

UNITED STATES **2006 JAN 12 PM 4 20**
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT **RECEIVED**

APPLICATION FOR PERMIT TO DRILL OR REENTER

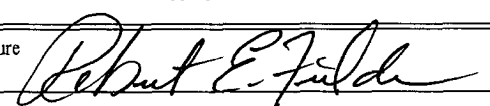
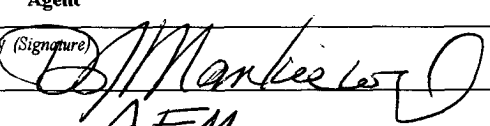
FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM97826
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. 22044		7. If Unit or CA Agreement, Name and No. NMNM100213
3a. Address 1050 17th Street, Suite 1800 Denver, CO 80265-1801		8. Lease Name and Well No. Elk Com No. 1C 6660
3b. Phone No. (include area code) 303.893.0933x302		9. API Well No. 30-039-29747
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2435' FNL - 965' FWL, Section 3, T25N, R2W, NMPM At proposed prod. zone Same		10. Field and Pool, or Exploratory Blanco Mesa Verde 72319
14. Distance in miles and direction from nearest town or post office* Eight miles northwest of Lindrith, NM		11. Sec., T. R. M. or Blk. and Survey or Area E Section 3, T25N, R2W, NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 41.78 965	16. No. of acres in lease 160	17. Spacing Unit dedicated to this well W/2- 320.97 acs
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1275	19. Proposed Depth 6346'	20. BLM/BIA Bond No. on file LP44138223 COB0000009
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7617' GL	22. Approximate date work will start* 01/01/2006	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. | 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 	Name (Printed/Typed) Robert E. Fielder	Date 1/10/06
Title Agent		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 2/13/06
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.

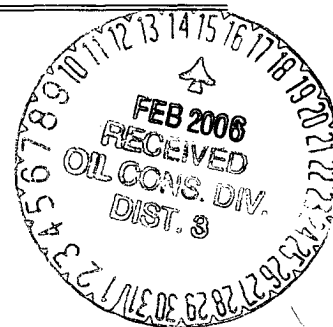
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

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

NMOCD



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

District II
PO Drawer 00, 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 JAN 12 PM 4:20 AMENDED REPORT

RECEIVED
WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29747		*Pool Code 72319	*Pool Name BLANCO-MESAVERDE
*Property Code 6660	*Property Name ELK COM		*Well Number 1C
*OGRID No. 22044	*Operator Name McELVAIN OIL & GAS PROPERTIES		*Elevation 7617'

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
E	3	25N	2W		2435	NORTH	965	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 320.97 Acres - W/2					¹³ Joint or Infill Y	¹⁴ Consolidation Code C	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

	<p>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 December 14, 2005 Date</p>
	<p>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: MAY 25, 2005 Signature and Seal of Professional Surveyor JASON C. EDWARDS Certificate Number 15269</p>

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 30-039-29747	
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 Elk Com	
8. Well Number 1C	
9. OGRID Number 22044	
10. Pool name or Wildcat Blanco Mesa Verde	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 7617' GL	
Pit or Below-grade Tank Application X 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>>1000 ft</u>	
Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls; Construction Material	

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 ☐ Gas Well ☒ Other

2. Name of Operator
McElvain Oil & Gas Properties, Inc.

3. Address of Operator
1050 17th Street, Suite 1800, Denver, CO 80265-1801

4. Well Location
Unit Letter E : 2435 feet from the North line and 965 feet from the West line
Section 3 Township 25N Range 2W NMPM Rio Arriba County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
7617' GL

Pit or Below-grade Tank Application X or Closure ☐
Pit type Drilling Depth to Groundwater >100 ft Distance from nearest fresh water well >1000 ft Distance from nearest surface water >1000 ft
Pit Liner Thickness: 12 mil Below-Grade Tank: Volume bbls; Construction Material

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Construct Drilling reserve pit X OTHER: ☐

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 a permit to construct a lined reserve and blow pit in conjunction with the location construction. Pits will be constructed in accordance with NMOCD guidelines. Pit size and location are shown on the attached Wellsite Layout. Pits will be closed 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 X, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Robert E. Fielder TITLE Agent DATE 01/10/06

Type or print name Robert E. Fielder E-mail address: pmci@acs-online.net Telephone No. (505)632.3869
For State Use Only

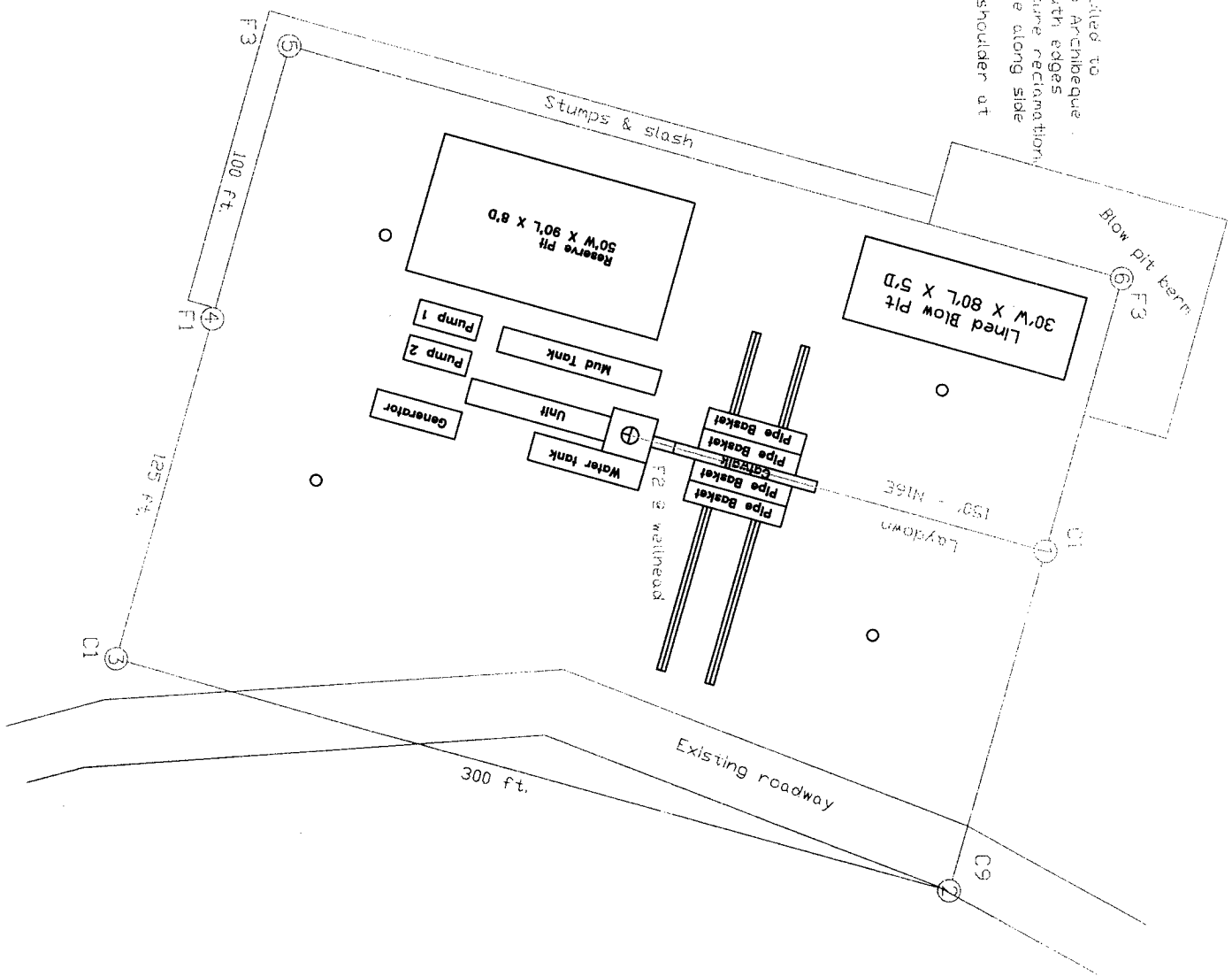
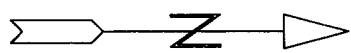
APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3 DATE FEB 15 2006
Conditions of Approval (if any):

1. Cut and pile up trees, usable "berrada" nailed to
 2. Stumps and slash pushed to west and south edges
 3. Trees stockpiled as berm above cut slope along side
 4. 20' cut of fill past east existing road shoulder at
 corner 2

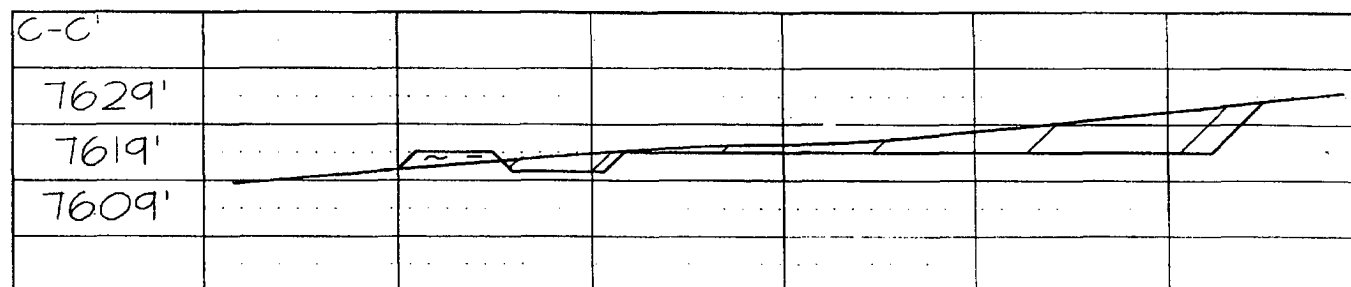
Scale: 1 inch = 60 feet

McElwain Oil & Gas Properties, Inc.

Wellsite Layout
 Elk Com No. 1C
 2435' FNL & 965' FWL
 Section 3, T25N, R2W, NMPM
 Rio Arriba Co., New Mexico



LATITUDE: 36°25'39"
LONGITUDE: 107°02'33"
DATUM: NAD1927



McElvain Oil & Gas Properties, Inc.
Elk Com No. 1C
2435' FNL & 965' FWL
Section 3, T25N, R2W, NMPM
Rio Arriba County, New Mexico

TEN POINT DRILLING PROGRAM

1. Surface Formation: San Jose
2. Surface Elevation: 7617' GL.
3. Estimated Formation Tops:

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Nacimiento	1946	
Ojo Alamo	3446	
Fruitland	3696	
Pictured Cliffs	3816	GAS
Lewis	4046	
Intermediate TD	4246	
Huerfanito	4311	
Chacra	4811	
Cliff House	5531	GAS
Menefee	5646	GAS
Pt. Lookout	5946	GAS
Upper Mancos	6196	
TOTAL DEPTH	6346	

4. Surface Hole Program:

Bit: Drill a 12 1/4" hole to 300' 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 - 300	8.6 or less	9.0-9.5	40 - 50	No Control

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 160 sacks of Class "B" cement (yield = 1.18 cf/sk) containing 3% CaCl₂ 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.

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

Drilling Program
McElvain Oil & Gas Properties, Inc.
Elk Com No. 1C
Page Two

4. Surface Hole Program: - continued

Centralizers: Run three (3) 9 $\frac{5}{8}$ " X 12 $\frac{1}{4}$ " regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

Float Equipment: Cement nose guide shoe run on bottom of first joint. Self fill insert float valve run in top of first joint. Thread lock shoe and connection between first and second joint run.

5. Intermediate Hole Program:

Bit: Drill an 8 $\frac{3}{4}$ " hole to 4246' 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:

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>Ph</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
300 - 3696	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
3696 - 4246	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 is expected and 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.

Drilling Program
McElvain Oil & Gas Properties, Inc.
Elk Com No. 1C
Page Three

5. Intermediate 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 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: No logs will be run in this section

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 \pm 2123'. **Stage 1** (4246' - 2123') will be cemented with 170 sacks (360.4 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 with 2% CaCl_2 , 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk. **Stage 2** (2123' - surface) will be cemented with 200 sacks (424.0 cf) of 65/35 Class B Poz with 5 pps gilsonite and 0.25 pps celloflake mixed at 12.1 PPG to yield 2.12 cf/sk. Follow with 50 sacks (63.0 cf) of Class B with 2% CaCl_2 , 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 0.5470". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

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 $\frac{3}{4}$ " bowspring centralizers will be run across all prospective pays and 5 - 7" X 8 $\frac{3}{4}$ " 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.

Drilling Program
McElvain Oil & Gas Properties, Inc.
Elk Com No. 1C
Page Four

6. Production Hole Program:

Bits: Drill a 6 1/4" hole to 6346' 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.

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

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: Gamma Ray Induction and Compensated density/Epithermal neutron logs from TD to intermediate casing shoe. Merge deep induction curve onto porosity logs. Pull gamma ray log to surface for correlation purposes.

Casing and Cementing Program: Run 4 1/2" 10.5# J-55 production liner from TD to 120 feet into intermediate casing. Cement in a single stage with 130 sacks (261.3 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. Followed with 100 sacks (133.0 cf) of 50/50 Class H POZ with 2% gel, 5 pps gilsonite, 0.25 pps celloflake, .2% FR and .4% FLA mixed at 13.7 PPG to yield 1.33 cf/sk.

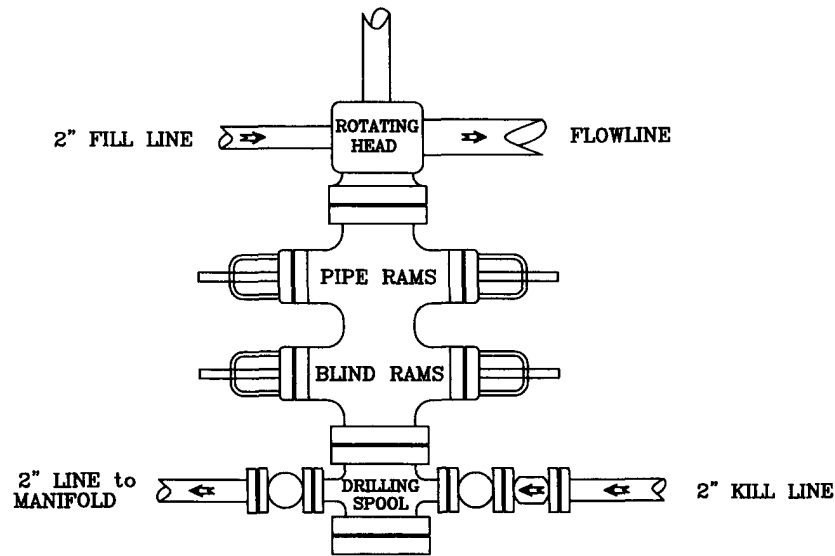
Slurry volumes assume a 70% excess over gauge hole volume to bring cement back into the intermediate casing. Cement volume is subject to change after review of open hole caliper log to caliper volume + 30%. Minimum clearance between couplings and hole is 0.625". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

Centralizers: 7 - 4 1/2" X 6 3/8" rigid centralizers will be run across prospective pays of the Mesa Verde.

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

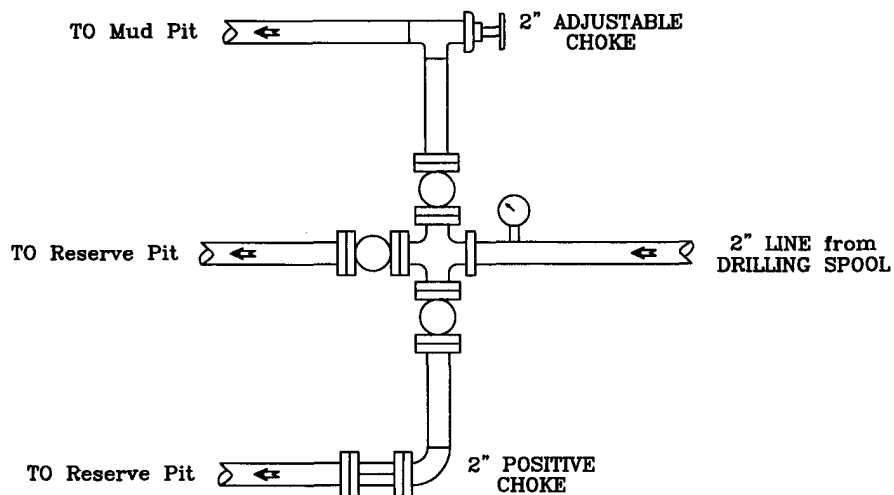
PRESSURE CONTROL

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 No. 1C
2435' FNL - 965' FWL
Section 3, T25N, R2W, NMPM
Rio Arriba County, New Mexico