

## CHECKLIST ENVIRONMENTAL ASSESSMENT

**Proposed Action:** Approve Drilling Permit (Form 22)

**Project/Well Name:** Lida Kluzek #3

**Operator:** HC Resources, LLC

**Location:** NENW Section 20 T11N R28E

**County:** Musselshell MT; **Field (or Wildcat):** Howard Coulee

**Proposed Project Date:** 9/15/2023

### I. DESCRIPTION OF ACTION

HC Resources, LLC plans to drill a well for a Piper formation test 3,250' MD / TVD.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS, OR INDIVIDUALS CONTACTED

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

US Fish and Wildlife, Region 6 website

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

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T11N R28E

Montana Cadastral Website

Surface Ownership and surface use Section 20 T11N R28E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

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

Action Alternative: HC Resources, LLC would have permission to drill the well.

### **III. IMPACTS ON THE PHYSICAL ENVIRONMENT**

#### **3. AIR QUALITY**

Long drilling time: No, 3-5 days drilling time.

Unusually deep drilling (high horsepower rig): No, drilling rig for a 3,250' MD / TVD well. The objective formation is the Piper.

Possible H2S gas production: None anticipated.

In/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. AQB review.

Comments: No special concerns – using rig to drill well to 3,250' MD / TVD. If there are no gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

#### **4. WATER QUALITY**

Salt/oil based mud: Gel LSND Freshwater based mud will be used on surface casing and through 3,100'. KCl based mud will be used from 3,100' to TD

High water table: No high-water table anticipated at this location.

Surface drainage leads to live water: No, an unnamed ephemeral drainage is located about 660' to the south.

Water well contamination: No water wells within a ½ mile radius.

Porous/permeable soils: No, sandy clay.

Class I stream drainage: No.

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 to 350' and cemented to surface to protect ground water. (Rule 36.22.1001).

#### **5. SOILS/VEGETATION/LAND USE**

Vegetation: Grassland.

Stream crossings: None anticipated.

High erosion potential: No, a small cut of 6.5' and a small fill of 4.0' is required.

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

Unusually large wellsite (Describe dimensions): No, a large location will be used, 200' X 240'.

Damage to improvements: Slight, surface use is grassland.

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: Access will be off Fourmile Rd. A new access of 1,100' will be built into location.

Drilling fluids/solids: The mud tank and reserve pit materials will be allowed to evaporate and then will be buried on site.

## **6. HEALTH HAZARDS/NOISE**

Proximity to public facilities/residences: No residences within ½ mile radius.

Possibility of H2S: None anticipated.

In/near Class I air quality area: No.

Size of rig/length of drilling time: 3-5 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: In core area. the Sage Grouse Habitat Conservation Program letter received 9/05/23.

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: Species identified as threatened or endangered in Musselshell County are the Grizzly Bear, Yellow-billed Cuckoo, Monarch Butterfly, and the Whitebark Pine. MTFWP

Natural Heritage Tracker website lists fourteen (14) species of concern, the Black-tailed Prairie Dog, Brewer's Sparrow, Golden Eagle, Burrowing Owl, Chestnut-collared Longspur, Ferruginous Hawk, Great Blue Heron, Loggerhead Shrike, Sage Thrasher, Thick-billed Longspur, Four-wing Saltbush, Suckley's Saltbush, and the Greater Sage Grouse. Special status specie is the Bald Eagle.

Mitigation:  
 Avoidance (topographic tolerance/exception)  
 Other agency review (DFWP, federal agencies, DNRC Trust Lands, **Sage Grouse Habitat Conservation Program**)  
 Screening/fencing of pits, drillsite  
 Other:

Comments: Private 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: None.

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 Title: Chief Field Inspector	Date: 09/08/23
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