

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

**Operator:** Plain Energy USA, LLC  
**Well Name/Number:** Plain Kevin 15-26  
**Location:** SW SE Section 26 T35N R4W  
**County:** Toole, MT; **Field (or Wildcat)** W/C

**Air Quality**

(possible concerns)

Long drilling time: 10 to 15 days drilling time.

Unusually deep drilling (high horsepower rig): No, double derrick hydraulic top head drive drilling rig for a 4200' TD vertical hole, Duperow Formation test.

Possible H2S gas production: Yes possible H2S.

In/near Class I air quality area: No, no 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: Double derrick drilling rig to drill a vertical hole to 4200' TD in the Duperow Formation.

**Water Quality**

(possible concerns)

Salt/oil based mud: Use freshwater and freshwater mud system on surface and mainhole to total depth, 4200'.

High water table: None anticipated.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral drainage, about 5/8 of a mile to the south from this location.

Water well contamination: No, closest water wells are about 3/8 of a mile to the west and 3/4 of a mile to the northeast of this location. Depth of these stock and domestic water wells are 20' and 82'. Surface casing hole will be drilled with freshwater and freshwater muds to 273' and steel surface casing run and cemented to surface.

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

Class I stream drainage: No Class I stream drainage.

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: 273' of surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used on surface hole.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings: None anticipated.

High erosion potential: No, small cut, up to 2.9' and small fill required up to 7.1', 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, large, 400'X300' location size required.

Damage to improvements: Slight, surface use is dry land crop field and 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: Using existing county roads, Gillespie Road and existing farm road. Access off existing farm road, approximately 1400' of new road will be constructed into this location. Cuttings will mixed buried in the earthen reserve pit. Drilling fluids will be allowed to dry in the earthen pit. No special concerns

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### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residences are about 3/8 of a mile to the west southwest and 1/2 of a mile to the northeast from this wellsite. The town of Kevin, Montana is about 4 miles to the east southeast from this location.

Possibility of H2S: Possible.

Size of rig/length of drilling time: Double derrick drilling rig 10 to 15 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: \_\_\_\_\_

Comments: No concerns, proper BOP stack and adequate surface casing should be able to control any problem that occurs.

### 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 endanger in Toole County are the Black-footed Ferret and Mountain Plover. Candidate species is the Sprague's Pipit.

Mitigation:

Avoidance (topographic tolerance/exception)

- Other agency review (DFWP, federal agencies, DSL)
- Screening/fencing of pits, drillsite
- Other: \_\_\_\_\_

Comments: Private cultivated surface lands. Drilling of this well should not impact any of species listed above. Drilling will take place in 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 cultivated surface 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 vertical hole to 4200' TD vertical Duperow Formation test.

### Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected . 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): \s\Steven Sasaki

(title:) Chief Field Inspector

Date: November 23, 2010

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells

(subject discussed)

November 23, 2010

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Glacier County

(subject discussed)

November 23, 2010

(date)

Montana Natural Heritage Program Website

(Name and Agency)

Heritage State Rank= S1, S2, S3

(subject discussed)

November 23, 2010

(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_