DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

BOARD OF OIL AND GAS CONSERVATION

BRIAN SCHWEITZER, GOVERNOR

OIL AND GAS CONSERVATION DIVISION

STATE OF MONTANA

December 31, 2007

RECEIVED

JAN 0 3 2008

LEGISLATIVE ENVIRONMENTAL POLICY OFFICE

Mr. Todd Everts
Environmental Quality Council
Room 106, State Capitol
Helena, MT 59620

Re: Environmental Assessment Reports

Dear Todd:

Enclosed please find a copy of the environmental assessments completed by this office covering the period from October 1 through December 31, 2007 with regard to applications for permits to drill oil or gas wells on state and privately owned lands in the State of Montana.

Let us know if you require any further information.

Sincerely,

Thomas P. Richmond
Administrator

km

Encs. 150

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1625 ELEVENTH AVENUE
PO BOX 201601
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(406) 444-6675

TECHNICAL AND
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BILLINGS, MONTANA 59102-4693
(406) 656-0040

NORTHERN FIELD OFFICE
201 MAIN STREET
PO BOX 690
SHELBY, MONTANA 59474-0690
(406) 434-2422

Montana Board of Oil and Gas Conservation
Environmental Assessment

Operator: Petro Hunt, LLC
Well Name/Number: Gridley 33A-4-1H
Location: SE NE Section 33T28N R59E
County: Roosevelt, **MT; Field (or Wildcat)** W/C

Air Quality

(possible concerns)
Long drilling time: 30-40 days drilling time for a horizontal Ratcliffe Formation test.
Unusually deep drilling (high horsepower rig) No, triple drilling rig for 13,000' MD/8815' TVD
Possible H2S gas production: Slight
In/near Class I air quality area: No
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X Air quality permit (AQB review)
__ Gas plants/pipelines available for sour gas
__ Special equipment/procedures requirements
__ Other:

Comments: No special concerns, adequate surface casing, 2000' to be set and cemented back to surface with proper BOP stack should mitigate any concerns. Triple rig to drill to 13,000' horizontal Ratcliffe formation well.

Water Quality

(possible concerns)
Salt/oil based mud: Use freshwater and freshwater mud system on surface and invert oil based mud to casing point and drill with saltwater for horizontal hole to TD.
High water table: No
Surface drainage leads to live water: Yes, Little Muddy Creek, about 1/4 of a mile to the northwest of this location. Also, an unnamed ephemeral tributary drainage to Little Muddy Creek lies about ¼ of a mile to the north of this location. Within Little Muddy Creek bottom are stock and/or irrigation ponds.
Water well contamination: No, all water wells within 1 mile are less than 300' in depth. Surface casing hole will be drilled with freshwater and casing will be cemented to surface.
Porous/permeable soils: No, silty-sandy bentonitic soils.
Class I stream drainage: No

Mitigation:
X Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
__ Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 2000' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used on surface hole. Invert oil based muds will be recycled. Completion fluids will be hauled and

disposed of at a commercial Class II disposal well, Land Tec Romo 1-26 SWD. Solids will be allowed to dry, pit liner folded over the top of the solids, spoil dirt to fill pit, top soil spread over pit area, and seeded to land owners specification..

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: None.
High erosion potential: No, moderate cut, up to 22.5' and small fill, up to 8.0', required.
Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.
Unusually large wellsite: Large, 440'X350' location size required.
Damage to improvements: Slight, surface use is a cultivated field.
Conflict with existing land use/values: Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
X Stockpile topsoil
__ Stream Crossing Permit (other agency review)
X Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Access will be over existing State Highway, #2 and an existing county gravel section line road. A short access road will be built into this location of about 755'. The town of Bainville, Montana is about 5.5 miles to the west. No special concerns

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences Residences within about 3/4 of a mile to the northeast, 1 mile to the east and the town of Bainville, about 5.5 miles to the west of this well location.
Possibility of H2S: Slight
Size of rig/length of drilling time: Triple drilling rig 30 to 40 days drilling time

Mitigation:
X Proper BOP equipment
__ Topographic sound barriers
X H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other: _____

Comments: No concerns, residences far enough away from wellsite. Proper BOP stack and surface casing should be able to control any problems that occur.

Wildlife/recreation

(possible concerns)
Proximity to sensitive wildlife areas (DFWP identified): None identified.
Proximity to recreation sites: None identified.
Creation of new access to wildlife habitat: No
Conflict with game range/refuge management: No
Threatened or endangered Species: None identified.

Mitigation:

__ Avoidance (topographic tolerance/exception)
__ Other agency review (DFWP, federal agencies, DSL)
__ Screening/fencing of pits, drillsite
__ Other:___.
Comments: Private surface lands. No concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites: None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
__ other agency review (SHPO, DSL, federal agencies)
__ Other:___
Comments: On private lands. No concerns.

Social/Economic

(possible concerns)
__ Substantial effect on tax base
__ Create demand for new governmental services
__ Population increase or relocation
Comments: No concerns

Remarks or Special Concerns for this site

Well is a 13,000' MD/8815' TVD Ratcliffe horizontal formation test

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drilling of this well. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): Steven Sasaki
(title:) Chief Field Inspector
Date: September 26, 2007
Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)
Roosevelt County water wells
(subject discussed)
September 26, 2007
(date)

If location was inspected before permit approval:
Inspection date: October 17, 2007
Inspector: Mr. Robert Schmidt
Others present during inspection: Frantz Construction