

**DRILLING PLAN
WEXPRO COMPANY
BW MUSSER NO. 33
DIRECTIONAL DRILLING PLAN
MOFFAT COUNTY, COLORADO**

1. SURFACE FORMATION, ESTIMATED TOPS AND WATER, OIL, GAS OR MINERAL BEARING FORMATIONS:

	MD	TVD
Wasatch	Surface	Surface
A-4-G SD	4,797'	4,710', gas - Secondary Objective
A-4-H SD	5,447'	5,351', gas - Secondary Objective
Fort Union	5,667'	5,571'
Allen 8 - A	6,538'	6,438'
Allen 8 - B	6,561'	6,460', gas, - Major Objective
Allen 8 - E	6,717'	6,616'
Allen 8 - F	6,836'	6,735', gas, - Major Objective
Allen 8 - G	6,910'	6,808'
Allen 8 - H	6,976'	6,874'
Allen 9 - A	7,092'	6,990', gas, - Secondary Objective
Allen 9 - B	7,156'	7,054', gas, - Secondary Objective
Allen 9 - C	7,272'	7,171'
Allen 11	7,352'	7,250'
L. F. U. 4600	8,014'	7,912'
Allen 10 - B	8,268'	8,166'
Allen 10 - C	8,381'	8,280'
Allen 6 - A	8,519'	8,418'
Allen 6 - G	8,519'	8,418', gas, - Major Objective
Allen 6 - H	9,108'	9,006', gas, - Major Objective
Allen 6 - K	9,281'	9,179', gas, - Major Objective
Total Depth	9,559'	9,457'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

2. PRESSURE CONTROL EQUIPMENT: (see attached diagram) Operator's minimum specifications for pressure control equipment require an 11-inch 3000 psi double gate hydraulically operated blowout preventer and an 11-inch 3000 psi annular preventer. BOP equipment will be tested to its rated working pressure or 70-percent of the internal yield of the surface casing. The annular preventer will be tested at 50-percent of its rated working pressure. NOTE: The surface casing will be pressure tested to a minimum of 1500 psi. BOP's will be checked daily as to mechanical operating condition and will be

tested by rig equipment after each string of casing is run. All ram type preventers will have hand wheels which will be operative and accessible at the time the preventers are installed. Accumulator will include both electric and air power source (see attached diagram).

At this time Wexpro Company requests approval, if needed, to use "Flex Hose" between the BOP and Choke Manifold. The Flex Hose will have a minimum rating of 5,000 psi. Please see the attached specifications sheet for more details.

AUXILIARY EQUIPMENT:

- a) Manually operated kelly cock
- b) No floats at bit
- c) Monitoring of mud system will be visual
- d) Full opening floor valves in the full open position, capable of fitting all drill stem connections manually operated

3. CASING PROGRAM:

Size		Top	Bottom	Weight	Grade	Thread	Condition
Hole	Casing						
26"	20"	sfc	80'	Steel Pipe Conductor			New
12-3/4"	9-5/8"	sfc	1500'	36#	J55	LT&C	New
7-7/8"	4-1/2"	sfc	9,559' MD 9,457' TVD	13.5#	P-110	LT&C	New

Casing Strengths:				Collapse	Burst	Tensile (minimum)
9-5/8"	36 lb.	J55	LTC	2,020 psi	3,520 psi	453,000 lb.
4-1/2"	13.5 lb.	P110	LTC	10,670 psi	12,410 psi	338,000 lb.

Area Fracture Gradient: 0.750 psi/foot

CEMENTING PROGRAMS: (See Attached Details)

9-5/8" Surface Casing: 959 cubic feet Class "G" with 2% CaCl₂ and 1/4 % cello flake (only if lost circulation is encountered).

4-1/2" Production Casing: Lead Slurry: 1422 cubic feet Light 50/50 Poz-G with retarder, reducer and fluid loss additive. Volume to be calculated from caliper logs to bring lead cement from 4,800' to surface, with 15% excess.

Tail Slurry: 1250 cubic feet 35/65 Poz-G with retarder, reducer and fluid loss additive. Volume to be calculated from caliper logs to bring tail cement from TD to 4,800', with 15% excess.

4. MUD PROGRAM:

Surface to 1500 feet

Surface hole mud drilled and cased with the Drilling rig.

Example Properties:

Mud Weight	9.0 ppg
Viscosity	35 – 38
Water Loss	10 – 14
LCM	10% Fine Mica if needed
Filter Cake	1/32
PH	> 10
PV / YP	18/10 minimum
Asphalt	6 lb/bbl

1500 to Total Depth

Drill out surface casing 10' and test formation 10.5 ppg mud equivalent.

Mud properties below will be maintained from Surface Casing to TD

Drill from 1500' to TD with 350 or less gpm

Mud weight of 9.5 - 10.0 ppg should be accomplished by 1,500 feet to total depth.

Mud weight	9.0 - 10.0 ppg
Viscosity	35 - 45
Water Loss	10 - 14
LCM	10% Fine Mica if needed
Filter Cake	1/32
PH	>10
PV/YP	18/10 Minimum
Asphalt	6 lb/bbl

Sufficient mud materials to maintain mud properties, control lost circulation and to contain blowout will be available at the wellsite.

No chrome constituent additives will be used in the mud system on Federal, State and Indian lands without prior BLM/State approval to ensure adequate protection of fresh water aquifers.

5. LOGGING:
 - DIL-SFL-GR: Total depth to surface casing.
 - BHC-Sonic-GR: Total depth to surface casing.
 - FDC-CNL-GR-PE-Cal: Total depth to surface casing.
 - Cement/Bore Hole Profile Log

- TESTING: None.

- CORING: None.

6. ABNORMAL PRESSURE AND TEMPERATURE: A BHT of 190° F and a BHP of 3500 psi are possible.

7. ANTICIPATED STARTING DATE: January 15, 2011

- DURATION OF OPERATION: 25 days