

CHECKLIST ENVIRONMENTAL ASSESMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: Swayze 4X

Operator: Somont Oil Company, Inc

Location: SE NE Section 34 T36N R2W

County: Toole **MT; Field (or Wildcat):** Kevin Sunburst

Proposed Project Date: 10/01/2017

I. DESCRIPTION OF ACTION

Somont will drill an oil well to 1945' TVD/MD in the Madison formation. The well will be completed with an open hole. Surface casing to be set at 45'.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED

Montana Bureau of Mines and Geology, GWIC website (Toole County Wells).

US Fish and Wildlife, Region 6 website

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

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T36N R2W

Montana Cadastral Website

Surface Ownership and surface use Section 34 T36N R2W

Montana Department of Natural Resources MEPA Submittal

2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be drilled.

Action Alternative: Somont Oil Company, Inc would have permission to drill the oil well.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

3. AIR QUALITY

Long drilling time: No, 2 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig to drill to 1945' TD.

Possible H₂S gas production: Slight amount of H₂S gas from Madison Formation.

In/near Class I air quality area: No Class I air quality area in area of review.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211. AQB review.

Comments: No special concerns – using small rig to drill to 1,945' TD. If there aren't any gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

4. WATER QUALITY

Salt/oil based mud: No, Freshwater mud system to be used.

High water table: No high water table anticipated.

Surface drainage leads to live water: No live water nearby only alkali dry lake flats.

Water well contamination: None.

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

Class I stream drainage: No Class I stream drainages in area of review.

Groundwater vulnerability area: 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)

Comments: Steel surface casing will be set at 45' and cemented to surface to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Grassland

Stream crossings: No, stream crossings anticipated.

High erosion potential: Small cut required of 2.2' and a small fill of 2.9' required.

Loss of soil productivity: After the well is plugged and abandoned the location will be restored to original contour and productivity.

Unusually large wellsite (Describe dimensions): No, 200' X 200' location size required.

Damage to improvements: Slight.

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

Access Road: Using existing trail.

Drilling fluids/solids: Fresh water air/mist/freshwater mud systems to be used. If drill mud is used, it will be reclaimed and stored in tanks until next use. Cuttings will be buried in mud pits.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Residences located 1/5 of a mile to the south.

Possibility of H2S: Slight amount of H2S gas from Madison Formation.

Size of rig/length of drilling time: 2 to 4 days drilling time.

Mitigation:

- Proper BOP equipment
- Topographic sound barriers
- H2S contingency and/or evacuation plan
- Special equipment/procedures requirements
- Other:

7. WILDLIFE/RECREATION

Sage Grouse: NA

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

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: None.

Conflict with game range/refuge management: None.

Threatened or endangered Species: Listed threatened or endangered species in Toole County is the Red Knot, Grizzly Bear. Candidate specie is the Whitebark Pine. NH Tracker website lists five (5) species of concern: Chestnut-collared Longspur, Peregrine Falcon, McCown's Longspur, Brewer's Sparrow, and Plains Spadefoot.

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.

IV. IMPACTS ON THE HUMAN POPULATION

8. HISTORICAL/CULTURAL/PALEONTOLOGICAL

Proximity to known sites:

Mitigation

- avoidance (topographic tolerance, location exception)
- other agency review (SHPO, DNRC Trust Lands, federal agencies)

Other:

9. SOCIAL/ECONOMIC

Substantial effect on tax base

- Create demand for new governmental services
- Population increase or relocation

Comments: No concerns.

IV. SUMMARY

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.

EA Checklist
Prepared By:

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Date: 08/15/2017