

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No 1004-0137  
Expires March 31, 2007

2007 JUN 11 AM 11:07

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF078643
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		8. Lease Name and Well No. Wildwood No. 2
3b. Phone No. (include area code) 303.893.0933x302		9. API Well No. 30-045-34345
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1770' FNL - 1485' FWL, Section 5, T29N, R13W, NMPM At proposed prod. zone same		10. Field and Pool, or Exploratory Basin Dakota
14. Distance in miles and direction from nearest town or post office* 0.5 miles North of Farmington, New Mexico		11. Sec., T. R. M. or Blk. and Survey or Area F Sec. 5, T29N, R13W, NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 161 866	16. No. of acres in lease 520.58	17. Spacing Unit dedicated to this well N/2 - 319.76 acs.
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 255	19. Proposed Depth 5955'	20. BLM/BIA Bond No. on file LPM4138223
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5331' GL	22. Approximate date work will start* 08/01/2007	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.  | 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 06/08/2007
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Title  
Agent

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 6/19/07
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Title  
*Acting A.M. Minerals*

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) Submit application for pit permit on NMOCD Form C-103 Prior to constructing Location

RCVD JUN20'07  
OIL CONS. DIV.  
DIST. 3

NMOCD

6-28-07  
BH

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

2007 JUN 11 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-34345	*Pool Code 71599	*Pool Name BASIN DAKOTA
*Property Code 35260	*Property Name WILDWOOD	*Well Number 2
*OGRID No 22044	*Operator Name McELVAIN OIL & GAS PROPERTIES	*Elevation 5331'

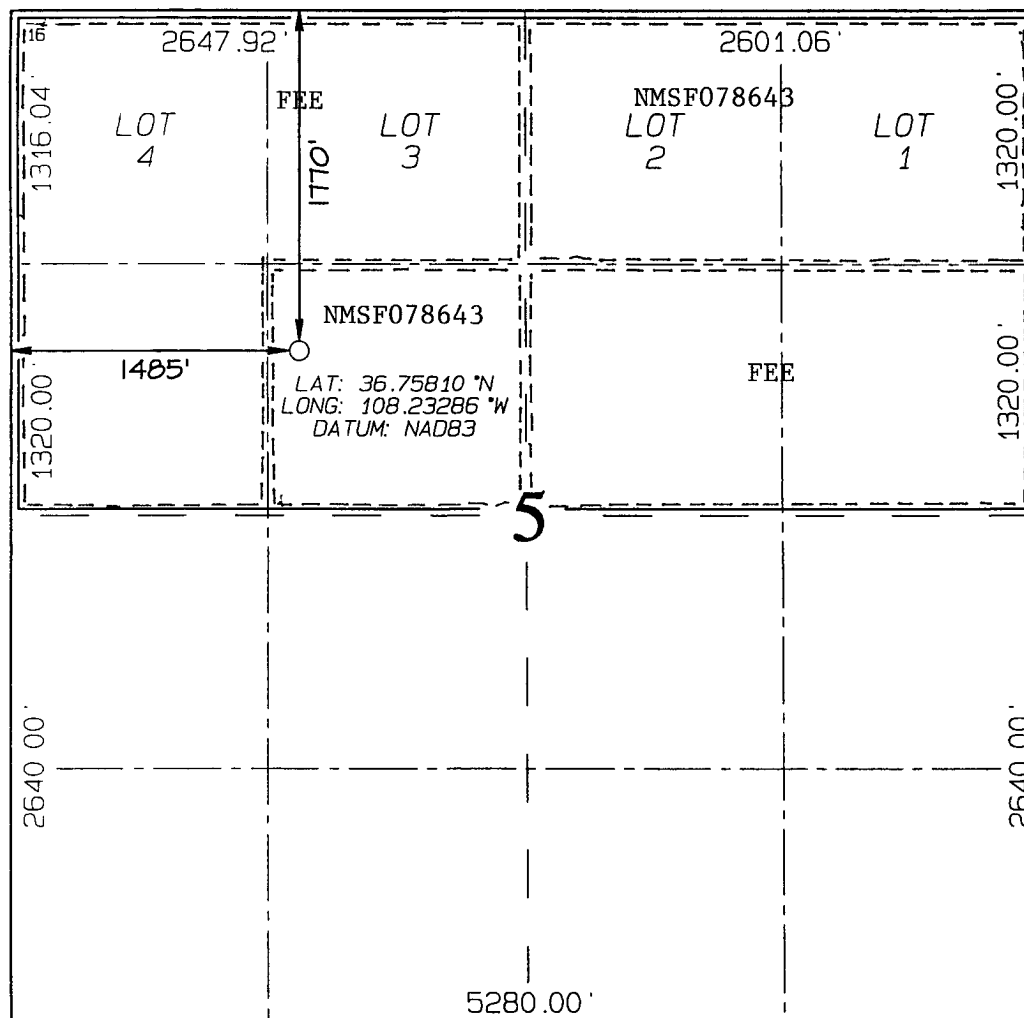
10 Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	5	29N	13W		1770	NORTH	1485	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 319.76 Acres - N/2					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

June 8, 2007

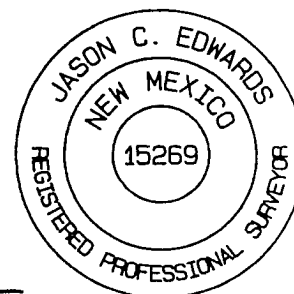
Date

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 17, 2006

Signature and Seal of Professional Surveyor

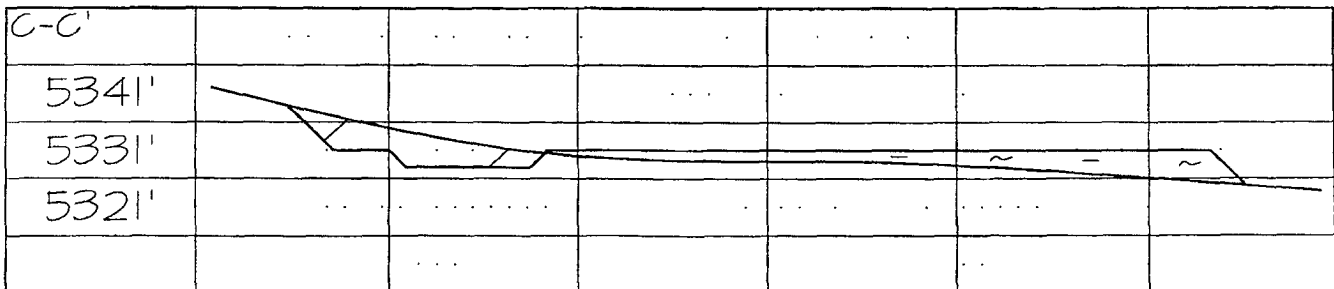


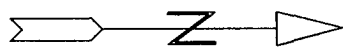
*Jason C. Edwards*

Certificate Number

15269

LATITUDE: 36.75810° N  
LONGITUDE: 108.23286° W  
DATUM NAD1983





Scale: 1 inch = 60 feet

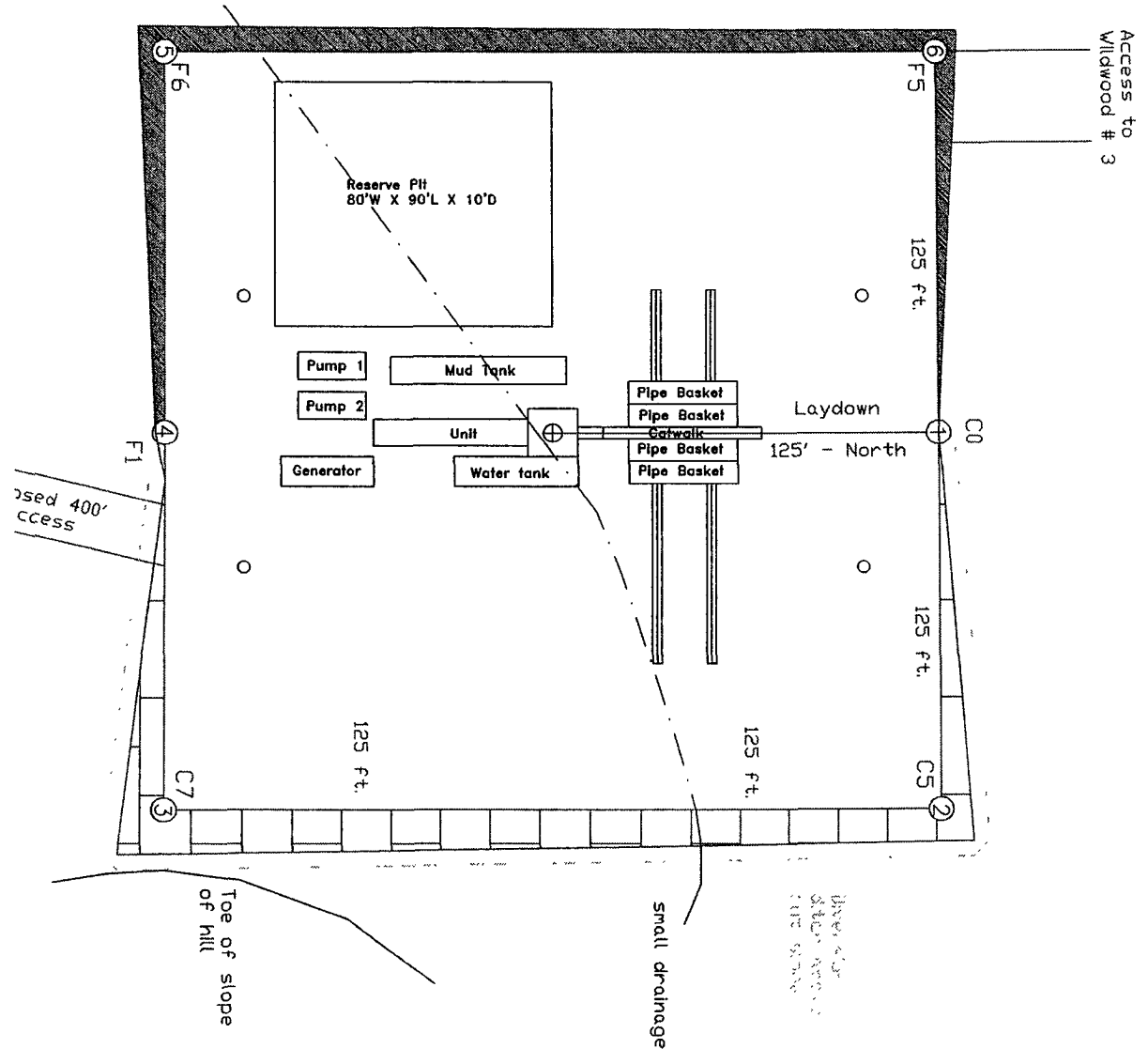
# McElvain Oil & Gas Properties, Inc.

## Wellsite Layout

Willwood No. 2  
1770' FNL & 1485' FWL  
Section 5, T29N, R13W, NMPM  
San Juan Co., New Mexico

Bayless

Archibeque



McElvain Oil & Gas Properties, Inc.

Wildwood No. 2

1770' FNL & 1485' FWL

Section 5, T29N, R13W, NMPM

San Juan County, New Mexico

TEN POINT DRILLING PROGRAM

1. Surface Formation: Ojo Alamo

2. Surface Elevation: 5331' GL.

3. Estimated Formation Tops:

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Ojo Alamo	surface	
Kirtland	495	
Fruitland	885	
Pictured Cliffs	1115	GAS
Lewis	1225	
Intermediate TD	1425	
Cliff House	2625	GAS
Menefee	2765	GAS
Pt. Lookout	3630	GAS
Upper Mancos	3870	
Gallup	4820	GAS
Greenhorn	5585	
Graneros	5635	GAS
Dakota	5770	GAS
TOTAL DEPTH	5955	

4. Surface Hole Program:

Bit: Drill a 12 $\frac{1}{4}$ " 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:

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

*Casing to be set at 500' ±*

Casing and Cementing: A string of 9 $\frac{5}{8}$ " 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<sub>2</sub> 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 $\frac{1}{4}$ " by 9 $\frac{5}{8}$ " 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 BOPE to full working pressure using test plug. Drill cement and float to within five feet of shoe. Test surface casing and BOPE to minimum of 600 psig for 15 minutes.

**Drilling Program**  
**McElvain Oil & Gas Properties, Inc.**  
**Wildwood No. 2**  
Page Two

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

**Centralizers:** Run three (3) 9 $\frac{3}{8}$ " 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 1425' using TCI, IADC Class 447 bit. WOB: 35-45K. RPM: 60 - 75.

**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>
500 - 885	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
885 - 1425	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.

**Pressure Control:** A 2M psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to full working pressure using a test plug. Surface casing and BOPE will be tested to a minimum of 600 psig for 15 minutes prior to 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.

Drilling Program  
McElvain Oil & Gas Properties, Inc.  
Wildwood No. 2  
Page Three

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

**Logging Program:** No logs will be run in intermediate hole.

**Casing and Cementing Program:** No casing will be run unless severe lost circulation is encountered in the Fruitland or Pictured Cliffs interval. If hole conditions dictate running intermediate casing the casing and cementing program will be called in to the BLM office prior to implementation.

**Centralizers:** None

**Float Equipment:** None

**6. Production Hole Program:**

**Bits:** Drill a 7 $\frac{1}{8}$ " hole to 3900' feet using TCI, IADC Class 447 bits. WOB: 35 - 45K. RPM: 60 - 70. Reduce rpm to 60 - 65 while drilling the Cliff House interval. Use 7 $\frac{1}{8}$ " PDC and 6 $\frac{1}{2}$ " mud motor to drill 3900' to 5700' interval. WOB: 12 - 15K. RPM: 40 - 50 @ rotary, 110 - 120 @ motor. Use TCI, IADC class 637 to finish hole. WOB: 35 - 45. RPM: 60 - 70.

**Mud:** Use a fresh water based low solids non dispersed system with the following properties:

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>pH</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
1425 - TD	8.6 - 9.0	9.0-9.5	28 - 40	8 - 10 cc

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.

Lost Circulation can occur in the Pt. Lookout sands. Mud weights should be controlled as low as possible with solids control equipment then as low as practical with water dilution.

Reduce water loss to 6.0 or lower before drilling into the Lower Mancos interval.

**Drilling Program**  
**McElvain Oil & Gas Properties, Inc.**  
**Wildwood No. 2**  
Page Four

**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 as outlined in 5 above. 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 from TD to surface casing shoe.

**Casing and Cementing Program:** Run 4½" 10.5 ppf, J-55 production casing from TD to surface. Cement in a three stages with mechanical DV tools set at 3570'± and 1425'±. **Stage One:**(5955' - 3570') Cement with 210 sacks (422.1 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. Followed with 300 sacks (399.0 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. **Stage Two**(3570' - 1425'): Cement with 290 sacks (614.8 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<sub>2</sub>, 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk. **Stage Three**(1425' - surface): Cement with 280 sacks (593.6 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<sub>2</sub>, 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk.

Circulate and WOC 4 hours between stages.

Slurry volumes assume a 50% 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 1.4375. Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

**Centralizers:** 9 - 4½" X 7½" regular centralizers will be run across prospective pays of the Gallup and Dakota. 3 - 4½" X 7½" turbolizers will be run across the Mesa Verde interval. 3 - 4½" X 8¾" regular centralizers will be run across the Pictured Cliffs and Fruitland intervals. 2 - 4½" X 8¾" turbolizers will be spaced so that one is below the base of the Fruitland coal and one is in the Fruitland coal interval.



**Drilling Program**  
**McElvain Oil & Gas Properties, Inc.**  
**Wildwood No. 2**  
Page Five

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

**Float Equipment:** Cement nose float shoe, 1 joint 4 1/2" casing, and float collar. Two mechanical DV tools with two cement baskets below each DV tool.

**7. Auxiliary Equipment:**

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

**8. 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. 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.

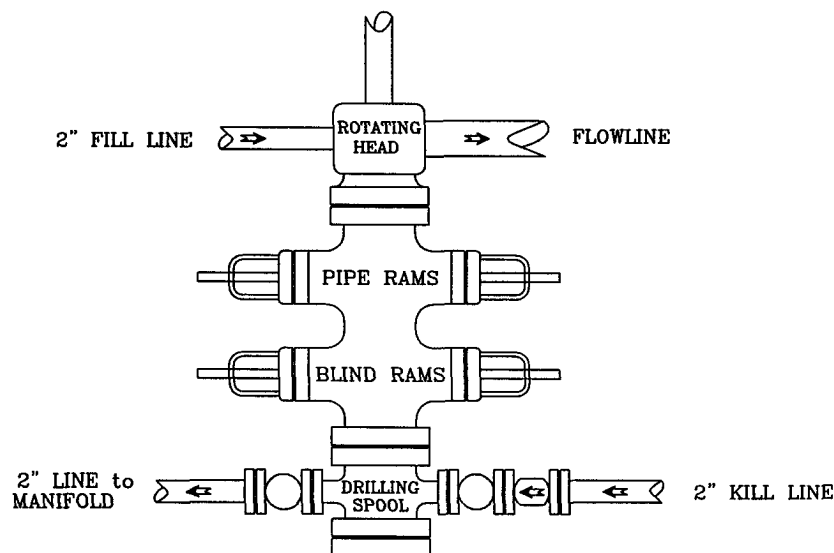
**10. Anticipated Starting Date:**

August 1, 2007

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

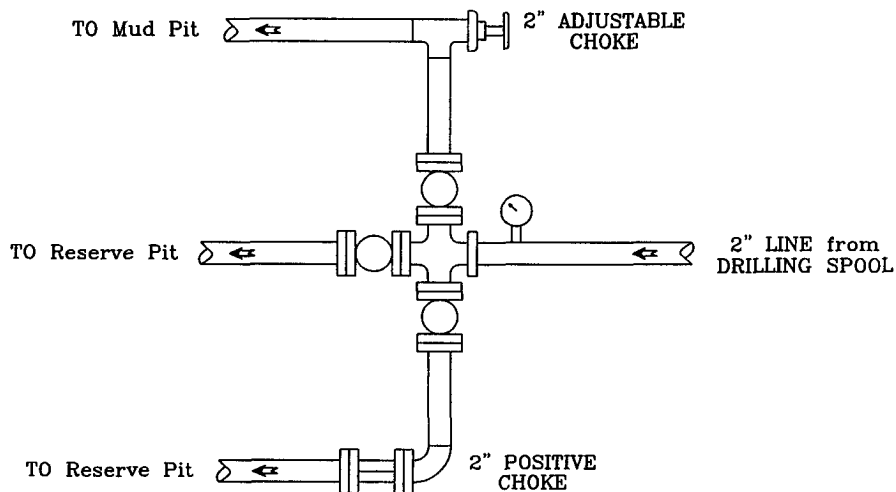
# PRESSURE CONTROL

## 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.*

Wildwood No. 2

1770' FNL - 1485' FWL

Section 5, T29N, R13W, NMPM  
San Juan County, New Mexico