

## ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Kraken Asgard Well Pad and Access Road
<b>Proposed Implementation Date:</b>	Fall 2025
<b>Proponent:</b>	Kraken Resources, LLC
<b>Location:</b>	28N 56E Section 35
<b>County:</b>	Roosevelt

### I. TYPE AND PURPOSE OF ACTION

Kraken Resources, LLC henceforth referred to as the proponent, has applied for a land use license to construct a segment of an access road and a well pad on State of Montana trust lands surface in Roosevelt County, MT. The pad will be utilized for the drilling and production of horizontal oil wells in the Bakken Formation. The proponent has applied for a Land-Use-License which has a maximum term of 10-years. However, the license may be renewed by the licensee. This analysis will evaluate the impacts of the pad and road from construction to reclamation and will apply to any subsequent renewals of the Land Use License. This analysis will not evaluate the impacts of drilling the wells that are planned from this pad. The Montana Board of Oil and Gas would evaluate that action in a separate analysis after an application to drill is filed for the wells. A map of the pad and access road is included in this document as Appendix A.

### II. PROJECT DEVELOPMENT

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

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

The proponent contacted the Montana Department of Natural Resources (the Department) in July of 2025 regarding the potential of constructing an access road and pad on State of Montana trust lands surface. The pad would facilitate the production of oil and gas from Bakken formation wells. Some of the wells that will be drilled and completed from this pad are outside of the related spacing unit for said wells. Therefore, a surface use agreement in the form of a land use license must be applied for by the proponent and approved by the Department prior to construction. The Department's Minerals Management Bureau and Glasgow Unit Office are both aware of the application. The Mineral's Management Bureau's Petroleum Engineer has visited the proposed site with the Department's surface lessee to inspect the area that would be disturbed and talk about potential mitigations. The surface lessee was given the opportunity to make a comment related to this application and analysis. In a phone call with the Department's Petroleum Engineer, on August 4<sup>th</sup>, 2025, the surface lessee expressed they had no outstanding concerns or comments related to the application and that they had all their questions answered and concerns addressed during the site visit. No other scoping will occur for this analysis.

## 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Prior to drilling Bakken formation wells, the proponent is required to obtain a temporary spacing order and (potentially, dependent on the number of wells planned) an increased density order from the Montana Board of Oil and Gas (BOGC). The applicable board orders for the wells to be drilled on this pad were granted at the February 20<sup>th</sup>, 2025 hearing. The applicable order numbers are 37-2025, 38-2025 and 25-2025, 26-2025. Prior to hearing these matters the applicant is required to notify all locatable mineral interest owners within the respective spacing unit.

After temporary spacing unit and increased density orders are authorized, the applicant must submit, for each well, an application for permit to drill (APD) to the BOGC for approval. The BOGC staff reviews each application and approves or denies the application through an environmental review in accordance with the Montana Environmental Policy Act.

The proponent has not applied for a permit to drill for any of the wells that will be drilled from this pad at the time of the writing of this analysis.

## 3. ALTERNATIVES CONSIDERED:

No Action Alternative: The Land Use License would be denied, and the proponent would not be allowed to construct the proposed surface location and access road on State of Montana trust lands.

Action Alternative: The Land Use License would be approved, and the proponent would be allowed to construct an access road, and a well pad on State of Montana trust lands.

## SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT

The impacts analysis identifies and evaluates direct, secondary, and cumulative impacts.

- Direct impacts: impacts that occur at the same time and place as the action that causes the impact
- Secondary impacts: further impacts to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action.
- Cumulative impacts: collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact study evaluation, or permit processing procedures.

Where impacts are expected to occur, the impacts analysis estimates the duration and severity of the impact. The duration of an impact is quantified as follows:

- **Short-term:** impacts that would not last longer than the proposed operation of the site, including reclamation of the site.
- **Long-term:** impacts that would remain or occur following reclamation of the proposed site.

The severity of an impact is measured using the following:

- **No impact:** There would be no change from current conditions.
- **Negligible:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.

- **Minor:** The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** The effect would alter the resource

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

##### Current conditions

The site does not contain any unique or unusual geological features.

**Soils:** According to the USDA's Web Soil Survey, the project area consists of two soil types.

1. Zahill-Cabba-Cambert complex
2. Zahill-Vida Loams

The primary soil factors considered for the construction of a road, and pad, are soil erodibility and soil restoration potential. Soil erodibility is a factor that determines the soils risk to erode from stresses such as weather and machinery travel. Soil restoration is the potential for restoration to the original state and is a metric of how well the soil will react to reclamation.

- *K factor* – These soils exhibit a moderate rating for soil-to-sheet and rill erosion from water.
- *Soil compactibility risk* – These soils exhibit a medium compactibility risk.
- *Wind erodibility group* – These soils exhibit a low to moderate risk to wind erosion.
- *Soil restoration potential* – These soils exhibit a moderate to high potential for soil restoration.
- *Soil rutting hazard* – These soils exhibit severe rutting hazard.
- *Suitability for Roads* – These soils have a rating from poorly suited to moderately suited for using the natural surface of the soil for roads.

##### Alternatives

###### No Action Alternative

- **Impacts:** The no action alternative is not expected to have any direct, secondary, or cumulative impacts to geology and soil quality, stability, and moisture.

## Action Alternative

- Direct Impacts: All soil, overburden, and substrate moved from the construction of the proposed pad and access road would be stockpiled and remain onsite for reclamation. The total pad area is expected to be approximately 10.4 acres. The access road length on Montana State Trust Lands is expected to be approximately 4500 feet long and 28 feet wide which is approximately 2.9 acres. The total disturbance would therefore be approximately 13.3 acres. Road and pad disturbances are expected to be reclaimed at the end of the useful life of the wells, per the requirements of the BOGC and Montana State Trust Lands. In-Situ soils and geology are not suitable for truck travel, especially under wet conditions. It shall be required that the proponent would source aggregate from outside the project area to place on the road and pad. The proposed activities would not inhibit the success of reclamation. Once drilling activities have finished unused areas of the well pad would be reclaimed. Based upon available information, minor, short-term impacts to geology and soil quality, stability and moisture would be expected.
- Secondary Impacts: No secondary impacts to geology and soil quality, stability and moisture are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to appreciably change cumulative impacts to geology or soil in the area.
- Duration: The duration of impacts is expected to be short-term.

## Mitigations

The potential selection of action alternative would include the following stipulation land use license.

- All topsoil, overburden, and substrate displaced by construction activities, must remain in the immediate vicinity of the pad or road and saved for reclamation. The removal of any material from trust lands is not authorized under this license. Berms shall be seeded with a prescribed seed mix from the Glasgow Unit Office.
- The licensee shall construct the pad and road surface with scoria or other comparable material on top of the existing soils to avoid rutting.
- Any pad area that is utilized for the drilling of the wells that is unnecessary to produce the wells shall be diligently reclaimed by the licensee.
- The pad area shall be fenced by the licensee to keep livestock from entering the pad area.
- Topsoil must be stored separately from all other forms of substrate.

### **5. WATER QUALITY, QUANTITY AND DISTRIBUTION:**

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

### **Current Conditions**

Section 35 contains several ephemeral drainages, none of which carry water year-round. There are no named bodies of water within section 35. The pad location is approximately one mile north of the Missouri River

The nearest ground water well to the proposed project area is approximately 0.3 miles to the northeast. This well has a static water level of 140 feet.

## **Alternatives**

### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary, or cumulative impacts to water quality, quantity or distribution in the project area.

### Action Alternative

- Direct Impacts: The proposed pad design would create a mostly level surface upon which the wellbores would be drilled from and the production equipment would be placed upon. The pad is proposed to be at an elevation of 2195 feet above sea level. The pad is designed to be built with a ditch that outlines the perimeter. The purpose of this ditch is to retain stormwater from the pad. The stormwater that falls upon the pad would be expected to be contained within the designated ditch and would either evaporate or infiltrate. Stormwater that falls upon the access road would be expected to runoff either side of the road and either infiltrate or continue to runoff following the surrounding natural contours. The impacts to stormwater runoff would be expected to be minor and last until final reclamation. No other surface water impacts are expected.

Groundwater is not expected to be impacted from the construction of the pad or the access road.

- Secondary Impacts: No secondary impacts to water quality, quantity and distribution are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to have significant changes to cumulative impacts of water quality, quantity, and distribution in the area.
- Duration: Impacts are expected to be short-term.

## **Mitigations**

The potential selection of action alternative would include the following stipulations in the land use license:

- If gasoline, oil or other forms of hazardous liquids are stored on site, they must be contained within primary and secondary containment, in which the secondary containment is able to contain the entire volume of the hazardous liquid. For example, oil tanks must have containment berms surrounding the facilities that are able to accommodate all oil volume from the tanks. This is consistent with Board of Oil and Gas Rule.
- All equipment utilized in construction and drilling activities must be regularly maintained and inspected to ensure it is not leaking fluids, spreading noxious weeds, creating an undue fire hazard or threatening the life or property of others.

### **6. AIR QUALITY:**

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

## **Current Conditions**

Currently the significant emission sources in the project area are from gas flaring operations, vehicles travelling on gravel roads, and farming equipment cultivating fields.

## **Alternatives**

#### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary, or cumulative impacts to air quality in the project area.

#### Action Alternative

- Direct Impacts: An increase in airborne pollutants and particulates may occur during the construction of an access road and well pad. The equipment that will be utilized to construct the well pad utilizes internal combustion engines which emit carbon dioxide, particulate matter, nitrogen oxides, and carbon monoxide. The EPA combines all these emission forms into a total, singular, standardized emission called carbon dioxide equivalent. The amount of carbon dioxide equivalent emitted from the equipment utilized to construct the well pad and access road is unknown. However, it is expected to be negligible when compared to the daily, monthly or yearly emissions across the state, country or world. Short-term, minor impacts to air quality are expected in the direct vicinity of the pad area from dust particulate dispersion. The proponent is responsible for maintaining any necessary air quality permits required through the State of Montana or United States. Overall, impacts to air quality in the area are expected to be short-term and minor. This analysis does not evaluate the impacts to air quality for drilling, or the production of oil and natural gas produced from the wells that would be drilled from this pad. Those impacts would be evaluated by the Montana Board of Oil and Gas in their analysis of an application to drill permit.
- Secondary Impacts: Fugitive dust and emissions may travel offsite to the surrounding area. Any particulate or pollutant would dissipate over distance. Secondary impacts are expected to be short-term and negligible.
- Cumulative Impacts: The greater Bakken area of eastern Montana and western North Dakota contains many oil and gas wells. Cumulative oil field activities have some impacts to air quality in the area. Which are created mostly by gas flaring and heavy-equipment, or truck utilization. The action alternative is expected to add to the total amount of emissions and dust that are currently in the greater Bakken oilfield area. However, the total amount of emissions and dust that would be produced from this project are not expected to appreciably change cumulative impacts to air quality in the area.
- Duration: Impacts from dust-generating activities are expected to be short-term. Impacts from equipment exhaust are expected to be long-term, but negligible.

#### **7. VEGETATION COVER, QUANTITY AND QUALITY:**

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

#### **Current Conditions**

According to the Montana Natural Heritage program's land cover data, the project area is comprised mostly of lowland/prairie grassland and agriculture. This is consistent with what was observed in the site visit. An inventory of the Montana Natural Heritage Program's Species of Concern database was conducted for the project area. The search yielded no vegetation species of concern.

#### **Alternatives**

##### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary, or cumulative impacts to vegetation cover, quantity, or quality.

## Action Alternative

- Direct Impacts: Vegetation communities would be impacted by the proposed action alternative. The use of excavation equipment would strip the plant communities along the access road route and the well pad. The vegetation would be stripped and stockpiled onsite along with the other dirt and substrate from construction activities. The vegetation in the stripped areas would be non-present until the site is reclaimed and revegetated. It is expected that approximately 13.3 acres of the 640 acres leased by the surface lessee would be stripped of vegetation. The proponent would have to negotiate a one-time surface damage settlement with the surface lessee in accordance with administrative rules of Montana.
- Secondary Impacts: With the removal of vegetative communities, disturbances may result in the propagation of noxious and invasive weeds. Per the stipulations of the permit the proponent would be responsible for the management and mitigation of invasive weeds within the project area.
- Cumulative Impacts: The selection of the action alternative would not be expected to appreciably change cumulative impacts to vegetation.
- Duration: Impacts are expected to be short term.

## Mitigations

The potential selection of action alternative would include the following stipulation in the land use license:

- The licensee shall be responsible for controlling any noxious weeds or spread from the construction and use of the pad.
- The licensee shall negotiate a surface damages settlement with the surface lessee in accordance with ARM 36.25.138

### **8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

## Current Conditions

The project area is open grassland consisting of prairie grasses providing habitat and forage for a variety of wildlife species including deer and antelope throughout the year. Species present within the project vicinity may also include raptors and other birds, various rodents, rabbits, foxes, coyotes, and reptiles.

## Alternatives

### No Action Alternative

- The no action alternative is not expected to have direct, secondary or cumulative impacts to terrestrial, avian or aquatic life and habitats.

### Action Alternative

- Direct Impacts: The selection of the action alternative would create a disruption mostly to terrestrial wildlife throughout the duration of the wells' lives. The project would eliminate

approximately 13.3 acres of habitat and forage during the operational life of the well. Upon cessation of production and reclamation of the well pad and access road, wildlife would be expected to utilize the project area in similar ways to current utilization. Similar habitat and forage are adjacent to the project area and could sustain the wildlife displaced during project activities. Grazing by domestic animals would continue outside of the operations. Short-term, minor impacts are expected to terrestrial wildlife habitat from the action alternative. Impacts to avian and aquatic life and habitat are expected to be short-term and negligible.

- Secondary Impacts: No secondary impacts to terrestrial, avian, and aquatic life are expected.
- Cumulative Impacts: The selection of the action alternative would add an additional well pad disturbance to the greater Bakken Area. The loss of grazing acres is expected to be negligible, and wildlife in the area have become conditioned to the operations associated with oil and gas production. Changes to cumulative impacts would be minor.
- Duration: Impacts would be expected to be short-term and last until reclamation occurs.

**9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

### **Current Conditions**

A search was conducted using the Montana Natural Heritage Program (MT NHP) database to identify species of concern in the area of the proposed activities. Below is the list of identified species of concern occurrences within the project area. A species occurrence in the MT Natural Heritage Program mapper is created under the following criteria: “Animal SO’s are generally: (1) buffers of terrestrial point observations based on documented species’ home range sizes; (2) buffers of stream segments to encompass occupied streams and immediate adjacent riparian habitats; (3) polygonal features encompassing known or likely breeding populations (e.g., wetlands for some amphibians or a forested portion of a mountain range for some wide ranging carnivores); or (4) combinations of the above.

- Whooping Crane - The federally endangered Whooping Crane occasionally migrate across the eastern portion of Montana, although their main migratory corridor is found to the east in the Dakotas. While the species was close to extinction during the early and mid-1900s, intensive management has helped to begin the recovery process. The species is still very rare across its range and at risk of extinction. The Whooping Crane utilizes marshlands, wetlands and wet prairie habitat with safe roosting sites and nearby forage opportunities. There are no management activities in Montana specific to Whooping Crane according to the MT NHP.
- Black Billed Cuckoo- Species is a rare breeding migrant found within deciduous riparian forest across central and eastern Montana. Its current population trend is unknown, and it faces high threats from habitat loss due to conversion of forest to agriculture and climate change. Black-billed Cuckoos are birds of wooded draws, forest edges, thickets, and shelterbelts. In Montana they are found most often in riparian cottonwoods, green ashes, and American elms with a shrubby understory of willows, box elders, and alders; they also occur in foothill deciduous woodlands (Skaar 1969; Walcheck 1969, 1970; Kroodsma 1973; Jones and Hansen 2009).



## **Alternatives**

### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary or cumulative impacts to unique, endangered, fragile or limited environmental resources.

### Action Alternative

- Direct Impacts: There are no management considerations for Whooping Crane listed on the Montana Natural Heritage Program's website. The project area consists of mostly dry land farm ground and native range. However, the project area closer to the most northern part of the access road on section 35 may retain some water in the spring and early summer months of April, May and June. Overall, the project area is not well suited for Whooping Crane habitat and other areas nearby would be of higher preference for the species. Therefore, the impacts to Whooping Crane from the selection of the action alternative are expected to be negligible.

The project area is poorly suited for the Black-billed Cuckoo as it does not contain wooded areas. Because of this, the impacts to Black-billed Cuckoo from the selection of the action alternative is expected to be negligible.

- Secondary Impacts: No secondary impacts to unique, endangered, fragile, or limited environmental resources are expected.
- Cumulative Impacts: The selection of the action alternative is not expected to appreciably change the cumulative impacts to the species of concern listed.
- Duration: impacts are expected to be short term and last until reclamation occurs.

#### **10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

## **Current Conditions**

During the site visit, DNRC staff along with the surface lessee investigated the project area for archeological and paleontological resources, none were found within the project area.

## **Alternatives**

### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary or cumulative impacts to historical and archeological sites.

### Action Alternative

- Direct Impacts: In addition to the field inspection that found no archeological or paleontological resources within the project area, a Class I (literature review) level review was also conducted by the DNRC staff archaeologist for the area of potential effect (APE). This

entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. Neither the field inspection nor the Class I inventory identified cultural or paleontological resources in the APE. Proposed developments will result in *No Effect to Antiquities*. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

- Secondary Impacts: No secondary impacts to historical and archaeological sites are expected.
- Cumulative impacts: The selection of the action alternative would not be expected to change cumulative impacts to historical and archaeological sites in the area.
- Duration: No impacts are anticipated; therefore, duration is not applicable.

## **Mitigations**

The potential selection of action alternative would include the following stipulation in the land use license:

- If previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

### **11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

## **Current Conditions**

The proposed pad is approximately 2 miles south of Montana Highway 2 and approximately 1.2 miles from the nearest residence. The pad is proposed upon a finger ridge that is greater in elevation than most of its surroundings.

## **Alternatives**

### **No Action Alternative**

- Impacts: The no action alternative would not be expected to have direct, secondary, or cumulative impacts to aesthetics in the project area.

### **Action Alternative**

- Direct Impacts: An increase in noise from trucks and heavy equipment may be heard adjacent to the project area during the construction of the pad and the access road. The heavy equipment utilized to construct the pad would likely be visible from the Highway and adjacent ranch home. Construction activities would not be expected to last more than 1-2 months. Once the road and the pad are constructed, they may be visible from parts of Highway 2 or the adjacent home. A stipulation will be added to limit pad construction activities to daylight hours only. With the daytime work only mitigation, impacts to aesthetics would be expected to be minor.
- Secondary Impacts: As mentioned in the direct impacts portion of the resource analysis, there will be impacts to offsite areas. This may be considered a secondary impact rather than a direct impact.

- Cumulative Impacts: The area already experiences a considerable amount of oil field traffic and work. The addition of a single well pad to the area would not be expected to appreciably change the cumulative impact to aesthetics in the area.
- Duration: Impacts would be expected to be short-term.

## **Mitigations**

The potential selection of action alternative would include the following stipulation in the land use license:

- Construction of the road and well pad is permitted during daylight hours only.

## **12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

## **Current Conditions**

The current conditions of land and water are described previously in this document. Energy is abundant in the project area in the form of electricity and fuel.

## **Alternatives**

### **No Action Alternative**

- The no action alternative would not be expected to have any impacts to the demands on environmental resources of land, water, air, or energy.

### **Action Alternative**

- Direct Impacts: The project would utilize approximately 13.3 acres of agricultural and grazing lands, along with fuel utilized to operate machinery. Both of these resources, while limited, are abundant in the area. The impacts to both of these resources from the selection of the action alternative are expected to be negligible.
- Secondary Impacts: No secondary impacts to environmental resources of land, water, air, or energy are expected.
- Cumulative Impacts: The oil and gas industry in the greater Bakken area utilizes a considerable amount of land for road, pad, pipeline and other infrastructure. The industry also utilizes a considerable amount of fuel to construct infrastructure, drill wells, and transport goods. However, the Bakken produces far more energy than it consumes through its production of oil and natural gas. The additional impacts created by the selection of the action alternative would not be expected to appreciably change the overall impacts that oil and gas activities have upon limited resources in the area.
- Duration: The impacts to limited environmental resources would be expected to last for the duration of wells' lives, until the project area is reclaimed.

**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

**Current Conditions**

The site is currently grassland that is being managed under a State of Montana as an Ag & Grazing lease. The proposed action would temporarily eliminate some of the agriculture and grazing area utilized by the lessee.

The proponent must send an application for permit to drill to the Montana Board of Oil and Gas which will either accept or deny their application. This application and review examine the downhole plans of the wells associated with this analysis' pad and road.

**Alternatives****No Action Alternative**

- The no action alternative is not expected to have direct, secondary or cumulative impacts to other studies, plans or projects on the tract.

**Action Alternative:**

- Direct Impacts: The Department's surface lessee would realize a negligible net loss in available grazing and agricultural acreage held under their lease. The proponent must negotiate a surface damage agreement and coordinate a one-time fee paid to the surface lessee in accordance with Department's Administrative Rules. In subsequent years, the Department will subtract non-usable acreage from the surface lease. Upon reclamation the impacted area would return to native rangeland or hay ground depending upon existing uses. The project would have a temporary, minor impact to the surface lease agreement that would reduce the land's animal carrying capacity.
- Secondary Impacts: No secondary impacts are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to change cumulative impacts to other environmental documents or projects in the area.
- Duration: The impacts are expected to be short-term.

**IV. IMPACTS ON THE HUMAN POPULATION**

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

**Current Conditions**

The current conditions of the site pose no risk to human health or safety.

**Alternatives**

## No Action Alternative

- The no action alternative is not expected to have direct, secondary, or cumulative impacts to human health and safety.

## Action Alternative

- Direct Impacts: The proposed action is not expected to have any impacts to public human health or safety. The occupational health and safety risks associated with the construction of a well pad and access road will be present during construction activities.
- Secondary Impacts: No secondary impacts to human health and safety are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to change cumulative impacts to human health and safety.
- Duration: Impacts are expected to be short term.

### **15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

## **Current Conditions**

The site is currently utilized as grazing ground. There are no industrial or commercial activities currently on the tract.

## **Alternatives**

### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary or cumulative impacts on industrial, commercial and agriculture activities and production.

### Action Alternative

- Direct Impacts: This proposed action could be considered both commercial and industrial in nature. It is an essential component to the commercial and industrial activity of drilling the proposed Bakken wells. Without the access road and the well pad, the proponent would not be able to effectively drill to the targeted formation and complete the well(s) in a commercial and economic fashion. The selection of the action alternative would be expected to have a major positive short-term impact on the commercial and industrial activities of drilling Bakken formation oil and gas wells. The impacts to agricultural activities and production have been previously outlined within this analysis.
- Secondary Impacts: No secondary impacts to industrial, commercial, and agricultural activities are expected.
- Cumulative Impacts: The Bakken area consists of many oil and gas wells that contribute to the local economies in an industrial and commercial nature. A combination of projects such as these have created many jobs and opportunities for other industrial growth in the area. Many service companies and industries have sustained success in the area, due to the Bakken field.
- Duration: Any impacts would be expected to last the duration of the wells' lives, until final

reclamation.

#### **16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

##### **Current Conditions**

The closest town and employment center is Culbertson, MT.

##### **Alternatives**

###### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary or cumulative impacts the quantity and distribution of employment.

###### Action Alternative

- Direct Impacts: No impacts are expected to the quantity and distribution of employment.
- Secondary Impacts: No secondary impacts to quantity and distribution of employment are expected.
- Cumulative Impacts: The oil and gas industry provides well-paying jobs to the local communities near the project area. Projects such as this sustain a workforce that would otherwise have to leave the area or find other work.
- Duration: No impacts are expected, therefore duration is not applicable.

#### **17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

##### **Current Conditions**

Trust land is exempt from property tax. Operators and lessees conducting business on Trust Lands must pay business taxes.

##### **Alternatives**

###### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary, or cumulative impacts to the local and state tax base or tax revenues.

###### Action Alternative

- Direct Impacts: minimal income taxes would be generated from the creation of a well pad and access road.
- Secondary Impacts: No secondary impacts to local and state tax base or revenues.
- Cumulative Impacts: Oil and gas tax is a significant component of the local tax base. Projects such as this in conjunction with one another provide a significant financial contribution to local governments.
- Duration: It is difficult to estimate the impact that production tax will have on tax-funded programs. The tax created by production from the oil and gas wells planned to be drilled from this pad is expected to be short-term. However, the impacts of the programs in which the tax funds

may have lasting long-term positive impacts for Montana and its residents.

#### **18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.*

#### **Current Conditions**

The nearest county road to the site is Road 1018, which runs south off Highway 2 approximately four miles east of Culbertson, MT. The nearest hospital is in Sidney, MT. Fire protection and police enforcement would come from Roosevelt County and more specifically, Culbertson.

#### **Alternatives**

##### No Action Alternative

- Impacts: The no action alternative would not be expected to have any direct, secondary or cumulative impacts to demand for government services.

##### Action Alternative

- Direct Impacts: The selection of the action alternative would increase traffic on County road 1018, and likely Highway 2. The impacts of increased traffic specifically from the construction of the pad and road are likely to be moderate and short-term. Fire protection for any incidents would likely come from Culbertson's Roosevelt County VFD, which is approximately 4-5 miles from the well pad. Overall, the impacts to local government services from the construction of the well pad and access road are expected to be minor and short-term.
- Secondary Impacts: No secondary impacts to demand for government service would be expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to change cumulative impacts to the demand for government services.
- Duration: The impacts to demand for government services are expected to be short-term.

#### **19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

#### **Current Conditions**

There are no known environmental plans or goals for this tract or in the project vicinity.

#### **Alternatives**

##### No Action Alternative

- Impacts: The no action alternative is not expected to have direct, secondary, or cumulative impacts on locally adopted plans or goals.

##### Action Alternative

- Direct Impacts: No direct impacts are expected; there are no known zoning or management plans.
- Secondary Impacts: No secondary impacts are expected to any locally adopted environmental plans.
- Cumulative Impacts: The selection of the action alternative would not be expected to change cumulative impacts to any adopted environmental plans.

- Duration: There are no expected impacts, therefore impacts are not applicable.

## **20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

### **Current Conditions**

This site is not designated as wilderness, nor does it provide access to wilderness. This tract is publicly accessible from the Missouri River through adjacent State Trust Land and BLM land.

### **Alternatives**

#### No Action Alternative

- Impacts: The no action alternative would not be expected to have any direct, secondary, or cumulative impacts to access and quality of recreational and wilderness activities.

#### Action Alternative

- Direct Impacts: The tract upon which the project area is proposed does not have wilderness area, nor does it provide access to wilderness areas. The tract is publicly accessible via the Missouri River, through adjacent State Trust Land and BLM lands. The tract likely experiences very little recreational activity, due to the logistical challenges of accessing it. However, those seeking to hike, hunt or otherwise recreate upon the tract will be impacted by the project activities. The well pad and road would create a disturbance that is visible from most portions of the tract. This may negatively impact the quality of recreation sought by the individual. Depending upon the type of recreation sought, the impacts to recreation may be either moderate or minor. Each would be expected to be short-term.
- Secondary Impacts: No secondary impacts to quality of recreational and wilderness activities are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to change cumulative impacts to the quality of recreational and wilderness activities.
- Duration: The impacts to recreation from the action alternative would last until final reclamation.

## **21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

### **Current conditions**

The closest population center to the project is Culbertson, MT

### **Alternatives**

#### No Action Alternative

- Impacts: The no action alternative is not expected to have any direct, secondary or cumulative impacts to the density and distribution of population and housing.



## Action Alternative

- Direct Impacts: No direct impacts to the density and distribution of population and housing are expected.
- Secondary Impacts: No secondary impacts are expected to density and distribution of population and housing.
- Cumulative Impacts: The Bakken oil boom has created significant changes in population and housing in the area over the past twenty years. Population has stayed steady or declined over the past decade. Projects such as this are part of a larger industry that created many well-paying jobs and helped to grow the economy of the area. This project itself would not have appreciable changes to the cumulative impact on housing or the population.
- Duration: No impacts are expected; therefore, duration is not applicable.

## **22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

### **Current conditions**

The Fort Peck Tribe of Montana is located approximately 10 miles west of the project area.

### **Alternatives**

#### No Action Alternative

- Impacts: The no action alternative is not expected to have any direct, secondary, or cumulative impacts to the density and distribution of population and housing.

#### Action Alternative

- Direct Impacts: No impacts are expected to native or traditional lifestyles.
- Secondary Impacts: No secondary impacts to native or traditional lifestyles are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to have significant cumulative impacts to native or traditional lifestyles in the area.
- Duration: No impacts are expected, therefore duration is not applicable.

## **23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

### **Current Conditions**

There are no known unique qualities of the area. Much like the surrounding landscape, the site is comprised of native range grasses and the topography and geology of the Missouri River breaks.

### **Alternatives**

#### No Action Alternative

- Impacts: The no action alternative is not expected to have any direct, secondary or cumulative impacts to the cultural uniqueness and diversity.

#### Action Alternative

- Direct Impacts: No direct impacts are expected to the unique qualities of the area.
- Secondary Impacts: No secondary impacts to cultural uniqueness and diversity are expected.
- Cumulative Impacts: The selection of the action alternative would not be expected to have cumulative impacts to the cultural uniqueness and diversity of the area.
- Duration: No impacts are expected, therefore duration is not applicable.

**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

**No Action Alternative**

- The no action alternative would not have any direct, secondary or cumulative impacts to the trust. It would not generate any economic value.

**Action Alternative**

- Direct Impact: The selection of the action alternative would generate \$100,200 over a ten-year term for the trust beneficiary. After the ten-year term, the proponent may renew the license for a subsequent ten-year term at a rate negotiated in the future.
- Secondary Impact: All the wells drilled from this pad will have trust lands minerals included as a royalty interest. The production and corresponding royalties from these wells are expected to be significant.
- Cumulative Impacts: Projects such as this generate money for the beneficiaries of Montana School Trust Lands. That money is appropriated through the legislature bi-annually.
- Duration: The land use license is valid for ten years, but revenue generated from the action alternative is expected to last for the duration of the wells' life.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Zack Winfield	<b>Date:</b> 11/20/24
	<b>Title:</b> Petroleum Engineer	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

After a thorough review of the Land Use License Environmental Assessment, as well as all applicable rules, plans and laws, I have decided to select the action alternative. The Department will issue the proponent a land use license for the construction of an access road, and well pad on State of Montana Trust Lands. The selection of the action alternative fulfills the trust mandate without encumbering the future income generating capacity of the land.

## 26. SIGNIFICANCE OF POTENTIAL IMPACTS:

The significance of impacts to the resources as explained in this document, are moderate, minor, negligible or none, and are all short-term. To further mitigate any potential impacts, the land use license will contain the following stipulations:

- All topsoil, overburden, and substrate displaced by construction activities, must remain in the immediate vicinity of the pad or road and saved for reclamation. The removal of any material from trust lands is not authorized under this license. Berms shall be seeded with a prescribed seed mix from the Glasgow Unit Office.
- The licensee shall construct the pad and road surface with scoria or other comparable material on top of the existing soils in order to avoid rutting.
- Any pad area that is utilized for the drilling of the wells that is unnecessary to produce the wells shall be diligently reclaimed by the licensee.
- The pad area shall be fenced by the licensee to keep livestock from entering the pad area.
- Topsoil must be stored separately from all other forms of substrate.
- If gasoline, oil or other forms of hazardous liquids are stored on site, they must be contained within primary and secondary containment, in which the secondary containment is able to contain the entire volume of the hazardous liquid. For example, oil tanks must have containment berms surrounding the facilities that are able to accommodate all oil volume from the tanks. This is consistent with Board of Oil and Gas Rule.
- All equipment utilized in construction and drilling activities must be regularly maintained and inspected to ensure it is not leaking fluids, spreading noxious weeds, creating an undue fire hazard or threatening the life or property of others.
- The licensee shall be responsible for controlling any noxious weeds or spread from the construction and use of the pad.
- The licensee shall negotiate a surface damages settlement with the surface lessee in accordance with ARM 36.25.138
- If previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.
- Construction of the road and well pad is permitted during daylight hours only.

## 27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐


EIS

☐

More Detailed EA

☒

No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name: Luke Gunderson</b> <b>Title: Acting Glasgow Unit Manager,</b> <b>FTLD</b>
<b>Signature:</b> 	<b>Date:</b> 9-2-35

Appendix A: Asgard Well Pad and Access Road

