

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

**Proposed Action:** Approve Drilling Permit (Form 22)

**Operator:** Anadarko E&P Onshore LLC.

**Well Name/Number:** Horgus Fee 3702-07-11H

**Location:** SW SW Section 7 T37N R2W

**County:** Toole, MT; **Field (or Wildcat)** Wildcat

**Air Quality**

(possible concerns)

Long drilling time: No, 20 to 25 days drilling time.

Unusually deep drilling (high horsepower rig): Double derrick drilling rig or a small triple derrick drilling rig to drill single lateral Middle Bakken Formation well, TD of Lateral: 7899'MD/3566'TVD. TD of pilot hole: 3900'

Possible H2S gas production: Yes possible H2S gas.

In/near Class I air quality area: No Class I air quality area in the area of review.

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 or a small triple derrick drilling rig to drill single lateral Middle Bakken Formation well, TD of Lateral: 7899'MD/3566'TVD. TD of pilot hole: 3900'

**Water Quality**

(possible concerns)

Salt/oil based mud: No, freshwater mud drilling fluid system will be utilized on the mainhole. A freshwater system will be utilized on the surface hole

High water table: None anticipated.

Surface drainage leads to live water: No, closest surface drainage is an unnamed ephemeral drainage, about 1/2 of a mile to the south from this location. A stock pond exists about 1/2 of a mile to the east.

Water well contamination: No, there are no water wells within 1 mile. Surface hole will be drilled with freshwater and surface casing set and cemented back to surface from 390'.

Porous/permeable soils: No, sandy clay 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: 390' of surface casing cemented to surface adequate to protect

freshwater zones.

### Soils/Vegetation/Land Use

(possible concerns)

Steam crossings: None.

High erosion potential: No, a small cut of 5.6' and a small fill of 2.5' 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, location size of 430' X 660'.

Damage to improvements: Slight

Conflict with existing land use/values: Slight, surface use appears to be grazing land.

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: County Encroachment Permit.

Comments: Using existing McVey Road and Fross Road. A new access of about 0.2 miles will be built into location. Freshwater drilling fluids will be recycled/disposed of in an approved facility. Cuttings will be buried in trench along cut slope. No special concerns

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No residence within 1 mile.. The town of Sunburst, Montana is located 6.0 miles to the south from this location. The town of Sweet Grass is located 2.1 miles to the northwest.

Possibility of H2S: Yes, H2S possible.

Size of rig/length of drilling time: Double or small triple drilling rig 20 to 25 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

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

Comments: Operational BOP and adequate surface casing 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. Candidate species are the Sprague's Pipit. NH Tracker website indicates three (3) species of concern in this area. They are as follows: Baird's Sparrow, Chestnut-collared Longspur, and the Long-billed Curlew

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: On private cultivated 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.

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### **Remarks or Special Concerns for this site**

Well is single lateral Middle Bakken Formation well, TD of Lateral: 7899'MD/3566'TVD. TD of pilot hole: 3900' in Toole County, Montana.

### **Summary: Evaluation of Impacts and Cumulative effects**

No significant long term impacts expected, some short term impacts are expected.

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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/ John Gizicki  
(title:) Compliance Specialist  
Date: July 22, 2014

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website  
(Name and Agency)  
Toole County water wells  
(subject discussed)  
July 22, 2014  
(date)

US Fish and Wildlife, Region 6 website  
(Name and Agency)  
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA  
COUNTIES, Toole County, Montana  
(subject discussed)  
July 22, 2014

Montana Natural Heritage Program Website  
(Name and Agency)  
Heritage State Rank= S1, S2, S3, Location T37N R2W  
(subject discussed)  
July 22, 2014  
(date)

If location was inspected before permit approval:

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

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

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