

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

Operator: Grassy Butte, LLC
Well Name/Number: State 1-16H
Location: SW SE Section 16 T35N R1E
County: Toole MT; Field (or Wildcat) W/C

Air Quality

(possible concerns)

Long drilling time: No, 4 to 7 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig to drill a re-entry to 4916' TD. Well was drilled to 6,000' and was plugged back to 4,916'.

Possible H2S gas production: None.

In/near Class I air quality area: 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: No special concerns – using small single derrick drilling rig to drill a re-entry to 4916'TD.

Water Quality

(possible concerns)

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

High water table: No high water table anticipated.

Surface drainage leads to live water: No live water nearby. Closest drainage is an unnamed ephemeral drainage to Fivemile Coulee ½ of a mile to the northeast. Fivemile Coulee drains into Willow Creek..

Water well contamination: No, no water wells within a 1 mile radius.

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

Class I stream drainage: No Class I stream drainages.

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: 314' of surface casing cemented to surface. No shallow freshwater zones in this area. Also, fresh water mud systems to be used to drill this well.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: Small cut, up to 2.5' and small fill, up to 6.0', required.

Loss of soil productivity: No, location will be restored after drilling if nonproductive. If productive unused portion of drill site will be reclaimed.

Unusually large wellsite: No, using existing well pad.

Damage to improvements: Slight, surface use is cultivated fields.

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. No reserve pit. The re-entry will involve milling out 3 cement plugs and two bridge plugs. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Closest residence is 2/5 of a mile to the southeast.

Possibility of H2S: None.

Size of rig/length of drilling time: Small drilling rig/short 4 to 7 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: _____

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None

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. The Montana Natural Heritage Program website lists one (1) species of concern, the Sprague's Pipit.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite

Other: _____

Comments: State of Montana leased 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. State of Montana "Trust Lands" minerals and surface. Trust Lands will do surface EA

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: State of Montana leased 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. State of Montana "Trust Lands" minerals and surface. Trust Lands will do surface EA.

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 4916' Nisku re-entry.

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/ John Gizicki

(title:) Compliance Specialist
Date: July 14th, 2015

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Water wells in Toole County
(subject discussed)
July 14th, 2015
(date)

US Fish and Wildlife, Region 6 website
(Name and Agency)
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES
MONTANA COUNTIES, Toole County
(subject discussed)
July 14th, 2015
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T35N R1E
(subject discussed)
July 14th, 2015
(date)

Montana Cadastral Website
(Name and Agency)
Surface Ownership and surface use Section 16 T35N R1E
(subject discussed)
July 14th, 2015
(date)

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