

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

Operator: Grassy Butte, LLC
Well Name/Number: Turner 44-27
Location: SE SE Section 27 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 to 3320' TD.

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 to 3320'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 Black Coulee about 4/5 of a mile to the southwest.

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: 350' 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, 300'X300' location size required.

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. About 1/2 of a mile of new access road will be built into this location. Drilling fluids will be allowed to evaporate in the earthen pits. Cutting will be buried in the earthen pits after the drying. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: None nearby. Closest residences are 1 mile to the northeast and 1.7 miles to the northwest.

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: Surface is private cultivated field. 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: Surface is private cultivated field. 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 3320' Nisku 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/ John Gizicki
(title:) Compliance Specialist
Date: June 30th, 2015

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)

Water wells in Toole County
(subject discussed)
June 30th, 2015
(date)

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

June 30th, 2015
(date)

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

June 30th, 2015
(date)

Montana Cadastral Website
(Name and Agency)
Surface Ownership and surface use Section 27 T35N R1E
(subject discussed)

June 30th, 2015
(date)

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