

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

Operator: FX Drilling Company, Inc.
Well Name/Number: American Eagle No.4-3
Location: Lot 4 NW/4 Section 3 T34N R1E
County: Toole **MT;** **Field (or Wildcat)** East Kevin Nisku Oil Field

Air Quality

(possible concerns)

Long drilling time : No, 10 to 14 days drilling time.

Unusually deep drilling (high horsepower rig): No, 3200' TVD, Nisku Formation test, small single derrick drilling rig will be used to drill this well.

Possible H₂S gas production: Yes, possible H₂S, low ppms.

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: Using small rig single derrick drilling rig to drill to 3200'

TD.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system.

High water table: No high water table anticipated.

Surface drainage leads to live water: Closest surface drainage in an unnamed ephemeral tributary drainage to Black Coulee. Closest surface water is a pond within Black Coulee, about 1.25 miles to the southeast from this location.

Surface casing will be set to 300' and cemented to surface. Production casing if set will be cemented to surface, if run.

Water well contamination : No, water well contamination anticipated. Closest water well is about 3/8 of a mile to the northwest from this location. Depth of this stock water well is 18'. Surface casing will be set to 300' well below this water zone.

Porous/permeable soils: No, silty 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: 300' of surface casing cemented to surface adequate to protect freshwater zones. Freshwater and fresh water mud systems to be used. 7" production casing will be cemented to surface, if productive.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No, small cut, up to 5.0' and a 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, 300'X350' location size required.

Damage to improvements: Slight, surface is CRP land.

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 state paved highway, Oilmont Highway and existing two track ranch trail. Will construct a short new road into this location, about 600' off of the two track ranch trail. Cuttings will be buried in the earthen reserve pit. Fluids will be allowed to evaporate. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No residences within 1 mile in any direction from this location..

Possibility of H2S: Yes, slight.

Size of rig/length of drilling time: Small drilling rig/short 10 to 14 days drilling time.

Mitigation:

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

Other:

Comments: No concerns. Distance and topographical features should mitigate any noise issues.

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: Listed threatened or endangered species in Toole County is the Black Footed Ferret. Candidate species is the Sprague's Pipit. NH Tracker website lists no species of concern for this Township and Range.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

Comments: No concerns, surface use is CRP private land.

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: No concerns, surface use is CRP private land.

Social/Economic

(possible concerns)

Substantial effect on tax base

Create demand for new governmental services

Population increase or relocation

Comments: Well is being drilled in the East Kevin Nisku Oil Field. No concerns

Remarks or Special Concerns for this site

Well is a 3200' Devonian Nisku Formation test.

Summary: Evaluation of Impacts and Cumulative effects

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

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 17, 2011

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Toole County water wells
(subject discussed)
August 17, 2011
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Toole County
(subject discussed)
August 17, 2011
(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, T34N R1E

(subject discussed)

August 17, 2011

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____