

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED
OCT 21 2008

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM0207001
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 St., Suite 1800 Denver, CO 80265-1801		8. Lease Name and Well No. Hagood No. 1R
3b. Phone No. (include area code) 303.893.0933X375		9. API Well No. 30-045-34837
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 825' FNL-1405' FEL, Section 24, T30N, R14W, NMPM At proposed prod. zone same		10. Field and Pool, or Exploratory Harper Hill FS/PC - Basin Fruitland Coal
14. Distance in miles and direction from nearest town or post office* 2 miles northwest of Farmington, New Mexico		11. Sec., T. R. M. or Blk. and Survey or Area Section 24, T30N, R14W, NMPM B
15. Distance from proposed* location to nearest property or lease line, ft. 825 (Also to nearest drig. unit line, if any)	16. No. of acres in lease 595.65	17. Spacing Unit dedicated to this well Harper Hill: NE/4-148.92 acres Basin FC: E/2-295.31 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 600	19. Proposed Depth 1761'	20. BLM/BIA Bond No. on file NM0253
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5851' GL This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	22. Approximate date work will start* 12/01/2008	23. Estimated duration 10 days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: "GENERAL REQUIREMENTS".

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 must 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 BLM.

25. Signature <i>Robert E. Fielder</i>	Name (Printed/Typed) Robert E. Fielder	Date 10/17/2008
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Title

Agent

Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 12/12/08
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Title

AFM

Office

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.

(Continued on page 2)

*(Instructions on page 2)

HOLD C104 FOR change in status to Hagood #1 for Harper Hill FS/PC

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT



H₂S POTENTIAL EXIST

NMOCD

DEC 17 2008

[Signature]

[Signature]

RECEIVED
OCT 21 2008

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised October 12, 2005

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

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

☐ AMENDED REPORT

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-34837	*Pool Code 78160/71629	*Pool Name HARPER HILL FRUITLAND SAND - PC/ BASIN FRUITLAND COAL
*Property Code -29126 29125	*Property Name HAGOOD	*Well Number 1 R
*GRID No. 22044	*Operator Name McELVAIN OIL AND GAS PROPERTIES, INC.	*Elevation 5851'

¹⁰ Surface Location

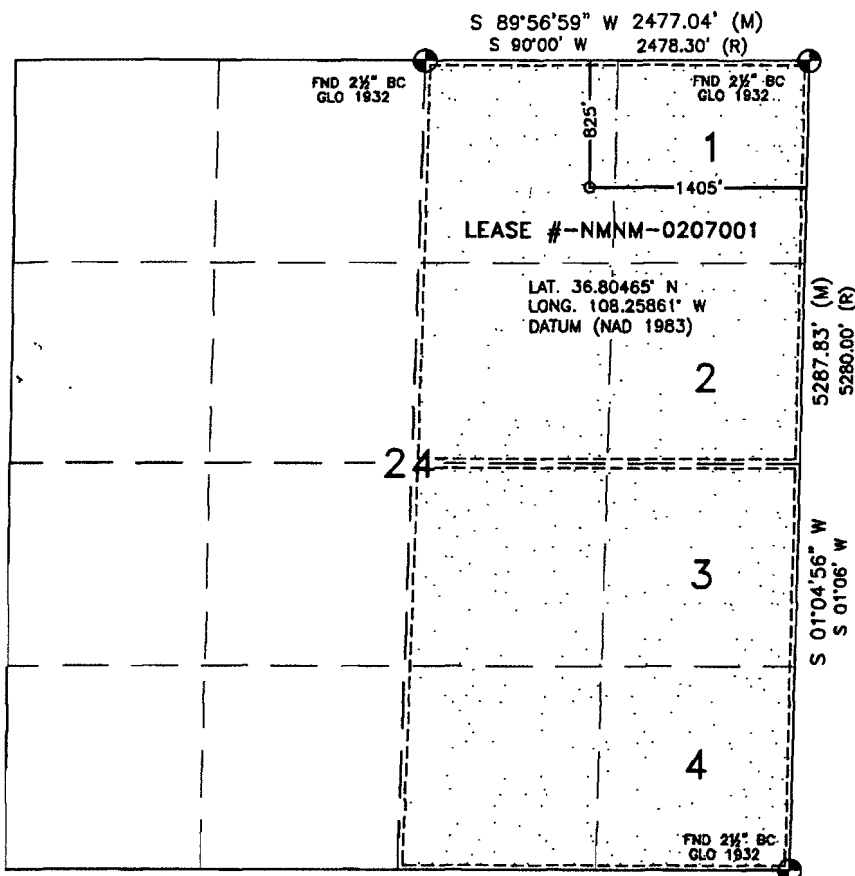
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	24	30N	14W		825'	NORTH	1405'	EAST	SAN JUAN

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 HARPER HILL - 148.92 Acres NE/4 FRUITLAND COAL - 295.31 Acres E/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

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¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner or a compulsory pooling order heretofore entered by the division.

Robert E. Fielder 10/17/08
Signature Date

Robert E. Fielder
Printed Name

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.

MARCH 25, 2008

Date of Survey

Signature and Seal of Professional Surveyor:

David R. Russell



DAVID RUSSELL

Certificate Number

10201

McElvain Oil & Gas Properties, Inc.
Hagood No. 1R
825' FNL & 1405' FEL
Section 24, T30N, R14W, NMPM
San Juan County, New Mexico

TEN POINT DRILLING PROGRAM

1. **Surface Formation:** Ojo Alamoo
2. **Surface Elevation:** 5851' GL.
3. **Estimated Formation Tops:**

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Ojo Alamo	surface	
Kirtland	961	
Fruitland	1361	GAS
Pictured Cliffs	1611	GAS
TOTAL DEPTH	1761	

4. **Surface Hole Program:**

Bit: Drill an 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 and ^{Spd}Cementing: A string of 8 $\frac{5}{8}$ " 24 ppf J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 350 sacks (413.0 cf) 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 $\frac{1}{4}$ " by 8 $\frac{5}{8}$ " annulus. Minimum clearance between couplings and hole is 1.3125". 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 a test plug. Drill out cement to within five feet of surface casing shoe. Test surface casing and BOPE to a minimum of 600 psig for 15 minutes.

Centralizers: Run four (4) 8 $\frac{5}{8}$ " 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 thread locked. Self fill insert float valve run one joint above shoe. Thread lock connection between first and second joint run.

Drilling Program
McElvain Oil & Gas Properties, Inc.
Hagood No. 1R
Page Two

5. Production Hole Program:

Bit: Drill a 7 $\frac{1}{8}$ " hole to 1761' using a TCI, IADC Class 447 bit. WOB: 30-35K. RPM: 60 - 75. Hold RPM at 55 - 65 through Ojo Alamo.

Mud: Use a fresh water base polymer and water system to drill this section. If hole conditions dictate, mud up with 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 - 1761	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12

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 surface pit will be visually monitored and recorded on a routine basis.

Note: If mud up is required, 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 Fruitland Coal and Pictured Cliffs formation. Mud weights should be controlled as low as possible 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. Surface casing and BOPE will be 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. 5 $\frac{1}{2}$ " 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: Dual Induction and Epithermal Neutron/Formation Density logs will be run from TD to the surface casing shoe.

Casing and Cementing Program: Run 5 $\frac{1}{2}$ " 15.5 ppf J-55 production casing from surface to TD and cement in a single stage with 140 sacks (357.0 cf) of Class B containing 3% sodium metasilicate extender, 5 pps Gilsonite and 1/4 pps celloflake. Lead slurry mixed at 11.8 PPG to yield 2.55 cf/sk. Tail in with 90 sacks (107.1 cf) of Class B with 0.25 pps celloflake, 0.3% FLA and 5 pps gilsonite mixed at 15.6 PPG to yield 1.19 cf/sk.

Drilling Program
McElvain Oil & Gas Properties, Inc.
Hagood No. 1R
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5. Production Hole Program: -continued

Slurry volumes assume a 50% excess over gauge hole volume to circulate to surface. Minimum clearance between couplings and hole is 0.9125". Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8.

Centralizers: 5 - 5½" X 7⅞" bowspring centralizers will be run across all prospective pays and 3 - 5½" X 7⅞" turbolizers will be spaced such that one (1) is just below the base of the Fruitland coal, one just below the base of the Ojo Alamo and one (1) in the Ojo Alamo.

Float Equipment: Cement nose guide shoe, 1 joint 5½" casing, and float collar.

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. Deep induction curve will be merged onto the porosity log.

Coring and Testing Program:

No cores or drill stem tests are planned.

8. Abnormal Pressure:

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

Estimated Bottom Hole Pressure:

250 - 300 psig.

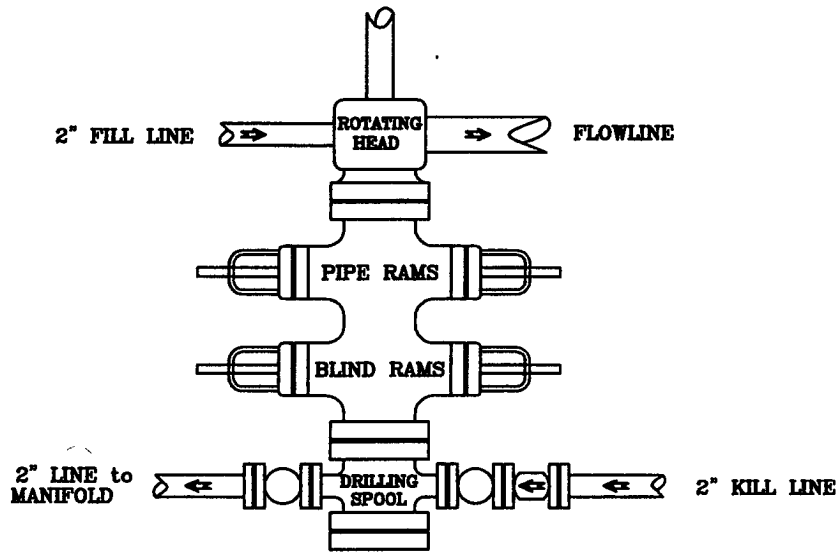
9. Anticipated Starting Date:

December 1, 2008

Duration of Operations: It is estimated a total of 6 days will be required for drilling operations and 5 days for the completion operation.

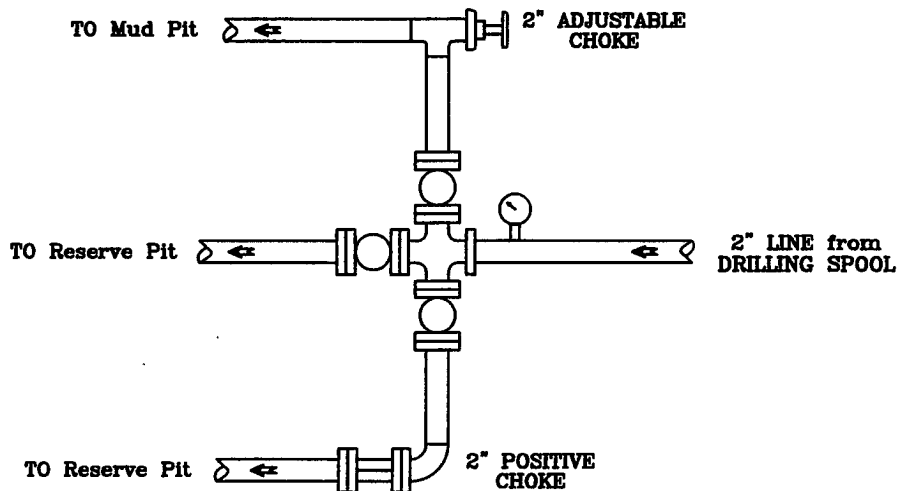
PRESSURE CONTROL

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.

Hagood No. 1R

825' FNL - 1405' FEL

Section 24, T30N, R14W, NMPM
San Juan County, New Mexico