Montana Board of Oil and Gas Conservation
Environmental Assessment

Proposed Action: Approve Drilling Permit (Form 22)
Operator: Fort Worth Operating Company LLC
Well Name/Number: Dupree 23-13
Location: Section 23 T29N R50E
County: Roosevelt, **MT; Field (or Wildcat)** Wildcat
Anticipated Spud Date: 09/15/2016

Air Quality

(possible concerns)
Long drilling time: No, 20 days drilling time.
Unusually deep drilling (high horsepower rig): No, triple derrick drilling rig to drill to 7,600' TD, Duperow Formation test.
Possible H2S gas production: Slight chance H2S gas from Mississippian Formations.
In/near Class I air quality area: Yes, Fort Peck Indian Reservation.
Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:
X 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 7,600' TD. If there aren't any gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

Water Quality

(possible concerns)
Salt/oil based mud: No, freshwater mud system for surface hole. Salt based mud to be used on main hole.
High water table: No high water table anticipated.
Surface drainage leads to live water: Potentially, closest drainage is an unnamed ephemeral drainage to Poplar River 0.16 miles to the east and an unnamed ephemeral drainage to Flea Creek 0.14 miles to the west. A stock pond exists 0.13 miles to the southwest.
Water well contamination: No water wells within a 1/2 mile radius. Surface hole in this well will be drilled to 1500' with freshwater based drilling fluid. Steel surface casing will be run and cemented to surface to protect ground water. (Rule 36.22.1001)
Porous/permeable soils: No, sandy silty bentonitic soils.
Class I stream drainage: No Class I stream drainages.

Mitigation:
__ Lined reserve pit
X Adequate surface casing
__ Berms/dykes, re-routed drainage
X Closed mud system
__ Off-site disposal of solids/liquids (in approved facility)
__ Other:

Comments: 1500' of surface casing cemented to surface adequate to protect freshwater zones (Rule 36.22.1001).

Soils/Vegetation/Land Use

(possible concerns)
Steam crossings: No, stream crossings anticipated.
High erosion potential: Possible, medium cut of 17.88' required and medium fill, up to 11.68', 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, 310'X300' location size required.
Damage to improvements: Slight, surface use is grass and sagebrush grazing land.
Conflict with existing land use/values: Slight

Mitigation
__ Avoid improvements (topographic tolerance)
__ Exception location requested
_X_ Stockpile topsoil
__ Stream Crossing Permit (other agency review)
_X_ Reclaim unused part of wellsite if productive
__ Special construction methods to enhance reclamation
__ Other _____

Comments: Location access is off Rd 2051. A new access road of 4/5 of a mile will be built off existing road. Drilling fluids will be trucked and disposed of in an approved commercial salt water disposal system. A solids pit will be built in a 1' depression lined with a 12 mil liner. Cuttings will be dried on location and farmed on location before the location is reclaimed.

Health Hazards/Noise

(possible concerns)
Proximity to public facilities/residences: Closest residence is 3/5 of a mile to the northeast.
Possibility of H2S: Slight chance H2S gas from Mississippian Formations.
Size of rig/length of drilling time: Triple drilling rig, 20 days drilling time.

Mitigation:
_X_ Proper BOP equipment
__ Topographic sound barriers
__ H2S contingency and/or evacuation plan
__ Special equipment/procedures requirements
__ Other:_____

Comments: Adequate surface casing and operational BOP (3,000 psi annular) should mitigate any problems. (BOP's 3,000 psig annular) Rule 36.22.1014. No concerns

Wildlife/recreation

(possible concerns)
Sage Grouse: No.
Proximity to sensitive wildlife areas (DFWP identified): No.
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: Only species identified as threatened or endangered is the Pallid Sturgeon, Piping Plover, Interior Least Tern, Whooping Crane, Red Knot, and Northern Long-eared Bat. NH tracker website lists two (2) species of concern: Chestnut-collared Longspur and the Bobolink..

Mitigation:
__ Avoidance (topographic tolerance/exception)
__Other agency review (DFWP, federal agencies, DNRC Trust Lands)
__ 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.. No concerns

Historical/Cultural/Paleontological

(possible concerns)
Proximity to known sites: None identified
Mitigation
__ avoidance (topographic tolerance, location exception)
other agency review (SHPO, DNRC Trust Lands L, federal agencies)
__ 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.. 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 Bowes Field, 7,600' Duperow Formation test.

Summary: Evaluation of Impacts and Cumulative effects

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

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: October 4, 2016

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Roosevelt County water wells.
(subject discussed)

October 4, 2016 (date)

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

October 4, 2016
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T29N R50E
(subject discussed)

October 4, 2016
(date)

Montana Cadastral Website
(Name and Agency)
Surface Ownership and surface use Section 23 T29N R50E
(subject discussed)

October 4, 2016 (date)

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