

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

Proposed Action: Approve Drilling Permit (Form 22)
Operator: Slawson Exploration Company, Inc.
Well Name/Number: Matador 3-13-24H
Location: NE NW Section 13 T24N R53E
County: Richland, MT; **Field (or Wildcat)** Wildcat

Air Quality

(possible concerns)

Long drilling time No, 25-35 days drilling time.
Unusually deep drilling (high horsepower rig) A triple derrick rig, estimated 900-1000 HP to drill a single lateral Bakken Formation Horizontal Lateral, 19,055' MD/9,601' TVD
Possible H2S gas production slight
In/near Class I air quality area No
Air quality permit for flaring/venting (if productive) Yes, if productive, DEQ air quality permit required.

Mitigation:

- Air quality permit (AQB review)
 - Gas plants/pipelines available for sour gas
 - Special equipment/procedures requirements
 - Other: _____
- Comments: _____
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Water Quality

(possible concerns)

Salt/oil based mud yes to long string salt based and oil based drilling fluids. Surface casing hole to be drilled with freshwater and freshwater mud. Horizontal lateral to be drilled with brine water.
High water table No
Surface drainage leads to live water No, an unnamed ephemeral tributary drainage to North Fork Redwater Creek is located about 0.16 miles to the south. North Fork East Redwater Creek is about 2.4 miles to the south of this location.
Water well contamination No, closest water wells are about 1/2 of a mile to the north, 7/10 of a mile to the northeast, 1 mile northwest, 3/5 of a mile to the southwest, two wells 1.3 miles to the southwest, 1 mile to the southwest, two wells 4/5 of a mile to the northeast, and 1.5 miles to the southeast. Depth of these wells are between 31' and 216'.
Porous/permeable soils No, gumbo 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: 1958' surface casing well below freshwater zones in adjacent water wells. Also, covering Fox Hills aquifer. Adequate surface casing and BOP equipment to prevent problems in and around freshwater slough.

Soils/Vegetation/Land Use

(possible concerns)

Steam crossings None

High erosion potential Location will require a large fill of 31.4'.

Loss of soil productivity None, location to be restored after drilling well, if nonproductive.

Unusually large wellsite No, large well site 480'X450'

Damage to improvements No, location to be restored after drilling, if nonproductive. If productive unused portion of drillsited will be reclaimed.

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: Surface hole cuttings will be disposed of on drillsite. Main hole and lateral hole, oil based and brine cuttings will be buried in the lined cuttings pit. When all fluids are removed from the pit, the liner and cuttings will be buried and backfilled on drillsite. Oil based mud will be recycled to the next location or recycled back to the mud company's storage tanks. The remaining water will be hauled to a SWD to be disposed of. Access will be over existing county road #318 and existing two track trails. About 2845' of new access road will be built off the county road into this location.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences residence 1.2 mile to the southwest of this location

Possibility of H2S Slight

Size of rig/length of drilling time Triple drilling rig 25 to 35 days drilling time.

Mitigation:

Proper BOP equipment

Topographic sound barriers

H2S contingency and/or evacuation plan

Special equipment/procedures requirements

Other: _____

Comments: Adequate surface casing cemented to surface with working BOP stack should mitigate any problems. Distance sufficient to mitigate noise problems.

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 Richland County are: Pallid Sturgeon, Piping Plover, Interior Least Tern, and Whooping Crane. Candidate species are the Greater Sage-Grouse and Sprague's Pipit.

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: Private surface

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

None

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): John Gizicki

(title:) Compliance Specialist

Date: November 12, 2014

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website
(Name and Agency)
Water wells in Richland County
(subject discussed)
November 12, 2014
(date)

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

November 12, 2014
(date)

Montana Natural Heritage Program Website (FWP)
(Name and Agency)
Heritage State Rank= S1, S2, S3, T24N R53E
(subject discussed)

November 12, 2014
(date)

Montana Cadastral Website
(Name and Agency)
Surface Ownership and surface use Section 13 T24N R53E
(subject discussed)

November 12, 2014
(date)

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