District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, 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-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
McElvain Oil & Gas Properties, Inc. 1050 17th St., Suite 2500 Denver, CO 80265-2080	22044
	[3] API Number 30 – 039-30580*

[3] Property Code	[5] Property Name	[6] Well No.
37465**	Lybrook	3

[9] Proposed Pool 1	[10] Proposed Pool 2
Basin Mancos Gas	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	36	24N	07W		2020	South	890	East	Rio Arriba

[8] Proposed 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

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	O	R	S	6735'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	6349'	Dakota	Not selected	09/01/2011

FR

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12.250"	9.625"	36 #	500'	240	surface
8.750"	7.000"	23 #	6349'	Stg 1-248	4470'
			DV @ 4470'	Stg 2 – 292	2230'
			DV@2230'	Stg 3 – 259	surface

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

- *-This is a re-file of a previously approved APD
- **- a a.

See attached drilling program. Blowout prevention program described in attached drilling program. Schematic of BOPE attached.
McElvain Oil & Gas Properties, Inc. applies for approval of this 160 acre NSP as a stranded unit as defined in Rule 3.B of the Special Pool Rules of R-12984. The stranded nature is exhibited on the attached C-102.

RCVD JUL 7'11
OIL CONS. DIV.
DIST. 3

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Robert E Fielder

Printed name: Robert E. Fielder

Title: Agent

E-mail Address: pmci@advantas.net

Date: 07/06/2011

Phone: 505.320.1435

OIL CONSERVATION DIVISION

Approved by:

Title: SUPERVISOR DISTRICT # 3

Approval Date: AUG 0 1 2011

Expiration Date: AUG 0 1 2012

Conditions of Approval Attached ☐

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

AUG 0 1 2011

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-039-30580	97232	Basin Mancos Gas

4 Property Code	5 Property Name	6 Well Number
37465	LYBROOK	3

7 OGRID No.	8 Operator Name	9 Elevation
22044	McELVAIN OIL & GAS PROPERTIES, INC.	6735

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
I	36	24 N	7 W		2020	South	890	East	Rio Arriba

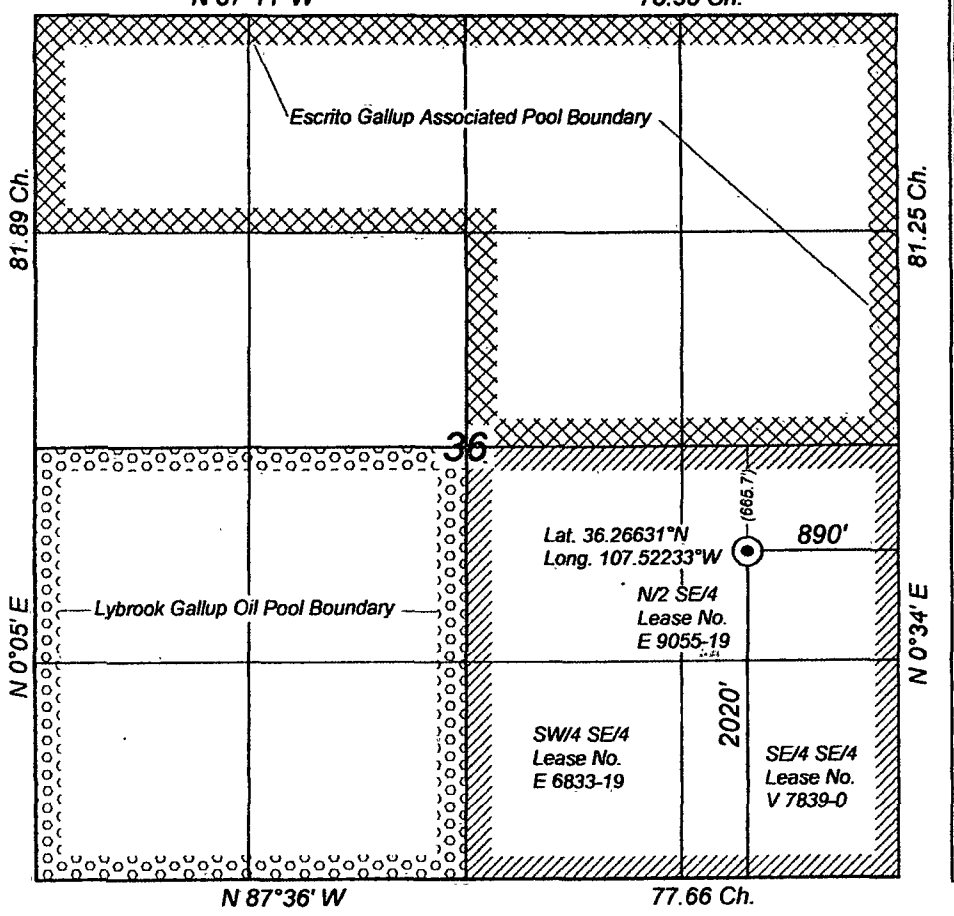
11 Bottom Hole Location If Different From Surface

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
SE/4-160 Ac.			

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.

16



Bearings From GLO Plat

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 of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Robert E. Fielder 07/06/2011
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.

Rev. 24 Mar 2011
14 May 2008
Date of Survey

Signature and Seal of Professional Surveyor
#8466

William E. Mahnke II
Certificate Number 8466

McElvain Oil & Gas Properties, Inc.
Lybrook No. 3
2020' FSL & 890' FEL
Section 36, T24N, R07W, NMPM
Rio Arriba County, New Mexico

TEN POINT DRILLING PROGRAM

1. **Surface Formation:** San Jose

2. **Surface Elevation:** 6735'GL.

3. **Estimated Formation Tops:**

Formation	Top - feet	Expected Production
San Jose	surface	
Ojo Alamo	1311	
Fruitland	1381	GAS
Pictured Cliffs	1926	GAS
Lewis	2014	
Cliff House	3439	WATER
Menefee	3484	GAS/WATER
Pt. Lookout	4189	GAS/WATER
Upper Mancos	4454	
Upper Gallup	4904	GAS/OIL
Lower Gallup	5384	GAS/OIL
Greenhorn	6144	
Graneros	6199	GAS/OIL
Dakota	6229	GAS/OIL
TOTAL DEPTH	6349	

4. **Surface Hole Program:**

Bit: Drill an 12¼" 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:

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

Casing and Cementing: A string of 9⅝" 36 ppf J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 240 sacks (336.0 cf) of Type III cement (yield = 1.40 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 12¼" by 9⅝" 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" 3000# 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.

4. **Surface Hole Program:** - cont'd

Centralizers: Run three (4) 9⅝" X 12¼" 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 bottom. Thread lock connection between first and second joint run.

5. **Production Hole Program:**

Bit: Drill an 8¾" hole to 6349' using TCI, IADC Class 447 - 625 bits. WOB: 30-35K. RPM: 60 - 75. Hold RPM at 55 - 65 through Ojo Alamo.

Mud: Use a fresh water base LSND mud system with the following properties:

Interval (ft)	Weight (ppg)	Ph	Vis(sec/qt)	Water Loss
500 - 1300	8.6 - 8.8	9.0-9.5	28 - 35	10 - 12
1301 - 4400	8.6 - 8.8	9.0-9.5	32 - 35	8 - 10
4401 - 6349	8.6 - 8.8	9.0-9.5	32 - 35	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.

Lost Circulation can occur in the Fruitland Coal, Pictured Cliffs and Mesa Verde formations. Mud weights should be controlled as low as possible with solids control equipment and water dilution.

Pressure Control: A 3M 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.

Logging Program: Dual Induction and Epithermal Neutron/Formation Density logs will be run from TD to the surface casing shoe.

5. **Production Hole Program:** - cont'd

Casing and Cementing Program: Run 7" 23 ppf J-55 and N-80 production casing from surface to TD (23# J to 4349'; 23# N-4349 to TD)and cement in three stages with mechanical DV tools set at 2230'± and 4470'±. Cement stage 1 (6349-4470') with 148 sacks (310.8 cf) Premium Lite FM containing 8% gel,5 pps LCM-1, and 0.25 pps celloflake mixed at 12.1 PPG to yield 2.10 cf/sk. Tail in with 100 sacks (137.0 cf) of Type III with 0.2% FLA and 0.25 pps celloflake mixed at 14.6 ppg to yield 1.37 cf/sk.
Cement stage 2 (4470-2230) with 192 sacks (403.2 cf) of Premium Lite FM containing 8% gel,5 pps LCM-1, and 0.25 pps celloflake mixed at 12.1 PPG to yield 2.10 cf/sk. Tail in with 100 sacks (137.0 cf) of Type III with 0.2% FLA and 0.25 pps celloflake mixed at 14.6 ppg to yield 1.37 cf/sk. Cement stage 3 (2230 - surface) with 159 sacks (333.9 cf) of Premium Lite FM containing 8% gel,5 pps LCM-1, and 0.25 pps celloflake mixed at 12.1 PPG to yield 2.10 cf/sk. Tail in with 100 sacks (137.0 cf) of Type III with 0.2% FLA and 0.25 pps celloflake mixed at 14.6 ppg to yield 1.37 cf/sk.

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

Slurry volumes assume a 50% excess over gauge hole volume to circulate to surface. Volumes will be adjusted to caliper plus 30% 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: 15 - 7" X 8¾" bowspring centralizers will be run across all prospective pays and 3 - 7" X 8¾" 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 float shoe, 1 joint 7" casing, and float collar. Two mechanical DV tools with cement basket below each DV tool.

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.
A two man mud log unit will be in service from the top of the Pt. Lookout to TD.

7. **Logging Program:** cont'd

Coring and Testing Program:

No drill stem tests are planned however some may be ran in the Basin Mancos formation at the discretion of the wellsite geologist. Coring will be done in the Basin Mancos formation at the discretion of the wellsite geologist.

8. **Abnormal Pressure:**

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

Estimated Bottom Hole Pressure:

2750 - 3000 psig.

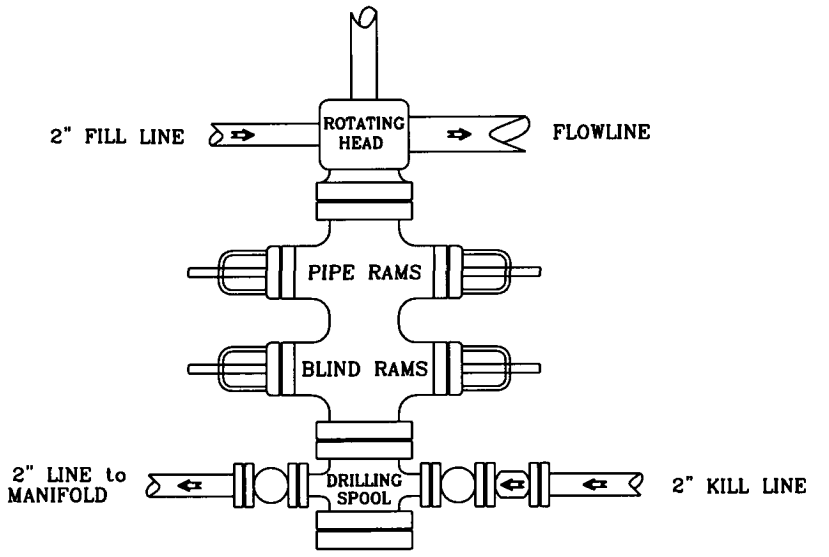
9. **Anticipated Starting Date:**

September 1, 2011

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

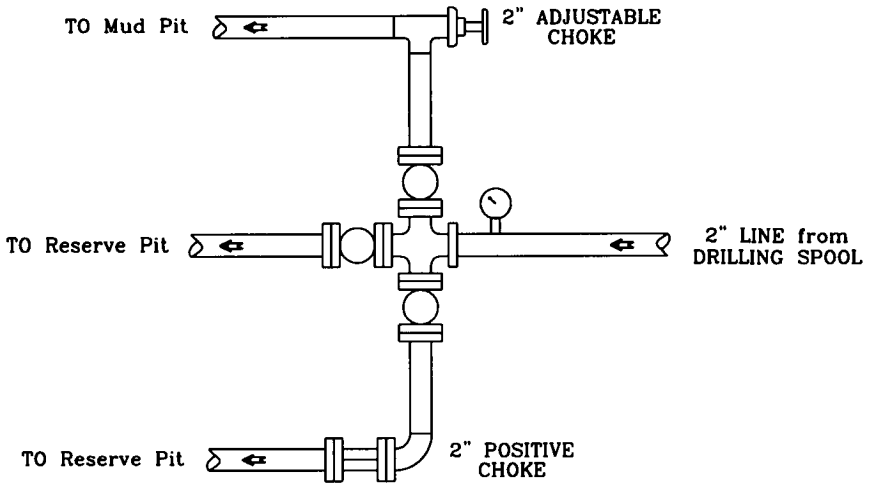
PRESSURE CONTROL

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.

Lybrook No. 3

2020' FSL – 890' FEL

Section 36, T24N, R7W, NMPM

Rio Arriba County, New Mexico