

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: Slohcin, Inc.
Well Name/Number: Halter #5-5B
Location: NW NE Section 21 T35N R2W
County: Toole MT; Field (or Wildcat) Kevin Sunburst

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig, about 500 HP (Estimated) to drill to 1620' TD.

Possible H2S gas production: Slight H2S anticipated (Very low PPM H2S).

In/near Class I air quality area: No not in a Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

Air quality permit (AQB review)

Gas plants/pipelines available for sour gas

Special equipment/procedures requirements

Other: _____

Comments: No special concerns – using small rig to drill to 1620' TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist.

High water table: No high water table anticipated.

Surface drainage leads to live water: No, closest drainages are unnamed ephemeral drainages, about, 1/8 of a mile to the south from this location.

Water well contamination: No, closest water wells are over 1 mile from this location.

Surface hole in this well will be drilled to 300' with freshwater and/or air. Steel surface casing will be run and cemented to surface to protect ground water if any.

Porous/permeable soils: No, sandy silty bentonitic soils.

Class I stream drainage: No Class I stream drainages.

Mitigation:

Lined reserve pit

Adequate surface casing

Berms/dykes, re-routed drainage

Closed mud system

Off-site disposal of solids/liquids (in approved facility)

Other: _____

Comments: 300' of surface casing cemented to surface adequate to protect freshwater zones. Also, air/air mist and/or fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated. Crossing only ephemeral drainages.

High erosion potential: No, small cut, up to 7.6' and small fill, up to 8.5', 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: No, 200'X200' location size required.
Damage to improvements: Slight, surface use is a grassland.
Conflict with existing land use/values: Slight

Mitigation

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

Comments: Access will be over existing county gravel road, west frontage road and existing well access roads. No new access will be built into this location. Well access road run through this location. Cuttings will be buried in and unlined earthen pit. Drilling fluids if used will be allowed to dry in the pit. Pits will be backfilled after drying. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is about 3/4 of a mile to the southeast from this location.

Possibility of H2S: Slight H2S anticipated.

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time.

Mitigation:

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

Comments: Adequate surface casing and operational BOP should mitigate any problems. No concerns

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: Species identified as threatened or endangered are the Black-footed Ferret and Mountain Plover. Candidate species are the Sprague's Pipit. Natural Heritage Tracker website lists the Ferruginous Hawk, Chestnut-collared Longspur, McCown's Longspur and Brewer's Sparrow as a species of concern.

Mitigation:

- Avoidance (topographic tolerance/exception)
- Other agency review (DFWP, federal agencies, DSL)
- Screening/fencing of pits, drillsite

Other: _____
Comments: Private grassland surface. All birds listed are migratory and will have left this area for the winter. 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: Private grassland surface. 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 1620' Madison Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

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): /s/ Steven Sasaki
(title:) Chief Field Inspector
Date: December 17, 2010

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Toole County water wells.
(subject discussed)
December 17, 2010
(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Toole County

(subject discussed)

December 17, 2010

(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, Section T35N R2W

(subject discussed)

December 17, 2010

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____