

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

Proposed Action: Approve Drilling Permit (Form 22)

Operator: Croft Petroleum Company.

Well Name/Number: Stevens Trust 15-6

Location: SW SW SE Section 6 T6N R15E

County: Wheatland, MT; **Field (or Wildcat)** W/C

Air Quality

(possible concerns)

Long drilling time no, 5 to 6 days drilling time

Unusually deep drilling (high horsepower rig) no, 3000' TD

Possible H2S gas production No

n/near Class I air quality area No

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 3000' TD.

Water Quality

(possible concerns)

Salt/oil based mud No, freshwater and freshwater mud system to 300'. Drill out of surface casing with freshwater mud to TD 3000'.

High water table No

Surface drainage leads to live water No, closest drainage is American Fork located about 1/2 of a mile to the southeast.

Water well contamination No, closest water wells are 1/5 of a mile to the northeast, 3/10 of a mile to the northeast, and a little over 1/2 a mile to the southwest. Depths of these wells range from 103'-125'.

Porous/permeable soils no, bentonite soils with some gravel.

Class I stream drainage no

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' surface casing cemented to surface adequate to protect freshwater zones. Also, fresh water mud systems to be used. Production casing will be set and cemented.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings no

High erosion potential no, small cut, up to 2.0' and small fill, up to 1.9', 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, 200'X200' location size required.

Damage to improvements slight, on cultivated 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 paved highway #191. About 192' of new access will be built into this location. Drill cuttings will be buried on site. Drilling fluids will be hauled off. Pit will be backfilled when dry. No special concerns

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences No residences within 1 mile of location of this location. The town of Harlowton is about 10 miles to the northeast from this location.

Possibility of H2S None

Size of rig/length of drilling time Small drilling rig/short 5 to 6 days drilling time

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: Working BOP should mitigate any issues. Distance is sufficient to not be a problem with noise. No concerns.

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified) n/a 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 Threatened or endangered species in Wheatland County are listed as the Black-footed Ferret and Canada Lynx. Candidate species are the Greater Sage-Grouse, Sprague's Pipit, and Whitebark Pine. The Montana Natural Heritage Program website lists two (2) species of concern. They are the Greater Sage-Grouse and the Northern Redbelly Dace.

Mitigation:

Avoidance (topographic tolerance/exception)

Other agency review (DFWP, federal agencies, DSL)

Screening/fencing of pits, drillsite
 Other: _____
Comments: 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: _____

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 3000' Lakota Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected from the drilling of this well. Some short term surface impacts will occur, but will be mitigated in 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): John Gizicki
(title:) Compliance Specialist
Date: September 15, 2015

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Water wells in Wheatland County
(subject discussed)

September 15, 2015

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA
COUNTIES, Wheatland County

(subject discussed)

September 15, 2015

(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, T6N R15E

(subject discussed)

September 15, 2015

(date)

Montana Cadastral Website

(Name and Agency)

Surface Ownership and surface use Section 6 T6N R15E

(subject discussed)

September 15, 2015

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____