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NOV 30 2009

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Application for Permit to Drill or Reenter

5. Lease Serial No.
NMNM09867
6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Big Gulp SWD No. 1

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

9. API Well No.

30-045-35043

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

3b. Phone No. (include area code)
303.893.0933X375

10. Field and Pool, or Exploratory
Mesa Verde

4. Location of Well (Report location clearly and in accordance with any State requirements *)

At surface 1807' FSL - 1117' FWL, Section 20, T30N, R13W, NMPM

At proposed prod. zone same

11. Sec., T. R. M. or Blk. and Survey or Area
Section 20, T30N, R13W, NMPM

14. Distance in miles and direction from nearest town or post office*
3 miles northwest of Farmington, NM

12. County or Parish
San Juan

13. State
NM

15. Distance from proposed* 201 / 201
location to nearest
property or lease line, ft
(Also to nearest drig. unit line, if any)

16. No. of acres in lease
160.0

17. Spacing Unit dedicated to this well
NA

18. Distance from proposed location* 35
to nearest well, drilling, completed,
applied for, on this lease, ft

19. Proposed Depth
4270'

20. BLM/BIA Bond No. on file
NM0253

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
5525' 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*
01/01/2010

23. Estimated duration
30 days

24. Attachments

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 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 Robert E. Fielder

Name (Printed/Typed)
Robert E. Fielder

Date
11/25/2009

Title
Agent

Approved by (Signature) [Signature]
Title AFM

Name (Printed/Typed)

Date 1/27/2010

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)

SWD order required from OCD Santa Fe

FEB 12 2010

NMOCD

BLM'S APPROVAL OR ACCEPTANCE OF THIS
ACTION DOES NOT RELIEVE THE LESSEE AND
OPERATOR FROM OBTAINING ANY OTHER
AUTHORIZATION REQUIRED FOR OPERATIONS
ON FEDERAL AND INDIAN LANDS

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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 & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

NOV 30 2009

Form C-102

Revised October 12, 2005

Bureau of Land Management Submit to Appropriate District Office

Farmington Field Office State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-35043		2 Pool Code 96160-SWD		3 Pool Name Mesa Verde SWD	
4 Property Code 38023		5 Property Name BIG GULP SWD			6 Well Number 1
7 OGRID No 22044		8 Operator Name McELVAIN OIL & GAS PROPERTIES, INC.			9 Elevation 5525

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
L	20	30 N	13 W		1807	South	1117	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	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.

<p>16</p> <p>S 88°17' W</p> <p>40.41 Ch.</p> <p>N 89°11' W</p> <p>39.71 Ch.</p> <p>79.79 Ch.</p> <p>40.04 Ch.</p> <p>40.25 Ch.</p> <p>40.27' E</p> <p>79.65 Ch.</p> <p>N 87°54' W</p> <p>1117'</p> <p>1807'</p> <p>Lat 36.79650° N</p> <p>Long 108.23371° W</p> <p>20</p> <p>Sec.</p>	<p>17 OPERATOR CERTIFICATION</p> <p>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 undivided 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 of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Robert E. Fielder</i> 11/25/09 Signature Date</p> <p><i>Robert E. Fielder</i> Printed Name</p>	
	<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>02 Oct 2009 Date of Survey</p> <p><i>William E. Mahnke</i> Signature and Seal of Professional Surveyor</p> <p>8466 Certificate Number</p>	

Bearings from GLO Plat

McElvain Oil & Gas Properties, Inc.
Big Gulp SWD No. 1
1807' FSL & 1117' FWL
Section 20, T30N, R13W, NMPM
San Juan County, New Mexico

TEN POINT DRILLING PROGRAM

1. **Surface Formation:** Ojo Alamo
2. **Surface Elevation:** 5524' GR.
3. **Estimated Formation Tops:**

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Ojo Alamo	surface	
Kirtland	661	
Fruitland	1106	GAS/WATER
Pictured Cliffs	1346	GAS
Lewis	1571	
Cliff House	2881	GAS/WATER
Menefee	3036	GAS/WATER
Pt. Lookout	3746	GAS/WATER
Mancos	4121	
TOTAL DEPTH	4270	

4. **Surface Hole Program:**

Bit: Drill an 12 $\frac{1}{4}$ " hole to 700' 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 - 700	8.6 or less	9.0-9.5	40 - 50	No Control

Casing and Cementing: A string of 9 $\frac{5}{8}$ " 36 ppf J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 375 sacks (442.5 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 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 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 (6) 9 $\frac{5}{8}$ " X 12 $\frac{1}{4}$ " regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

contact
OCD

Drilling Program
McElvain Oil & Gas Properties, Inc.
Big Gulp SWD No. 1
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4. **Surface Hole Program:** -cont'd

Float Equipment: Cement nose guide shoe thread locked. Self fill insert float valve run one joint above bottom. Thread lock connection between first and second joint run.

5. **Production Hole Program:**

Bit: Drill an 8 $\frac{3}{4}$ " hole to 4270'± using TCI, IADC Class 447 bits. WOB: 30-35K. RPM: 60 - 75.

Mud: Use a fresh water base LSND mud system with the following properties to drill this section.

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>Ph</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
700 - 1100	8.6 - 8.8	9.0-9.5	32 - 35	8 - 10
1100 - TD	8.8 - 9.0	9.0-9.5	35 - 45	6 - 8

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: 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. Fluid loss control is important and should be established in mud system and maintained for the entire length of this section of the hole.

Lost Circulation can occur in the Fruitland Coal, Pictured Cliffs, and Mesa Verde group. 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. 7" 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.

Drilling Program
McElvain Oil & Gas Properties, Inc.
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5. Production Hole Program: -continued

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 7" 20 ppf J-55 or K-55 production casing from surface to TD with a mechanical DV tool at 1600'±. Cement stage 1 (TD - 1600') with 135 sacks (286.2 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 250 sacks (315.0 cf) of Type V with 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk. Cement stage 2 (1600-surface) with 140 sacks (296.8 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 50 sacks (63.0 cf) of Type V with 5 pps gilsonite and 0.25 pps celloflake mixed at 15.2 ppg to yield 1.26 cf/sk.

Circulate and WOC for four (4) hours between stages.

Slurry volumes assume a 50% excess over gauge hole volume to circulate to surface. Slurry volume will be adjusted to caliper volume plus 30% excess after logs are run. 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.

Centralizers: 12 - 7" X 8¾" bowspring centralizers will be run across all prospective pays, below the DV tool and spaced evenly to the surface casing shoe. 3 - 7" X 8¾" turbolizers will be spaced with one (1) just below the DV tool, one (1) just below the base of the Fruitland coal and one (1) in the Fruitland coal.

Float Equipment: Cement nose float shoe, 1 joint 7" casing, and float collar. Mechanical DV tool with cement basket and turbolizer on the joint below the DV.

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

Coring and Testing Program:

No cores or drill stem tests are planned.

Drilling Program
McElvain Oil & Gas Properties, Inc.
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8. **Abnormal Pressure:**

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

Estimated Bottom Hole Pressure:

1000 - 1500 psig.

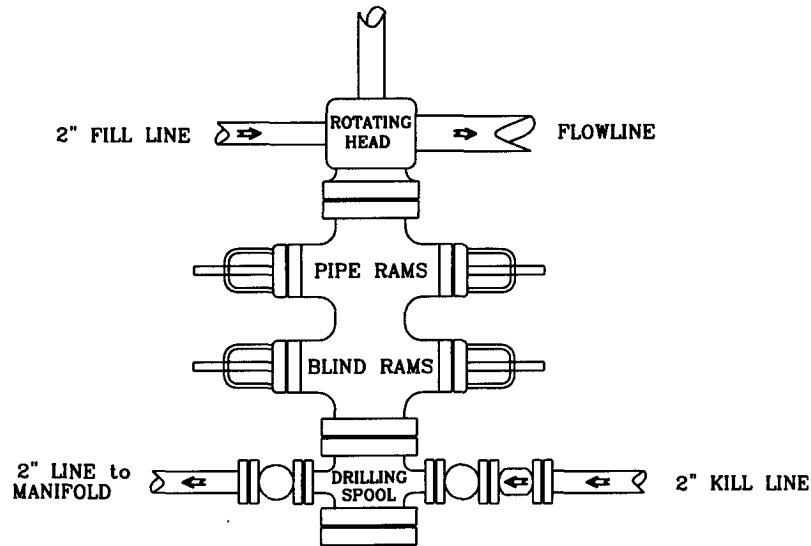
9. **Anticipated Starting Date:**

January 1, 2010

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

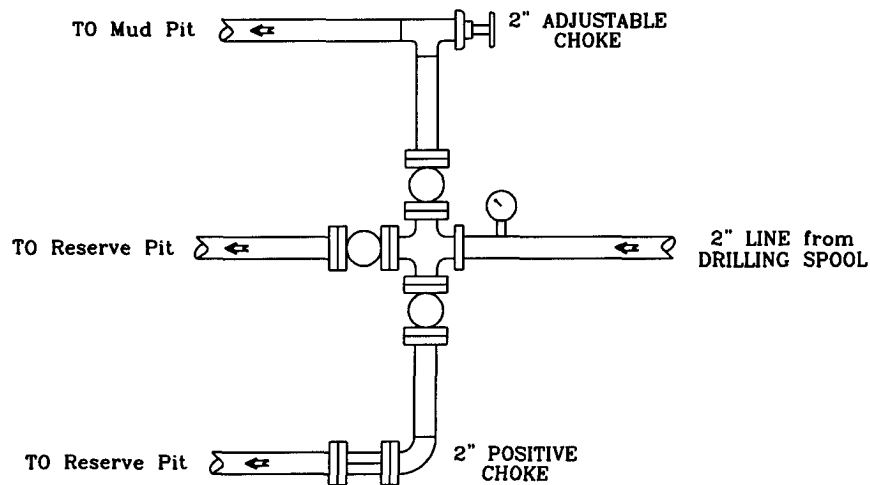
PRESSURE CONTROL

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.

Big Gulp SWD No. 1

1807' FSL - 1117' FWL

Section 20, T30N, R13W, NMPM

San Juan County, New Mexico