

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		25. Lease Serial No. SF080536	
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 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		8. Lease Name and Well No. Ora No. 8	
3b. Phone No. (include area code) 303.893.0933x302		9. API Well No. 30-039-29702	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1150' FSL - 930' FWL, Section 15, T25N, R3W, NMPM At proposed prod. zone same		10. Field and Pool, or Exploratory West Lindrith Gallup Dakota	
14. Distance in miles and direction from nearest town or post office* 7 miles northwest of Lindrith, NM		11. Sec., T. R. M. or Blk. and Survey or Area M Section 15, T25N, R3W, NMPM	
15. Distance from proposed* location to nearest property or lease line, ft. 930 (Also to nearest drig. unit line, if any) 930		12. County or Parish Rio Arriba	
16. No. of acres in lease 1640		13. State NM	
17. Spacing Unit dedicated to this well SW/4 - 160.0 acs.		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 500(P&A)	
19. Proposed Depth 8380'		20. BLM/BIA Bond No. on file LPM4138223	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7306' GL		22. Approximate date work will start* 12/15/2005	
23. Estimated duration 25 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.
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 <i>Robert E. Fielder</i>	Name (Printed/Typed) Robert E. Fielder	Date 11/18/2005
Title Agent		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 1/3/06
Title 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)



HOLD C104 FOR **N5L**

NMOCD

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

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

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

2005 NOV 21 PM 12:02 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29708		*Pool Code 39189	*Well Name LINDRITH GALLUP-DAKOTA, WEST
*Property Code 29123 ✓	*Property Name ORA ✓		*Well Number 8 ✓
*GRID No. 22044 ✓	*Operator Name McELVAIN OIL & GAS PROPERTIES		*Elevation 7306' ✓

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
M	15	25N	3W		1150	SOUTH	930	WEST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

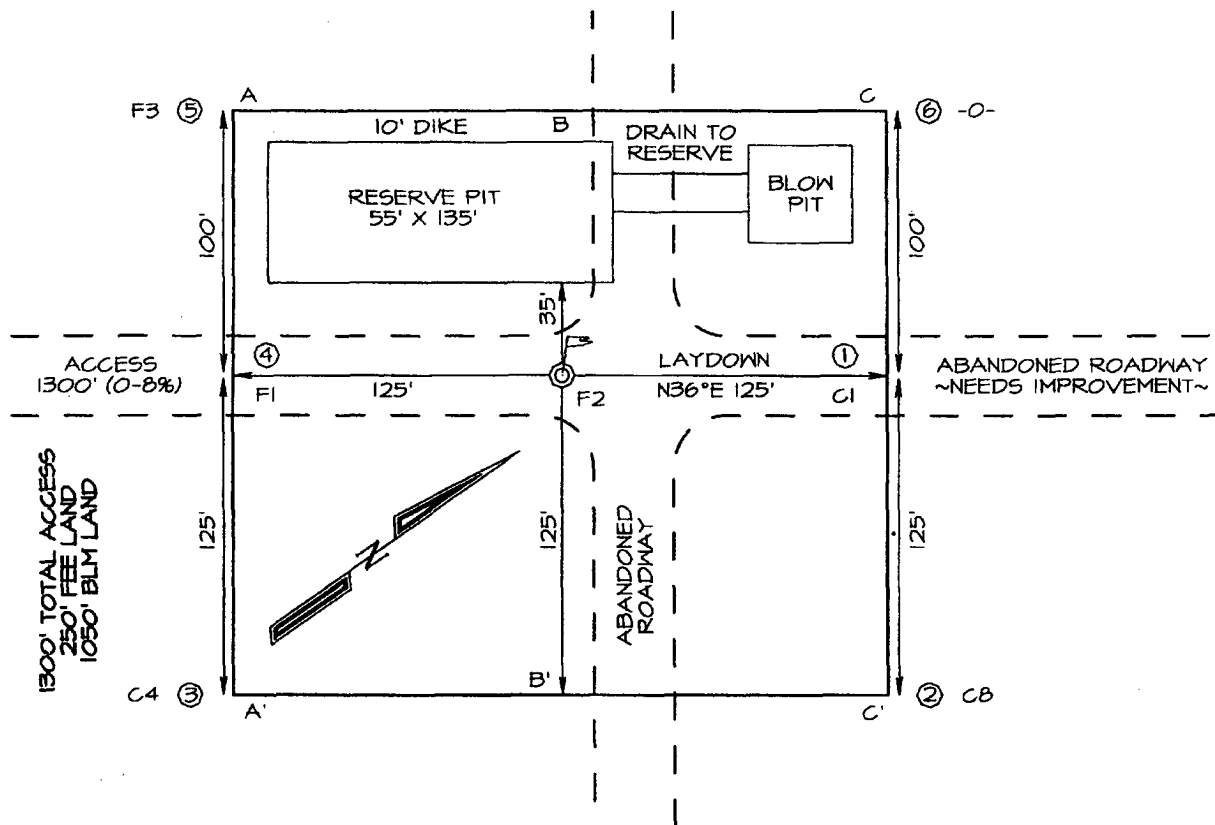
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 160.0 Acres - SW/4	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-----------------------------------------------------	-------------------------------	----------------------------------	-------------------------

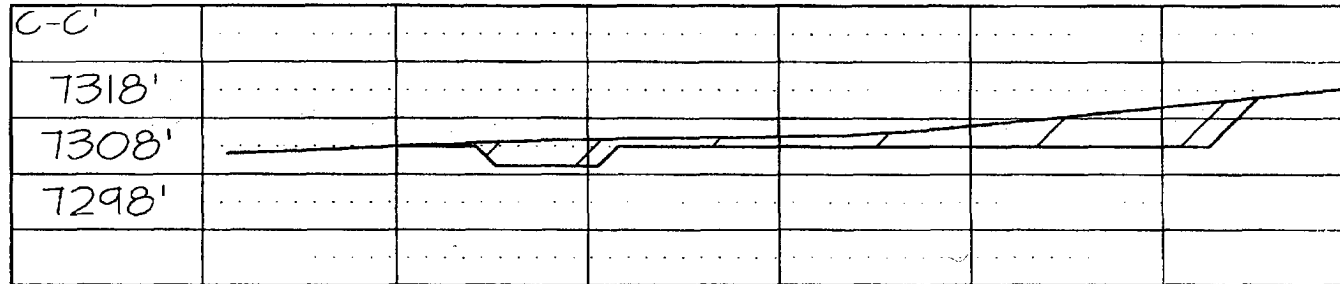
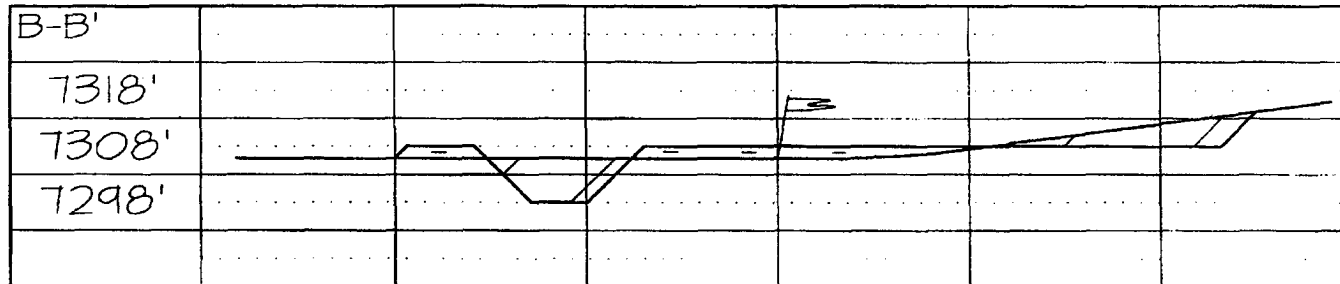
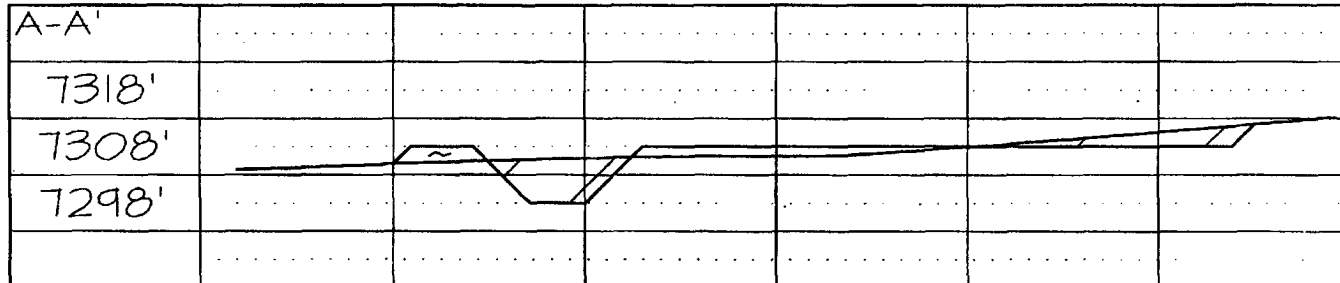
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div><p>16</p><p>5281.32'</p><p>5280.00'</p><p>15</p><p>LEASE SF-080536</p><p>930'</p><p>1150'</p><p>LAT: 36°23.6288' N LONG: 107°08.2568' W DATUM: NAD27</p><p>5287.92'</p></div>	<div><p>¹⁷ OPERATOR CERTIFICATION</p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p><p><i>Robert E. Fielder</i> Signature Robert E. Fielder Printed Name Agent Title November 18, 2005 Date</p></div> <div><p>¹⁸ 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>Survey Date: APRIL 22, 2005</p><p>Signature and Seal of Professional Surveyor</p><div><p>JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR</p></div><p><i>JASON C. EDWARDS</i> Certificate Number 15269</p></div>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

McELVAIN OIL & GAS PROPERTIES ORA #8
1150' FSL, 930' FWL, SECTION 15, T25N, R3W, NMPM
RIO ARriba COUNTY, NM GROUND ELEVATION: 7306'



LATITUDE: 36°23'38"
LONGITUDE: 107°08'15"
 DATUM: NAD1927



McElvain Oil & Gas Properties, Inc.

Ora No. 8

1150' FSL & 930' FWL

Section 15, T25N, R03W, NMPM

Rio Arriba County, New Mexico

TEN POINT DRILLING PROGRAM

1. Surface Formation: San Jose

2. Surface Elevation: 7306' GL.

3. Estimated Formation Tops:

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Nacimientito	1725	
Ojo Alamo	3460	
Fruitland	3630	
Pictured Cliffs	3750	GAS
Lewis	3935	
Huerfanito	4175	
Chacra	4870	
Mesa Verde	4925	
Cliff House	5425	GAS
Menefee	5560	GAS
Pt. Lookout	5910	GAS
Upper Mancos	6140	
Gallup	6925	GAS
Lower Mancos	7505	
Greenhorn	7890	
Graneros	7955	GAS
Dakota	7995	GAS
Burro Canyon	8240	
Morrison	8300	
TOTAL DEPTH	8380	

4. Surface Hole Program:

Bit: Drill a 12 1/4" hole to 600' 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 - 600	8.6 or less	9.0-9.5	40 - 50	No Control

Drilling Program

McElvain Oil & Gas Properties, Inc.

Ora No. 8

Page Two

4. Surface Hole Program: - continued

From 600' to Surface
Casing and Cementing: A string of 9 5/8" 36# J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 320 sacks of Class "B" cement (yield = 1.18 cf/sk) containing 2% 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 12 1/4" by 9 5/8" annulus. Minimum clearance between couplings and hole is 0.8125". 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.

WOC 12 HOURS. Nipple up 11" 2000# BOPE. Pressure test surface casing and BOPE to 600 psi for 15 minutes.

Centralizers: Run three (5) 9 5/8" X 12 1/4" regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

Float Equipment: Cement nose guide shoe thread locked. Self fill float collar run in top of first joint. Also thread lock connection between first and second joint run.

5. Production Hole Program:

Bit: Drill an 8 1/2" hole to 4000'± using TCI, IADC Class 447 bit. WOB: 35-45K. RPM: 60 - 75. Reduce RPM to 55 - 65 through Ojo Alamo. Reduce hole size to 7 1/2". Using TCI, IADC Class 447 bit drill to 6200'. WOB: 35-45K. RPM: 60-75. Reduce RPM and WOB while drilling Cliff House and Pt. Lookout intervals. At 6200' pick up PDC bit and drill to top of Dakota. Watch for fractures in Gallup and Greenhorn. Adjust WOB and RPM to keep PDC from stalling out. At 7995' run TCI, IADC Class 627 to 647 to finish hole.

Mud: Use 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>
600 - 3480	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
3480 - 6200	8.9 - 9.2	9.0-9.5	35 - 50	8 - 10
6200 - 8380	8.9 - 9.2	9.0-9.5	35 - 50	6 - 10

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 rig pits will be visually monitored and recorded on a routine basis.

Note: 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.

Drilling Program
McElvain Oil & Gas Properties, Inc.
Ora No. 8
Page Three

5. Production Hole Program: - continued

Mud: - continued

Drispac will be used for control of fluid loss.

Hole will be drilled to top of Fruitland using polymer and drispac additions to water. Mud up before drilling into Fruitland.

Lost Circulation is expected and can occur in the Pictured Cliffs, Mesa Verde and Gallup formations. 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 Density / Epithermal Neutron logs will be run from TD to surface casing shoe. A one man mud logging unit will be in service from 5000' to TD.

Casing and Cementing Program: Run 4½" 10.5 ppf (0 - 6700') J-55 and 4½" 11.6 ppf (6700 - TD) N-80 production casing and cement in 3 stages with mechanical DV tools installed ± thirty feet below the Upper Mancos top and ± thirty feet below Mesa Verde top. **Stage 1** (8380' - 6170') will be cemented with 295 sacks (592.95 cf) of 65/35 Class H Poz containing 5 pps gilsonite and 0.25 pps celloflake mixed at 12.3 ppg to yield 2.01 cf/sk. Tail in with 125 sacks (166.25 cf) of 50/50 Class H Poz with 2% gel, 5 pps gilsonite, 0.25 pps celloflake, 0.2% FR and 0.4% FLA mixed at 13.7 ppg to yield 1.33 cf/sk. **Stage 2** (6170' - 4955') will be cemented with 315 sacks (418.95 cf) of 50/50 Class H Poz with 2% gel, 5 pps gilsonite, 0.25 pps celloflake, 0.2% FR and 0.4% FLA mixed at 13.7 PPG to yield 1.33 cf/sk. **Stage 3:** (4955' - surface) will be cemented with 995 sacks (2109.4 cf) of 65/35 Class B Poz containing 5 pps gilsonite and 0.25 pps celloflake mixed at 12.1 ppg to yield 2.12 cf/sk. Tail in with 50 sacks (63.0 cf) of Class B with 2% CaCl₂, 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk.

Circulate and WOC between stages for four (4) hours.

Slurry volumes assume a 50% excess over gauge hole volume. Minimum clearance between couplings and hole is 1.4375". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

Drilling Program
McElvain Oil & Gas Properties, Inc.
Ora No. 8
Page Four

5. Production Hole Program: - continued

Centralizers: 4 - 4½" X 8¾" rigid centralizers, 15 - 4½" X 7½" rigid centralizers will be run spaced throughout casing string and 5 - 4½" X 8¾" turbolizers will be spaced such that one (1) is just below the Basal Fruitland Coal, two (2) across base of Ojo Alamo, and two (2) across base of Nacimiento.

Float Equipment: Cement nose float shoe, 1 joint 4½" N-80 casing, float collar, and 2 - mechanical DV tools with 2 cement baskets below each DV.

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

A one man mud logging unit will be in service from 5000' to TD.

Coring and Testing Program:

No cores or drill stem tests are planned.

9. Abnormal Pressure:

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

Estimated Bottom Hole Pressure:

2500 - 3000 psig.

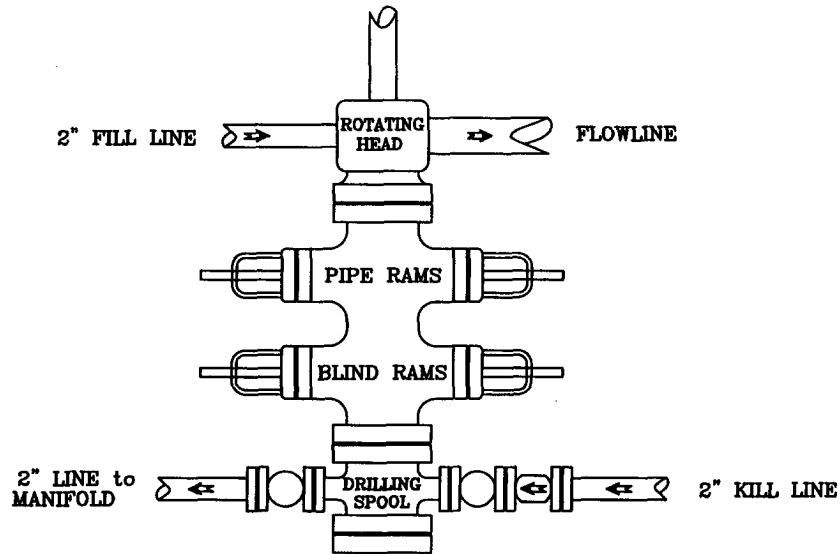
10. Anticipated Starting Date:

December 15, 2005

Duration of Operations: It is estimated a total of 15 days will be required for drilling operations and 10 days for the completion operation.

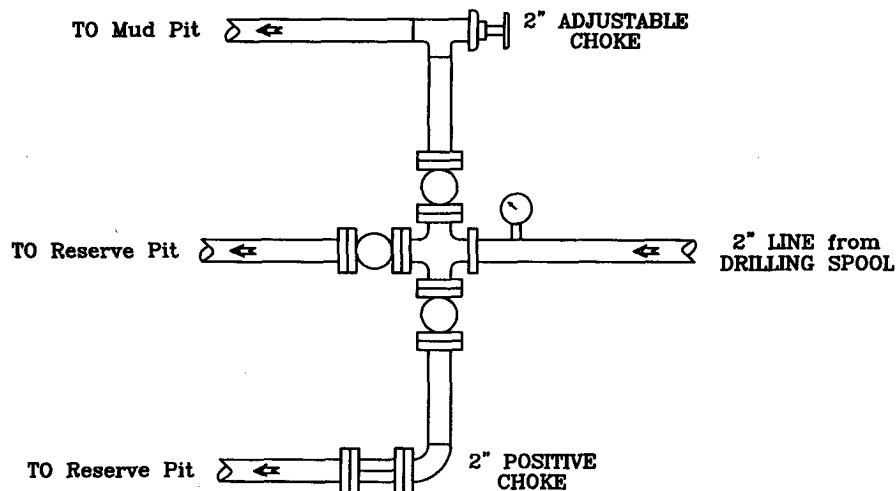
PRESSURE CONTROL

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.

Ora No. 8

1150' FSL - 930' FWL

Section 15, T25N, R3W, NMPM
Rio Arriba County, New Mexico

McElwain Oil & Gas Properties, Inc.

Wellsite Layout

Ora No. 8
1150' FSL & 930' FWL
Section 15, T25N, R3W, NMPM
Rio Arriba Co., New Mexico

Scale: 1 inch = 60 feet

