

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER



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

1a. Type of Work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. <b>NMMN-106649</b>
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 <b>McElvain Oil and Gas Properties, Inc.</b>		7. If Unit or CA Agreement, Name and No.
3a. Address <b>1050 17th Street #1800 Denver, CO 80265</b>	3b. Phone No. (include area code) <b>303-893-0933</b>	8. Lease Name and Well No. <b>Twilight Zone #1</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface <b>1850' FSL &amp; 1850' FEL Sec. 12-T24N-R2W</b> At proposed prod. zone <b>Same</b>		9. API Well No. <b>30-039-23606</b>
14. Distance in miles and direction from nearest town or post office* <b>Lindrith, NM 2 miles south</b>		10. Field and Pool, or Exploratory <b>Basin Dakota or Blanco Mesaverde</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>1850'</b>	16. No. of Acres in lease <b>320</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>J Sec. 12-T24N-R2W</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>NA</b>	19. Proposed Depth <b>8150</b>	12. County or Parish <b>Rio Arriba</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>7355' GL</b>	22. Approximate date work will start* <b>January 2004</b>	13. State <b>NM</b>
23. Estimated duration <b>2-3 weeks</b>		

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 	Name (Printed/Typed) <b>John D. Steuble</b>	Date <b>12/29/2003</b>
Title <b>Engineering Manager</b>		
Approved by (Signature) <b>/s/ David R. Sitzler</b>	Name (Printed/Typed)	Date
Title <b>Acting Assistant Field Manager</b>	Office	

Application approval does not warrant or certify the 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 reverse)

## District I

1625 N. French Dr., Hobbs, NM 88240

## District II

1301 W. Grand Avenue, 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 &amp; Natural Resources Department

## OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised August 15, 2000

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

30-039-23606 WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-09406	<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name MESAVERDE
<sup>4</sup> Property Code 33408	<sup>5</sup> Property Name Twilight Zone	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 22044	<sup>8</sup> Operator Name McElvain Oil & Gas Properties, Inc.	<sup>9</sup> Elevation 7355'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	12	24N	2W		1850	South	1850	East	Rio Arriba

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

		<sup>16</sup>	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature John Steuble Printed Name Engineering Manager Title 12-30-2003 Date
		<sup>18</sup> 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. 10-05-1984 Date of Survey Signature and Seal of Professional Surveyor: This location was originally surveyed by Edgar L. Risenhoover 5979 Certificate Number	

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30-039-73606

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-09406	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code 33408	<sup>5</sup> Property Name Twilight Zone	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 22044	<sup>8</sup> Operator Name McElvain Oil & Gas Properties, Inc.	<sup>9</sup> Elevation 7355'

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		1850'	
		1850'	

**McELVAIN OIL & GAS PROPERTIES, INC.**

**Twilight Zone #1  
1850' FSL & 1850' FEL  
Sec. 12-T24N-R2W  
Rio Arriba County, New Mexico**

**DRILLING PROGRAM**

1. Surface Formation: San Jose
2. Surface Elevation: 7355'
3. Formation Tops:

<u>FORMATION</u>	<u>TOP</u>	<u>EXPECTED PRODUCTION</u>
Nacimiento	1730'	T <sub>OC</sub> 1925
Ojo Alamo	3090'	
Kirtland	3290'	
Fruitland	3365'	
Pictured Cliffs	3437'	
Lewis	3518'	
Cliffhouse	5168'	GAS
Menefee	5271'	GAS
Pt Lookout	5648'	GAS
Mancos	5915'	
Gallup	6417'	
Greenhorn	7795'	
Graneros	7870'	
Dakota	7985'	GAS
TD	8150'	

4. Casing and Cementing Program:

Run and cemented as previously reported.

9 5/8" 40# limited Service @ 233' in 12 1/4" hole  
Cemented with 125 sxs Class B +2% CaCl  
Circulated to surface

5 1/2" 17# J-55 0'-607'

5 1/2" 15.5# K-55 607'-6432'

5 1/2" 17# J-55 6432'-8148'

8 1/2" hole

DV @ 6139' & 3528'

Cement 1<sup>st</sup> stage with 10 bbl Mud Flush, 375 sxs 50/50 Class B POZ +2% Gel +6 1/4 #/sk Gilsonite +1/4 #/sk flakes  
(525 cf) Full returns while cementing

Cement 2<sup>nd</sup> stage with 10 bbl Mud Flush, 190 sxs 65-35 Class B POZ +12% Gel +1/4 #/sk flakes Tailed with 270  
sxs 50/50 Class B POZ +2% Gel +1/4 #/sk flakes  
(763 cf) Full returns while cementing

Cement 3<sup>rd</sup> stage with 10 bbl mud flush, 320 sx 65-35 Class B POZ +12% Gel +1/4 #/sk flakes  
85 sx 65-35 Class B POZ +12% Gel +6 1/4 #/sk Gilsonite +1/4 #/sk flakes  
Tailed with 85sx 50-50 Class B POZ +2% Gel +6 1/4 #/sk Gilsonite +1/4 #/sk flakes  
(1025 cf) Full returns until last 49 bbls of displacement  
Cement top @ 1925' (temp survey)

**P&A PLUGS: 12-1996**

6769' CIPB Capped with 8 sk cement  
Tested casing to 780 psig

5865'-5965' 17 sx

5118'-5698' 69 sx

3065'-3487' 51 sx

0-282' 108 sx

Perf sqz holes @ 282'

Pumped down casing with cement returns to surface out of bradenhead

**PERFORATIONS:**

6819'-7114' 32 holes

7353'-7563' 11 holes

**5. Pressure Control Equipment:**

A double ram 3000 psi BOP and stripping head will be utilized during the clean out operations of the cement plugs.  
A TIW valve will be available at all times during the cleanout operations.

**6. Mud Program**

Fresh water will be utilized will be utilized to drill all cement plugs. Once the plugs have been drilled the fresh water will be replaced with 2% KCl water for the completion .

**7. Logging Program**

A GR/CBL/CCL/VDL from PBTD' to 7900' and 5900' to 5000'

**8. Coring and Testing**

No cores or DST's are planned.

**9. Estimated Pressures:**

Estimated BHP after completion is  $\pm 1800$  psig

#### 10. Other Information

This is a planned reentry of a P&A'd well. The purpose of the reentry is to complete zones within the Dakota and or Mesaverde formation. A 80' x 40' reserve pit will be built. Location anchors will be installed.

The casing was cut off below ground level and a dry hole marker installed during the plugging operations. The 9 5/8" and 5 1/2" casing will be extended to the surface. A 3000# wellhead will be installed and pressure tested prior to the starting of operations. The cement plug from surface to 282' will be drilled out. The casing and squeeze holes will then be tested to 2000 psig for 30 minutes. Should the squeeze holes leak the holes will be resqueezed and the process repeated until a successful pressure test is obtained. The remaining plugs will be drilled out down to the CIBP at 6769'. A GR/CBL/CCL/VDL log will be run from 5900' to 5000' across the Mesaverde zone. The hole will be circulated clean with water. The casing will then be tested to 2000 psig for 30 minutes. The CIBP at 6769' will be drilled out and the well will be cleaned out to PBTD. The hole will be circulated with clean 2% KCl water. A GR/CBL/CCL/VDL log will be run from PBTD to 7900'. Intervals in the Dakota zone will be perforated and broke down with 15% HCl and ball sealers then swab tested. If the swab test is good, the zone will be stimulated. A decision will be made, depending on the production levels achieved, to either squeeze the open perforations or produce the Dakota from under a packer.

Should the Dakota be unproductive a CIBP will be set at  $\pm 7985'$  (top of the Dakota formation) and capped with 50' of cement. A CIBP will be set at  $\pm 6769'$  and capped with 50' of cement. Selected intervals within the Mesaverde formation will be perforated, broke down, tested and stimulated as necessary.

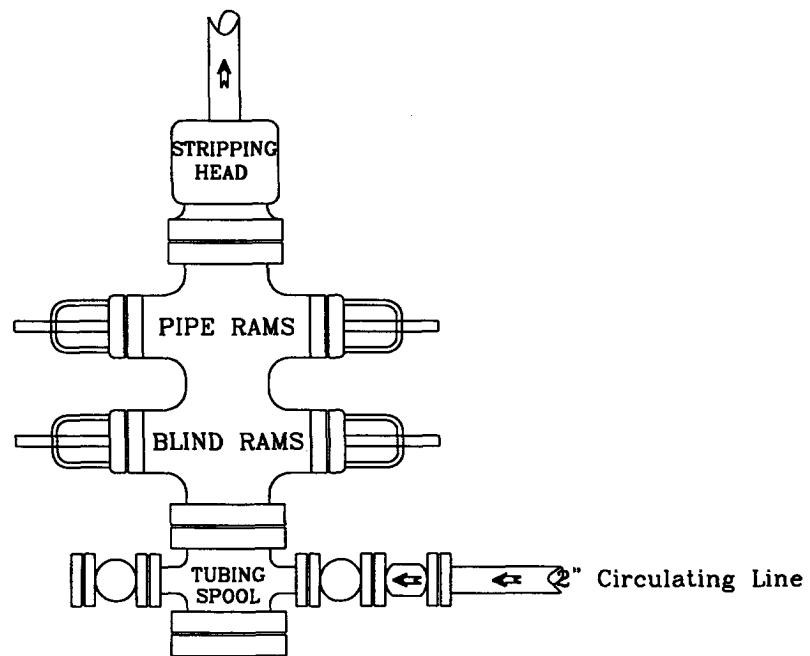
If either the Dakota or Mesaverde is commercial production facilities will be set and a pipeline connection installed.

If the well is not commercial, the well will be P&A'd as follows:

- Spot a 100' cement plug 5865'-5965' (top of Mancos)
- Set a CIBP @ 5168' and capped with 50' of cement (top of Mesaverde)
- Spot a 240' plug 3250'-3490' (top of Kirtland)
- Spot a 100' plug 3050'-3140' (top of Ojo Alamo)
- Spot a 100' plug 232'-332' (base of surface casin)
- Spot a 50' surface plug
- Cut off casing.
- Install dry hole marker
- Reclaim location

# PRESSURE CONTROL

## Wellhead Assembly



Preventer and Spools are to have a  
2000 PSI or higher Pressure Rating

*McElvain Oil & Gas Properties, Inc.*

Twilight Zone #1

1850' FSL & 1850' FEL

Section 12 T24N, R2W, NMPM

Rio Arriba County, New Mexico