

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

Operator: Coolidge, G.B., Inc.
Well Name/Number: Taylor 1-32
Location: SW NW Section 32 T35N R1E
County: Toole MT; Field (or Wildcat) East Kevin

Air Quality

(possible concerns)

Long drilling time: No, 8 to 10 days drilling time.
Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig to drill to 3100' TD, Duperow Formation vertical well test.
Possible H₂S gas production: Yes, low concentration of H₂S possible, from Mississippian and Devonian Formations.
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 3000'TD, Duperow Formation. If there is an existing pipeline for gas in the area then associated gas can be gathered or if no gathering system nearby gas can be flared under Board Rule 36.22.1220.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist.
High water table: No, high water table expected.
Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral tributary drainage to Black Coulee, also an ephemeral drainage, about 1/8 of a mile to the east and south from this location. Within the east ephemeral drainage is a stock pond, about 1/2 of a mile to the southeast from this location.
Water well contamination: Closest water well is about 1/2 of a mile to the south southwest from this location. Depth of this water well is 15'. Surface hole will be drilled with freshwater based drilling fluids. Surface casing will be run and cemented to surface from 300'.
Porous/permeable soils: No, silty sandy bentonitic soils.
Class I stream drainage: No, Class I stream drainages in the area.

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: Surface casing will be drilled to 300' and cemented to surface. This is 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.

High erosion potential: No, small cut, up to 4.1' and small fill, up to 4.6', 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 cultivated field.

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: Requires DEQ General Permit for Storm Water Discharge Associated with Construction Activity, under ARM 17.30.1102(28).

Comments: Access will be over existing county road, Ferdig Road. About 1900' of new access road will be built into this location from the county road. Cuttings will be disposed of in the unlined drilling pit. Drilling fluids will be allowed to dry in the earthen pits. Pits will be backfilled after allowing pit to dry. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residences are over 1 mile away in any direction from this location.

Possibility of H2S: Slight H2S low ppms.

Size of rig/length of drilling time: Small drilling rig/short 8 to 10 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. (BOP's 3,000 psig annular, pipe and blind rams) rule 36.22.1014. 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: Only species identified as threatened is the Black-Footed Ferret or endangered (USFWS listing). Candidate species is listed as the Sprague's Pipit.

Mitigation:

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

Comments: Private surface lands, cultivated. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands.

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 surface lands. There may be possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

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 3100' Duperow 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: August 13, 2012

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)
Toole County water wells
(subject discussed)
August 13, 2012
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA
COUNTIES, Toole County
(subject discussed)
August 13, 2012
(date)

Montana Natural Heritage Program Website
(Name and Agency)
Heritage State Rank= S1, S2, S3, Location T35N R1E
(subject discussed)
August 13, 2012
(date)

If location was inspected before permit approval:
Inspection date: _____
Inspector: _____
Others present during inspection: _____