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

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

Form C-103
May 27, 2004

WELL API NO.
30-045-27518

5. Indicate Type of Lease
STATE ☐ FEE X

6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name
Bear 20

1. Type of Well: Oil Well ☐ Gas Well X Other

8. Well Number 1A

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

9. OGRID Number
22044

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

10. Pool name or Wildcat
Blanco Mesa Verde

4. Well Location
Unit Letter I : 1445 feet from the South line and 1265 feet from the East line
Section 20 Township 26N Range 2W NMPM Rio Arriba County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
7332' GL

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type **Depth to Groundwater** **Distance from nearest fresh water well** **Distance from nearest surface water**

Pit Liner Thickness: **Below-Grade Tank: Volume** _____ **bbls; Construction Material** _____

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	X	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
OTHER:	☐			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. proposes to change the depths, casing points and cementing program for both the Intermediate and Production casing strings as shown on the attached Drilling Program.

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 07/26/2005

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: _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE JUL 27 2005

Conditions of Approval (if any):

McElvain Oil & Gas Properties, Inc.
Bear 20 No. 1A
1445' FSL & 1265' FEL
Section 20, T26N, R2W, NMPM
Rio Arriba County, New Mexico

TEN POINT DRILLING PROGRAM

1. **Surface Formation:** San Jose

2. **Surface Elevation:** 7332'GL.

3. **Estimated Formation Tops:**

Formation	Top - feet	Expected Production
Nacimiento	1610	
Ojo Alamo	3350	
Fruitland	3550	
Pictured Cliffs	3650	GAS
Lewis	3900	
Intermediate TD	4100	
Huerfanito	4200	
Chacra	4700	
Cliff House	5465	GAS
Menefee	5545	GAS
Pt. Lookout	5845	GAS
Upper Mancos	6040	
TOTAL DEPTH	6190	

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:

Interval (ft)	Weight (ppg)	Ph	Vis(sec/qt)	Water Loss
0 - 600	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 320 sacks of Class "B" cement (yield = 1.18 cf/sk) containing 3% $CaCl_2$ 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 four (4) 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. Self fill insert float valve run in top of first joint. Thread lock connection between first and second joint run.

5. **Intermediate Hole Program:**

Bit: Drill an 8 ¾" hole to 4100' 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
600 - 3450	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
3450 - 4100	8.9 - 9.2	9.0-9.5	35 - 50	8 - 10

Fresh water will be used for initial mud up. Produced water will be used for subsequent additions 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 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: Run Dual Induction and Formation Density / Compensated Neutron logs from Intermediate TD to surface casing shoe.

5. Intermediate Hole Program: - continued

Casing and Cementing Program: Run 7" 20# J-55 production casing from surface to Intermediate TD with a mechanical DV tool set at 1850' ±. Cement in two stages as follows. **Stage 1: (4100 - 1850')** Cement with 180 sacks (381.6 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. 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: (1850' - surface)** Cement with 170 sacks (360.4 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. Tail in with 50 sacks (63.0 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.

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 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 two (2) cement baskets below the DV tool.

6. Production Hole Program:

Bits: Drill a 6 1/4" hole to 6190' 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: Gamma Induction and Compensated density/Epithermal neutron logs from TD to intermediate casing shoe. A temperature log may be run if natural flows are encountered

Casing and Cementing Program: Run 4 ½" 10.5# J-55 production liner on sufficient amount of drill pipe to place liner hanger minimum of 120' into intermediate casing. Cement in a single stage with 120 sacks (241.2 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. Tail in with 110 sacks (146.3 cf) of 50/50 Class H Poz containing 2% gel, 5 pps gilsonite, 0.25 pps celloflake, 0.4% FLA 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.

Centralizers: 9 - 4½" X 6¼" rigid centralizers will be run across all prospective pays in the Mesa Verde.

Float Equipment: Cement nose float shoe, 1 joint 4 1/2" 10.5 # casing, and latch collar. TIW 4½" X 7" Linger Hanger run between casing and drill pipe.

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 - 2500 psig.

10. **Anticipated Starting Date:**

July 25, 2005.

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