

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

**Operator:** Henry A. Alme  
**Well Name/Number:** Alme-Vanderpas 15-10  
**Location:** SW SW SE Section 10 T35N R1W  
**County:** Toole MT; Field (or Wildcat) Kevin Sunburst

**Air Quality**

(possible concerns)

Long drilling time: No, 2 to 3 days drilling time.

Unusually deep drilling (high horsepower rig): No, 1650' TD Rierdon Formation.

Possible H2S gas production: No, none anticipated.

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 1650' TD.

**Water Quality**

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist, rule 36.22.1001.

High water table: No high water table expected in this area.

Surface drainage leads to live water: No, closest drainage is Black Coulee, an ephemeral drainage, about 3/16 of a mile to the west from this location.

Water well contamination: No water wells within 1 mile radius from this location.

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

Class I stream drainage: No Class I stream drainages in the area of review.

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 hole will be drilled to 200' and surface casing set and cemented to surface. This is adequate to protect any freshwater zones. Also, air/air mist and/or fresh water mud systems to be used, rule 36.22.1001. Reserve pit will be unlined and any drilling fluids will be allowed to dry in the pit. When the pit is dry it will be closed by pushing in the subsoil first and finishing off with top soil.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings: No, stream crossings.

High erosion potential: No high erosion potential, small cut, up to 3.2' and small fill, up to 2.8', 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, 150'X150' 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 \_\_\_\_\_

Comments: Access will be over existing county gravel roads, Sundby and Pederson Roads. About ¼ of a mile of new access road will be built into this location from the existing county road. Cuttings will be disposed of in the unlined drilling pit. Drilling fluids if any will be allowed to evaporate. Pits will be backfilled after allowing pit to dry. No special concerns.

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is about 1 mile to the south southwest from this location.

Possibility of H2S: None

Size of rig/length of drilling time: Small drilling rig/short 2 to 3 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 (3,000 psi annular) should mitigate any problems. (BOP's 3,000 psig annular) 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 or endangered that is the Black-footed Ferret. Candidate species listed is the Sprague's Pipit. NH tracker website lists only one (1) species of concern as the Ferruginous Hawk.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

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

Comments: Private cultivated surface lands. 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 cultivated 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: Existing shallow gas field, Kevin-Sunburst Gas Field. No concerns

### Remarks or Special Concerns for this site

Well is a 1650' Rierdon 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: February 22, 2013

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells

(subject discussed)

February 22, 2013

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Toole County

(subject discussed)

February 22, 2013

(date)

Montana Natural Heritage Program Website

(Name and Agency)

Heritage State Rank= S1, S2, S3, Location T35N R1W

(subject discussed)

February 22, 2013

(date)

If location was inspected before permit approval:

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

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

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