Form 3160-3
(September 2001)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. **SF079335A**
	6. If Indian, Allotee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. **Elk Com 10 No. 1B**
2. Name of Operator **McElvain Oil & Gas Properties, Inc.**	9. API Well No. **30-039-29215**
3a. Address **1050 17th St., Suite 1800 Denver. CO 80265**	3b. Phone No. *(include area code)* **(303)893-0933x302**
	10. Field and Pool, or Exploratory **Blanco Mesa Verde**
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface **660' FNL - 1345' FEL, Section 10, T25N, R2W, NMPM** At proposed prod. zone **Same**	11. Sec., T. R. M. or Blk. and Survey or Area **B Section 10, T25N, R2W, NMPM**
14. Distance in miles and direction from nearest town or post office* **Eight miles northeast of Lindrith, NM**	12. County or Parish **Rio Arriba** / 13. State **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) **660' / 660'**	16. No. of acres in lease **120**	17. Spacing Unit dedicated to this well **N/2-320**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **1100'**	19. Proposed Depth **6073'**	20. BLM/BIA Bond No. on file **LPM4138223**
21. Elevations (Show whether DF, KDB, RT, GL, etc.) **7401' GL**	22. Approximate date work will start* **05/01/2004**	23. Estimated duration **20 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 Robert E. Fielder	Name *(Printed/Typed)* **Robert E. Fielder**	Date **03/24/2004**
Title **Agent**		
Approved by *(Signature)* **/s/ David R. Sitzler**	Name *(Printed/Typed)*	Date **AUG 2 3 2004**
Title **Assistant Field Manager**	Office	

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)*

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

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

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

State Lease - 4 Cop
Fee Lease - 3 Cop

☐ AMENDED REPOF

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-29215	72319	BLANCO MESAVERDE

4 Property Code	5 Property Name	6 Well Number
24727	ELK COM 10	1B

7 OGRID No.	8 Operator Name	9 Elevation
22044	McELVAIN OIL & GAS PROPERTIES	7401'

10 Surface Location

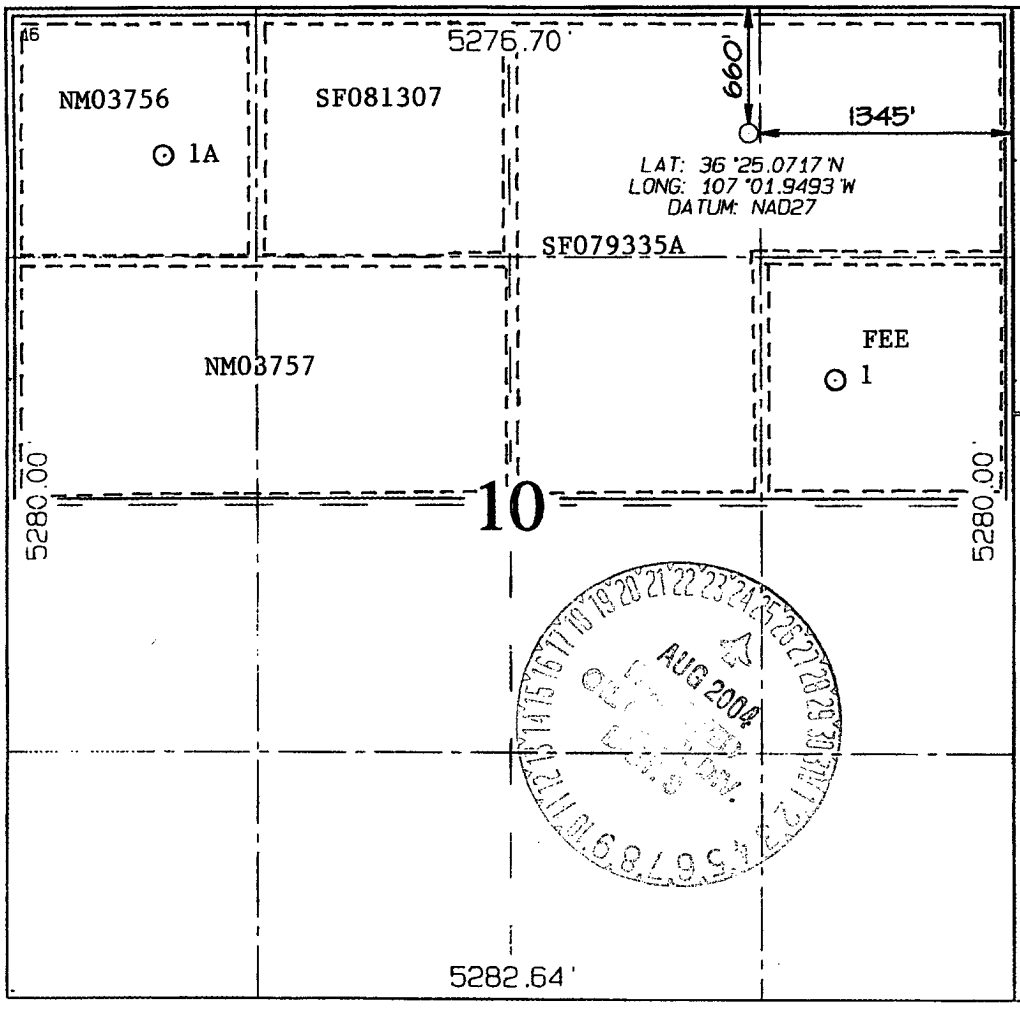
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	25N	2W		660	NORTH	1345	EAST	RIO ARRIBA

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
320.0 Acres - N/2	Y		

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.

Signature

Robert E. Fielder

Printed Name

Agent

Title

March 9, 2004

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.

Survey Date: OCTOBER 11, 2003

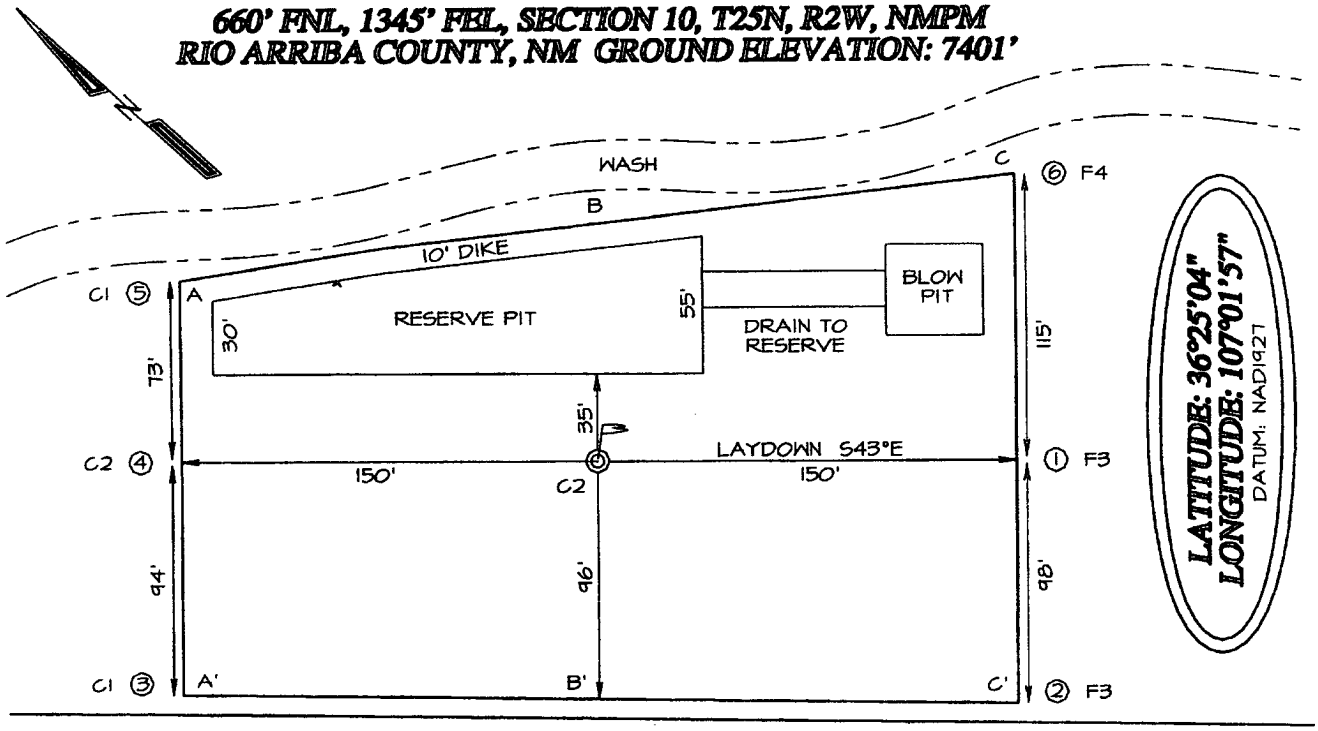
Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

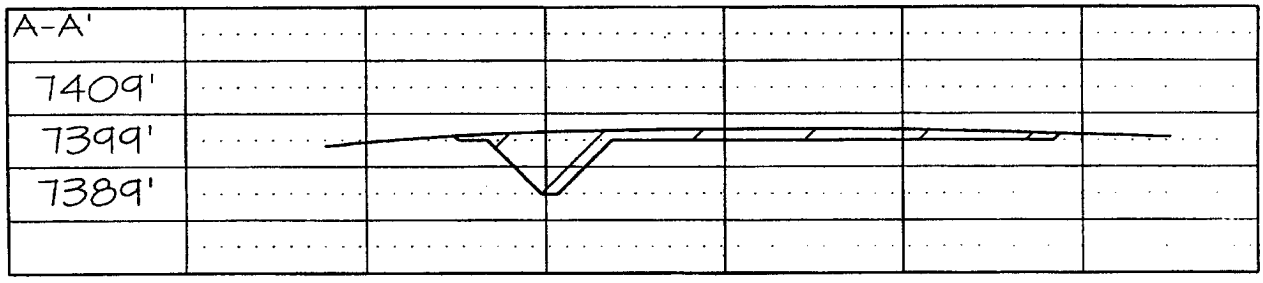
JASON C. EDWARDS

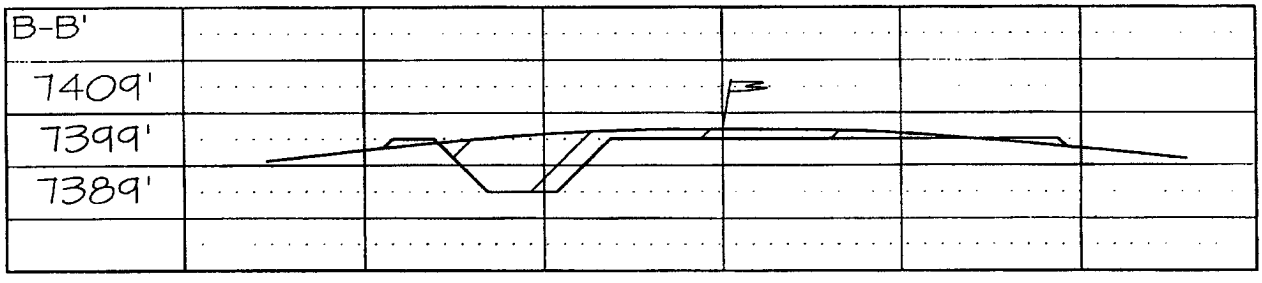
Certificate Number 15269

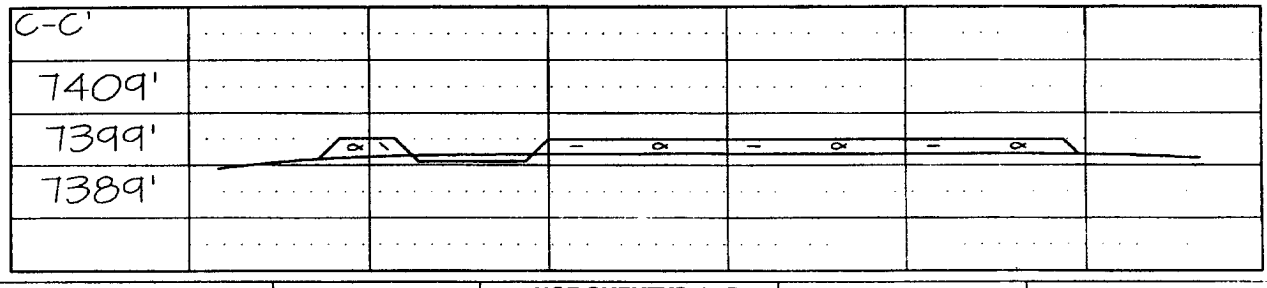
660' FNL, 1345' FEL, SECTION 10, T25N, R2W, NMPM
RIO ARRIBA COUNTY, NM GROUND ELEVATION: 7401'



AREA OF WELLPAD = 1.32 ACRES







FILENAME: 25210BT	SHEET 2 OF 3	NICE SURVEYS, INC.	DRAWN BY: EDO	CHECKED BY: JCE

McElvain Oil & Gas Properties, Inc.
Elk Com 10 No. 1B
660' FNL & 1345' FEL
Section 10, T25N, R2W, NMPM
Rio Arriba County, New Mexico

TEN POINT DRILLING PROGRAM

1. **Surface Formation:** San Jose

2. **Surface Elevation:** 7401'GL.

3. **Estimated Formation Tops:**

Formation	Top - feet	Expected Production
Nacimiento	1628	
Ojo Alamo	3193	
Fruitland	3473	
Pictured Cliffs	3573	GAS
Lewis	3773	
Intermediate TD	3833	
Huerfanito	4033	
Chacra	4533	
Mesa Verde	4783	
Cliff House	5328	GAS
Menefee	5408	GAS
Pt. Lookout	5753	GAS
Upper Mancos	5923	
TOTAL DEPTH	6073	

4. **Surface Hole Program:**

Bit: Drill a 12 1/4" hole to 500' 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:

Interval (ft)	Weight (ppg)	Ph	Vis(sec/qt)	Water Loss
0 - 500	8.6 or less	9.0-9.5	40 - 50	No Control

Casing and Cementing: A string of 9⅝" 36# J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 265 sacks of Class "B" cement (yield = 1.18 cf/sk) containing 3% $CaCl_2$ and 0.25 pps 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 or 100,000 lb overpull, whichever is greater.

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

Centralizers: Run three (3) 9⅝" X 12 ¼" regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

4. **Surface Hole Program:** - continued

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

5. **Intermediate Hole Program:**

Bit: Drill an 8 ¾" hole to 3833' using TCI, IADC Class 447 bit. WOB: 35-45K. RPM: 60 - 75. Reduce RPM to 55 - 65 through Ojo Alamo.

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

Interval (ft)	Weight (ppg)	Ph	Vis(sec/qt)	Water Loss
500 - 3273	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
3273 - 3833	8.9 - 9.2	9.0-9.5	35 - 50	8 - 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.

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 can occur in the 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. 7" rams will be installed before running intermediate 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 Epithermal Neutron / Formation Density logs will be run from Intermediate TD to the surface casing shoe.

5. **Intermediate Hole Program:** - continued

Casing and Cementing Program: Run 7" 20# J-55 production casing from surface to Intermediate TD and cement in 2 stages with a mechanical DV tool installed @ ± 1920 feet. **Stage 1** (3833' - 1920') will be cemented with 145 sacks (307.4 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 100 sacks (126.0 cf) of Class B containing 2% $CaCl_2$, 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk. **Stage 2:** (1920' - surface) will be cemented with 175 sacks (371.0 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 containing 2% $CaCl_2$, 5pps gilsonite and 0.25 pps celloflake mixed at 15.26 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 0.5470". 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.

WOC 12 HOURS from plug down on first stage. Pressure test intermediate casing and BOPE to 1500 psi for 15 minutes.

Centralizers: 10 - 7" X 8 3/4" bowspring centralizers will be run across all prospective pays and 5 - 7" X 8 3/4" 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 7" casing, float collar, and 1 - mechanical DV tool with 2 cement baskets below the DV.

6. **Production Hole Program:**

Bits: Drill a 6 1/4" hole to 6073' feet using air hammer. WOB: 5 - 25K. RPM: to be determined by drilling conditions. If hole gets wet use TCI, IADC class 637 to finish hole.

Mud: Air from Intermediate casing shoe to TD. If hole gets wet use a fresh water based low solids non dispersed system with the following properties: **Note:** Pull into intermediate casing to mud up.

Interval (ft)	Weight (ppg)	pH	Vis(sec/qt)	Water Loss
? - TD	8.6 - 9.0	9.0-9.5	28 - 40	8 - 10 cc

6. **Production Hole Program:** - continued

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 1500 psig before drilling out from under intermediate casing. Mechanical operation of pipe rams will be checked daily and blind rams will be checked on each trip out of hole. 4 1/2" 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: Induction and Compensated density/Epithermal neutron logs from TD to intermediate casing shoe.

Casing and Cementing Program: Run 4 ½" 10.5# J-55 production liner casing from TD to a minimum of 120 feet of overlap into Intermediate casing. Cement in a single stage with 140 sacks (281.4 cf) of 65/35 Class H Poz containing 5 pps gilsonite and 2 pps celloflake mixed at 12.3 PPG to yield 2.01 cf/sk. Follow with 100 sacks (133.0 cf) of 50/50 Class H POZ with 2 % gel, 5 pps Gilsonite, 0.25 pps celloflake, 0.4% fluid loss additive and 0.2% friction reducer mixed at 13.7 PPG to yield 1.33 cf/sk.

Slurry volumes assume a 70% excess over gauge hole volume to bring cement back into the intermediate casing. Cement volume is subject to change after review of open hole caliper log to caliper volume + 30%. Minimum clearance between couplings and hole is 0.625". 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: 9 - 4 1/2" X 6 1/8" rigid centralizers will be run across prospective pays of the Mesa Verde.

Float Equipment: Float shoe, 1 joint 4 1/2" 10.5 # casing, and plug landing collar. TIW 7" X 4 ½" liner hanger.

7. **Auxiliary Equipment:**

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

8. **Logging Program:**

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

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:

1500 - 2000 psig.

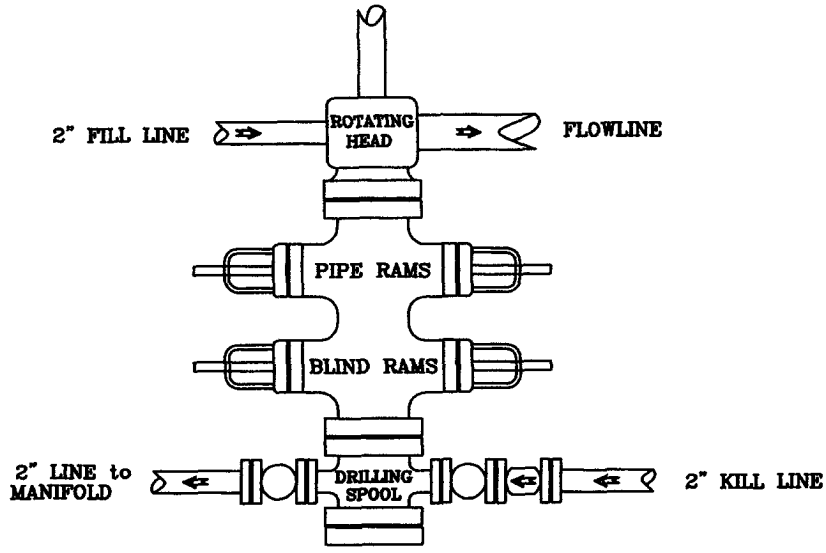
10. **Anticipated Starting Date:**

April 1, 2004.

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

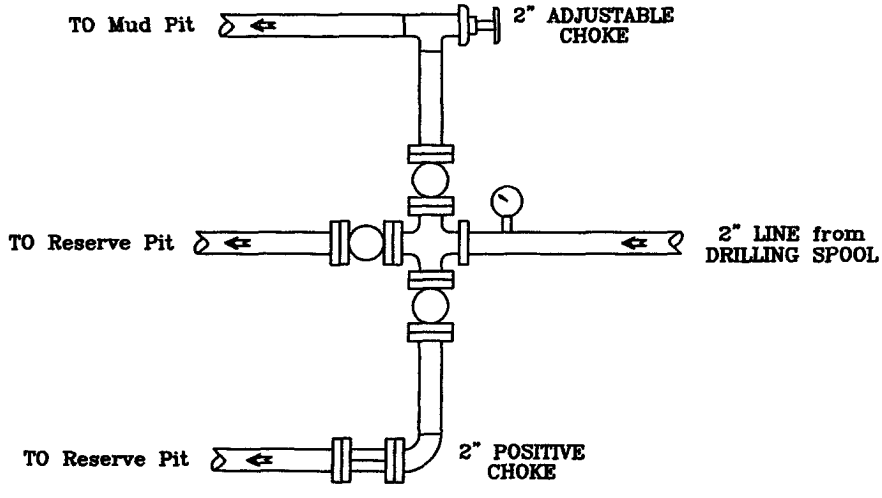
PRESSURE CONTROL

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.

Elk Com 10 No. 1B

660' FNL – 1345' FEL

Section 10, T25N, R2W, NMPM

Rio Arriba County, New Mexico