

CHECKLIST ENVIRONMENTAL ASSESMENT

Proposed Action: Approve Drilling Permit (Form 22)

Project/Well Name: NECBSU S-802

Operator: Synergy Offshore, LLC

Location: NE NE Section 2 T34N R6W

County: Glacier **MT; Field (or Wildcat):** Northeast Cut Bank Sand Unit

Proposed Project Date: 7/15/2017

I. DESCRIPTION OF ACTION

The plan is to re-enter and deepen the well from the current TD of 2,811' to 3,150'. The well will be deepened through a portion of the Madison formation for the purpose of water injection. The proposed 4 ½" casing will be run to the proposed TD of 3,150' and cemented to surface. A workover rig will be utilized. No new location. No reserve pit.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED

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

US Fish and Wildlife, Region 6 website

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

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T34N R6W

Montana Cadastral Website

Surface Ownership and surface use Section 2 T34N R6W

Montana Department of Natural Resources MEPA Submittal

2. ALTERNATIVES CONSIDERED

No Action Alternative: The well would not be re-entered drilled.

Action Alternative: Synergy Offshore, LLC would have permission to re-enter the well.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

3. AIR QUALITY

Long drilling time: No, 2 days

Unusually deep drilling (high horsepower rig): No, workover rig.

Possible H₂S gas production: Yes, H₂S gas production possible.

In/near Class I air quality area: Yes, Class I air quality area, Blackfoot Reservation.

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 re-enter and drill well to 3,150' 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: Freshwater and freshwater mud system.

High water table: None anticipated.

Surface drainage leads to live water: No, closest drainage is Rocky Coulee, about 1.2 miles to the west.

Water well contamination: No, closest water well is 3/5 of a mile to the southwest from this location. Depth of this industrial well is 3377'. Surface casing hole set at 295'.

Porous/permeable soils: No, sandy clay soils.

Class I stream drainage: No.

Groundwater vulnerability area: NA

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 run and cemented to surface to protect ground water. (Rule 36.22.1001).

5. SOILS/VEGETATION/LAND USE

Vegetation: Cultivated field.
Stream crossings: None will utilize existing road crossings.
High erosion potential: No.
Loss of soil productivity: No.

Unusually large wellsite (Describe dimensions): No, existing location being used.

Damage to improvements: Slight, surface use is a cultivated field.
Conflict with existing land use/values:

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: New access of 342' will be built off Yunck Road.

Drilling fluids/solids: Any fluids remaining after completion of deepening operations will be removed and disposed of at an approved disposal facility. Any solids will be treated on site.

6. HEALTH HAZARDS/NOISE

Proximity to public facilities/residences: Closest residences are about 9/10 of a mile to the southwest, and 1.1 miles to the northwest from this location. The town of Cutback, MT is located about 7 miles to the south from this location. Blackfeet reservation is located about 1 mile west of location.

Possibility of H₂S: Yes, H₂S gas production possible.

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

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):

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: None.

Conflict with game range/refuge management: None.

Threatened or endangered Species: Species identified as threatened or endanger in Glacier County are Grizzly Bear, Canada Lynx and Bull Trout. Potential species are the Meltwater Lednian Stonefly, Western Glacier Stonefly, and Wolverine. Candidate specie is the Whitebark Pine. NH tracker website

lists two-hundred and fourteen (214) species of concern. This may be a mistake, the next range to the east (36n-5W) listed three (3) species of concern. They are the Chestnut-collared Longspur, Black-necked Stilt, and McCown's Longspur.

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:	Name: John Gizicki	Date: 07/06/17
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