 34482	*Property Name PRI		*Well Number 4
*GRID No. 22044	*Operator Name McELVAIN OIL & GAS PROPERTIES, INC.		*Elevation 5822'

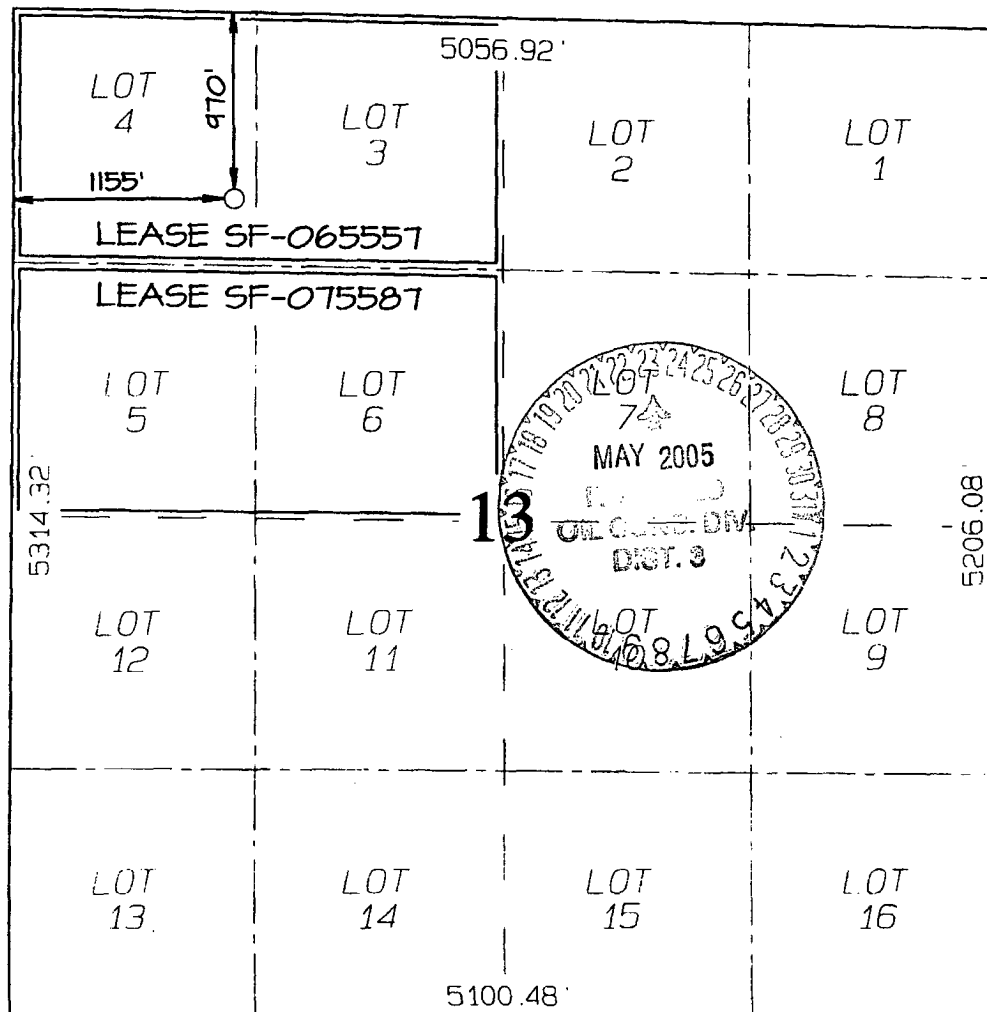
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	13	29N	12W		970	NORTH	1155	WEST	SAN JUAN

¹¹ 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
¹² Dedicated Acres 153.76 Acres - (NW/4)					¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order 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



¹⁷ OPERATOR CERTIFICATION

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

Robert E. Fielder
Signature

Robert E. Fielder

Printed Name
Agent

Title
April 5, 2005

Date

¹⁸ 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: **MARCH 11, 2005**

Signature and Seal of Professional Surveyor



Jason C. Edwards
Certificate Number **15269**

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name PRI
8. Well Number 4
9. OGRID Number 22044
10. Pool name or Wildcat Fulcher Kutz Pictured Cliffs

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator McElvain Oil & Gas Properties, Inc	
3. Address of Operator 1050 17 th St., Suite 1800 Denver, CO 80265-1801	
4. Well Location Unit Letter <u>D</u> : <u>970</u> feet from the <u>North</u> line and <u>1155</u> feet from the <u>West</u> line Section <u>13</u> Township <u>29N</u> Range <u>12W</u> NMPM San Juan County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5822' GL	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type <u>Drilling</u> Depth to Groundwater <u>>100 ft.</u> Distance from nearest fresh water well <u>> 1000 ft</u> Distance from nearest surface water <u>> 1000ft</u>	
Pit Liner Thickness: <u>12 mil</u> Below-Grade Tank: Volume <u> </u> bbls; Construction Material <u> </u>	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: Request for pit permit <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

McElvain Oil & Gas Properties, Inc. requests permission to construct a lined drilling pit in conjunction with the construction of this well location. The pit dimensions and location are shown on the attached Wellsite Layout drawing. The pit will be constructed in accordance with NMOCD guidelines. A closure permit will be submitted within six months of cessation of operations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Robert E. Fielder TITLE Agent DATE 04/05/2005

Type or print name Robert E. Fielder
For State Use Only

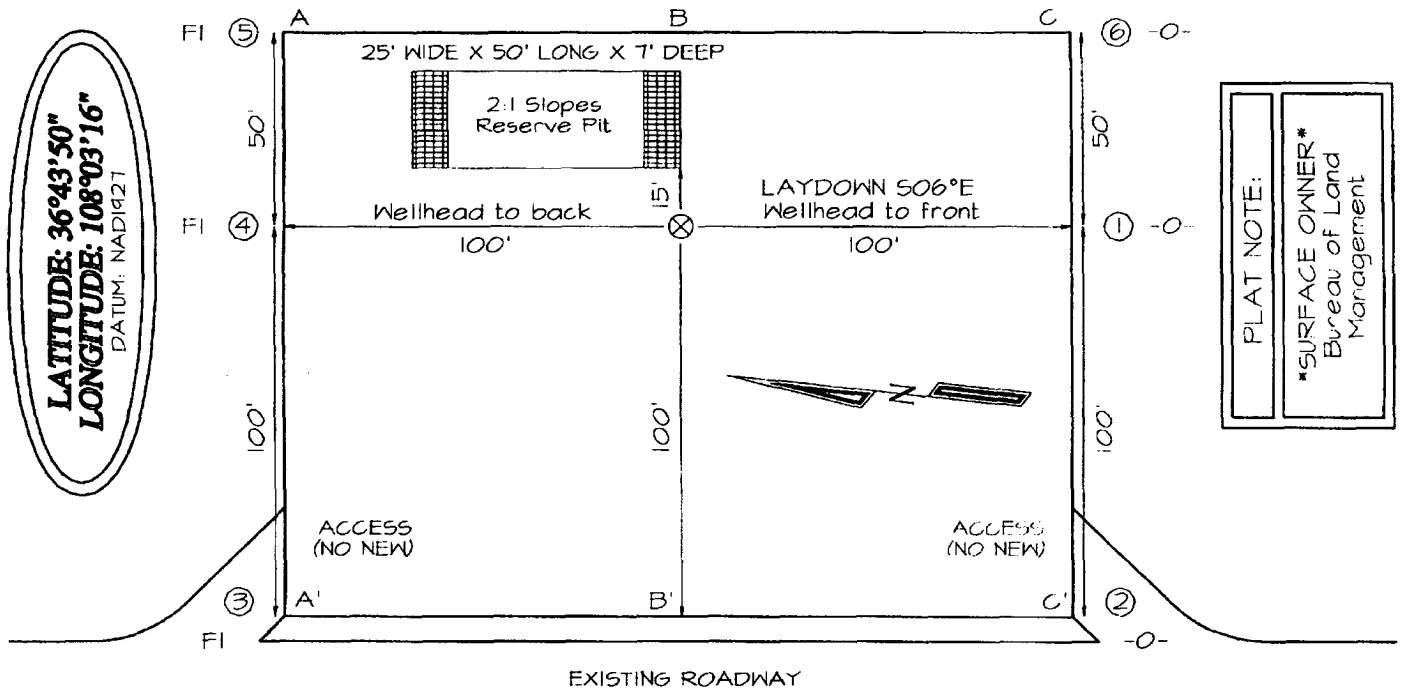
E-mail address: pmci@acs-online.net

Telephone No. 505.632.3869

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE MAY 23 2005

Conditions of Approval (if any):

McELVAIN OIL & GAS PROPERTIES PRI #4
970' FNL & 1155' FWL, SECTION 13, T29N, R12W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 5822'
DATE: MARCH 11, 2005



A-A'						
5832'						
5822'						
5812'						

B-B'						
5832'						
5822'						
5812'						

C-C'						
5832'						
5822'						
5812'						

Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

McElvain Oil & Gas Properties, Inc.

PRI No. 4

970' FNL & 1155' FWL

Section 13, T29N, R12W, NMPM

San Juan County, New Mexico

TEN POINT DRILLING PROGRAM

1. Surface Formation: Nacimiento

2. Surface Elevation: 5822' GL.

3. Estimated Formation Tops:

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Nacimiento	surface	
Ojo Alamo	598	
Kirtland	698	
Farmington	1428	
Fruitland	1668	
Pictured Cliffs	1918	GAS
Lewis	2118	
TOTAL DEPTH	2268	

4. Surface Hole Program:

Bit: Drill an 8 $\frac{3}{4}$ " hole to 200' using a retip mill tooth, IADC Class 115 or 116, bit. WOB: all. RPM: 70 - 100.

Mud: Use a fresh water base spud mud with the following properties:

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>Ph</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
0 - 200	8.6 or less	9.0-9.5	40 - 50	No Control

Casing and Cementing: A string of 7" 20 ppf J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 50 sacks (59.0 cf) of Class "B" cement (yield = 1.18 cf/sk) containing 3% CaCl₂ and 1/4 lb/sack celloflake. Slurry volume assumes 100% excess over calculated hole volume. If cement does not circulate to surface, cement will be topped off using 1" pipe down the 8 $\frac{3}{4}$ " by 7" annulus. Minimum clearance between couplings and hole is 0.5470". Prior to drilling out the shoe, casing and BOPE will be tested to a minimum of 600 psig. Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb overpull, whichever is greater.

WOC 12 HOURS. Nipple up 7 1/16" 2000# BOPE. Pressure test surface casing and BOPE to 600 psi for 15 minutes.

Centralizers: Run two (2) 7" X 8 $\frac{3}{4}$ " regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

Float Equipment: Cement nose guide shoe thread locked. Also thread lock connection between first and second joint run.

Drilling Program
McElvain Oil & Gas Properties, Inc.
PRI No. 4
Page Two

5. Production Hole Program:

Bit: Drill a 6¼" hole to 2268' using a TCI, IADC Class 447 bit. WOB: 30-35K. RPM: 60 - 75. Reduce RPM to 55 - 65 through Ojo Alamo.

Mud: Use a fresh water base polymer and water system to drill this section. If hole conditions dictate, mud up with a fresh water base LSND mud with the following properties:

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>Ph</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
200 - 2268	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12

Fresh water will be used for dilution and building volume. Sufficient materials will be on location at all times to maintain mud properties and to control any lost circulation problem or unforeseen abnormal pressures. The mud volume in the surface pit will be visually monitored and recorded on a routine basis.

Note: If mud up is required, raise **viscosity** to 55 - 60 for logging. Thin to 40 - 45 viscosity to run casing.

pH is to be maintained with lime or caustic soda at the recommended levels to assure drill pipe corrosion protection.

Drispac will be used for control of fluid loss.

Lost Circulation can occur in the Fruitland Coal and Pictured Cliffs formation. Mud weights should be controlled as low as possible with solids control equipment then as low as practical with water dilution.

Pressure Control: A 2M psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to a minimum of 600 psig before drilling out from under surface casing. Mechanical operation of pipe rams will be checked daily and blind rams will be checked on each trip out of hole. 4½" rams will be installed before running production casing. A full opening internal blowout preventor or drill pipe safety valve will be on the drill floor at all times and will be capable of fitting all connections.

Logging Program: Dual Induction and Compensated Neutron/Formation Density logs will be run from TD to the surface casing shoe.

Casing and Cementing Program: Run 4½" 10.5 ppf J-55 production casing from surface to TD and cement in a single stage with 100 sacks (255.0 cf) of Class B containing 3% sodium metasilicate extender, 5 pps Gilsonite and 1/4 pps celloflake. Lead slurry mixed at 11.8 PPG to yield 2.55 cf/sk. Tail in with 75 sacks (89.25 cf) of Class B with 0.25 pps celloflake, 0.3% FLA and 5 pps gilsonite mixed at 15.6 PPG to yield 1.19 cf/sk.

Drilling Program
McElvain Oil & Gas Properties, Inc.
PRI No. 4
Page Three

5. Production Hole Program: -continued

Slurry volumes assume a 50% excess over gauge hole volume to circulate to surface. Minimum clearance between couplings and hole is 0.6250". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb over pull, whichever is greater.

Centralizers: 5 - 4½" X 6¼" bowspring centralizers will be run across all prospective pays and 2 - 4½" X 6¼" turbolizers will be spaced such that one (1) is just below the base of the Ojo Alamo and one (1) in the Ojo Alamo.

Float Equipment: Cement nose guide shoe, 1 joint 4½" casing, and float collar.

6. Auxiliary Equipment:

An upper kelly cock will be utilized. The handle will be available on rig floor at all times

7. Logging Program:

Dual Induction and Compensated Neutron / Formation Density will be run from TD to surface casing shoe. Bulk density will be presented on a 5 " scale through the coals. Deep induction curve will be merged onto the porosity log.

Coring and Testing Program:

No cores or drill stem tests are planned.

8. Abnormal Pressure:

Although not expected, abnormal pressures are possible in the Fruitland formation.

Estimated Bottom Hole Pressure:

250 - 300 psig.

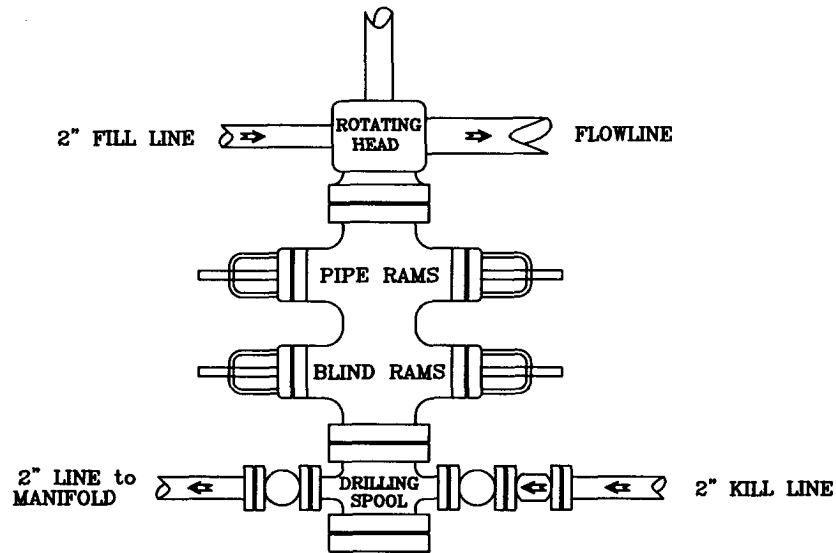
9. Anticipated Starting Date:

May 15, 2005

Duration of Operations: It is estimated a total of 6 days will be required for drilling operations and 5 days for the completion operation.

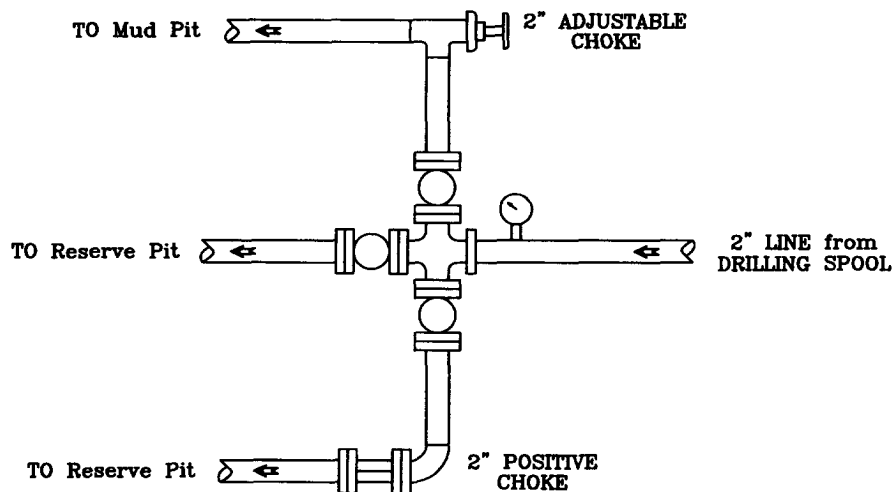
PRESSURE CONTROL

Wellhead Assembly



Preventer and Spools are to have a
6" Bore or larger and a 2000 PSI
or higher Pressure Rating

Choke Manifold



McElvain Oil & Gas Properties, Inc.

PRI No. 4

970' FNL - 1155' FWL

Section 13, T29N, R12W, NMPM
San Juan County, New Mexico