

## CHECKLIST ENVIRONMENTAL ASSESSMENT

|                                      |  |
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| <b>Project Name:</b>                 | Running Foxes Oil Well   |
| <b>Proposed Implementation Date:</b> | August 2020  |
| <b>Proponent:</b>                    | Running Foxes Petroleum, Inc.<br>14550 E. Easter Avenue, Suite 200<br>Centennial, CO |
| <b>Location:</b>                     | Section 36-T15N-R30E (Common Schools Trust)  |
| <b>County:</b>                       | Garfield   |

### I. TYPE AND PURPOSE OF ACTION

Running Foxes Petroleum, Inc has requested permission to drill a new wildcat well in Sec. 36 T15N-30E. The drill pad for the well would initially be approximately 1 acre, located in SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 36. The production well would be drilled to a vertical depth of approximately 2,500 feet into the Amsden formation.

If the well is commercially viable, pertinent production equipment would be installed and the well pad would be minimized to a size necessary for production operations. If tests indicate that commercial quantities of recoverable oil and/or gas are not present, then the well would be plugged according to Montana Board of Oil & Gas Conservation standards. The area would be contoured back to the natural slopes and the topsoil redistributed over the area. The site would be returned to native rangeland.

See attached map.

### II. PROJECT DEVELOPMENT

**1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:**  
*Provide a brief chronology of the scoping and ongoing involvement for this project.*

Running Foxes Petroleum, Inc. – Oil and Gas lessee OG-27393-84

State of Montana, Department of Natural Resources and Conservation (DNRC) - Surface and Mineral Owner. Trevor Taylor, Minerals Management Bureau Chief, completed a field evaluation on August 4, 2020.

Rowton Brothers – Surface Lessee, DNRC Ag and Grazing Lease #9591

Eastern Land Office, Montana DNRC

Sage Grouse Habitat Conservation Program

Montana Board of Oil & Gas Conservation

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

Running Foxes Petroleum, Inc. has submitted Permit Form 22 to the Montana Board of Oil and Gas Conservation to drill the State 36-16 CD well. The proponent has also applied to and been approved by the Montana Sage Grouse Habitat Conservation Program due to this section being located within Greater Sage-Grouse general habitat.

**3. ALTERNATIVES CONSIDERED:**

No Action Alternative: The proposed wells would not be drilled. Current non-motorized recreational use and grazing leasing would continue.

Action Alternative: Running Foxes Petroleum, Inc. would have permission to construct a well pad site and drill the initial exploratory well in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ , in Section 36 T15N-30E. Current non-motorized recreational use would continue, and the current grazing lease would be modified for the loss of approximately  $\pm$  1 acre in grazing land.

**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.*

**154. 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.*

Most of Section 36 T15N-30E is made up of the Niobrara Formation which consists of gray to dark gray shale with numerous thin bentonite beds, including chalky aggregates of coccoliths and rhabdoliths in upper part. The middle part of the Niobrara Formation is identified as the MacGowan Concretionary Bed consisting of grayish brown concretionary dolostone and limestone with phosphatic pellets and gray to black chert pebbles. The lower part of the Niobrara is Marine and noncalcareous. Overall formation thickness ranges from 30–75 ft. The northeast corner of this section is composed of alluvial terrace deposits that can be up to 50 feet deep with gravel, sand, silt and clay. Small areas of the drainages in this section are the Lebo Member of the Fort Union Formation which consists of sandstone, siltstone, shale and ironstone.

Soils on this section where the access road, well pad and evaporation ponds would be constructed are silty clay. The proposed well pad site would be approximately 1 acre, constructed on Neldore-Volborg complex in the SE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 16. The proposed temporary evaporation pit would be approximately 6,000 square feet, constructed on Neldore-Volborg complex in SE $\frac{1}{4}$ SE $\frac{1}{4}$  Section 36.

Soil characteristics at this site include; severe to moderate erosion hazard, low resistance to soil compaction, moderate potential for soil restoration and moderate ability to handle oil and gas vehicles in dry conditions. Wet conditions may cause periods when the native soil cannot handle oil and gas

vehicles. Wet conditions are temporary and should dry over the course of several days. The effects to the native soil will be mitigated through the construction of an all-weather road. All oil and gas vehicles will be limited to road travel. No off-road travel is permitted. Negative impacts to the soil resources are expected in the short-term. Long-term, cumulative, and/or irreversible impacts to the ecosystem are not expected.

Any topsoil and subsoil would be stripped and stockpiled for use in reclamation. Reclamation would require the slopes of the area be put back to a natural contour with erosion control techniques. This is required for both the well-pad site and access roads constructed during oil and gas operations.

**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.*

Jackson Coulee Creek flows east to west in the northern half of Section 36, Sage Hen Creek runs east to west throughout Section 1 of T14N R30E, and unnamed stream runs through Section 2 of T14N R30E. The proposed well pad and evaporation pit is approximately 0.7 miles south of Jackson Coulee, 0.6 miles north of Sage Hen Creek, and 0.8 miles west of the unnamed stream. All three bodies of water drain into the Musselshell river which is approximately 2 miles from the project site. The project site is located on ground approximately 60 feet higher in elevation than unnamed water body, which is the drainage in which surface water from the project site will shed.

A search on the Montana Ground Water Information Center website found there is one well within 1.5 miles of the proposed project site. The existing well is located southeast of the project in Section 11 of T14N R30E. The well has a total depth of 1473 feet, and the static water level is not specified. This well is shown to be located down-gradient, between the proposed project and the Musselshell River. Water from the site. However, surface water from the site would appear to follow the drainage path of the unnamed stream into the Musselshell River, thus not affecting the aforementioned well.

A temporary evaporation pit would be constructed to store pit fluids from the drilling of the proposed well. The proponent will allow the reserve pit fluids to evaporate and dry. The evaporation pit would be temporary until the proponent could permit and utilize an injection well, after which the pit would be reclaimed.

**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.*

A short duration increase in airborne pollutants and particulates would occur from machinery exhaust and dust during proposed well pad construction and drilling activities. Minimal short-term impacts to air quality are expected. If commercial quantities of hydrocarbons are found, associated natural gas may likely be produced along with the oil. Depending on proximity of gas lines, natural gas flaring is allowed on a temporary basis as is permitted by the Board of Oil and Gas Conservation. The products of natural gas flaring are carbon dioxide and water.

**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.*

Vegetation in Section 36 at the proposed project site including the access road, well pad, and evaporation pond are Western Juniper (*Juniperis Occidentalis*), Pine (*Pinus Ponderosa*), Western Wheat Grass (*Pascopyrum smithii*), Greasewood (*Sarcobatus Vermicaulatus*), Broom Snakeweed (*Gutierrezia Sarothrae*), and Sandberg Bluegrass (*Poa secunda sandbergii*).

Vegetation on the proposed project site would be damaged during construction. Reclamation would re-establish native grasses, forbs and shrubs as stated in proponent's approval letter from the Montana Sage Grouse Habitat Conservation Program for this project.

**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.*

There may be minimal disruption to other wildlife in the area. The scale and length of the project should not be enough to permanently disrupt wildlife species. Species in the area include antelope, whitetail deer, mule deer, elk, raptors and other birds, various rodents, rabbits, reptiles and others.

**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.*

A search was conducted using the Montana Natural Heritage Program database to identify point observations of species of concern in the section of the proposed activity. Species of concern documented in Section 36 in the last 10 years are Greater Sage-Grouse. There are several species of concern in nearby sections, including Ferruginous Hawk, Plains Spadefoot, and Burrowing Owl.

Section 36 is in the Greater Sage-Grouse general habitat area. The proponent has applied to and been approved for this project from the Montana Sage Grouse Habitat Conservation Program. The recommendations for this project are as follows:

1. New project noise level, either individual or cumulative, should not exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of an active lek from 6:00p.m. to 8:00a.m. during the breeding season (March 1 - July 15).
2. Reclamation should re-establish native grasses, forbs, and shrubs during interim and final reclamation. The goal of reclamation is to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage grouse and replace or enhance sage grouse habitat to the degree that environmental conditions allow. Landowners should be consulted on the desired plant mix on private lands. Reclamation of disturbed areas must include control of noxious weeds and invasive plant species, including cheatgrass (*Bromus tectorum*) and Japanese brome (*Bromus japonicas*).

**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

A Class I (literature review) level review was 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. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. 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.

**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.*

Impacts to aesthetics are minimal during the scope of this project. There will be increased noise, however the drilling rig will not be visible from MT HWY 200 during the construction of the well pad and drilling of the wells. After drilling activities are completed, aesthetics will only be changed on approximately one acre of this section. A well pad would be in place and vehicles would be traveling to the site for regular maintenance and operation. Depending on the production of the proposed well, there could be increased vehicle traffic for maintenance and operation of the wells.

**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.*

Jackson Coulee State A-1 is an active producing oil well in the NW¼NW¼ of Section 36. Because the proposed well is being drilled over one mile from the existing well, no negative effects are anticipated for either well.

**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.*

None.

**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.*

No human and health safety risks were identified as a result of the proposed project other than the typical occupational hazards that coincide with drilling operations.

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

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

The proposed project is not expected to alter current or future industrial, commercial, and agricultural activities and production.

**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.*

The proposed project would not create, move, or eliminate jobs.

**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.*

No impact.

**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.*

No impact.

**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.*

No known zoning or management plans exist for this area.

**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.*

No impact.

**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.*

No impact.

**22. SOCIAL STRUCTURES AND MORES:**

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

No impact.

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

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

No impact.

**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.*

The existing oil and gas lease provides approximately \$600 in rental fees and approximately \$15,000 in royalties were generated in 2019 from the Jackson Coulee State A-1 well in the NW¼NW¼ of the section. The existing grazing leases provide approximately \$800 in annual revenue from Section 36, T15N-R30E that goes to Common Schools. If wells are drilled and oil is extracted from state land, the amount of oil and gas royalties would increase benefiting the trust for Common Schools.

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| <b>EA Checklist<br/>Prepared By:</b> | <b>Name:</b> Zackary Winfield    | <b>Date:</b> 8/27/2020 |
|                                      | <b>Title:</b> Petroleum Engineer |                        |

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

After reviewing the Environmental Assessment, I have selected the Action Alternative, to issue a new well permit. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area and generate revenue for the common school trust.

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

I conclude all identified potential impacts will be mitigated by utilizing the stipulations listed in the approval letter and no significant impacts will occur as a result of implementing the selected alternative.

**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

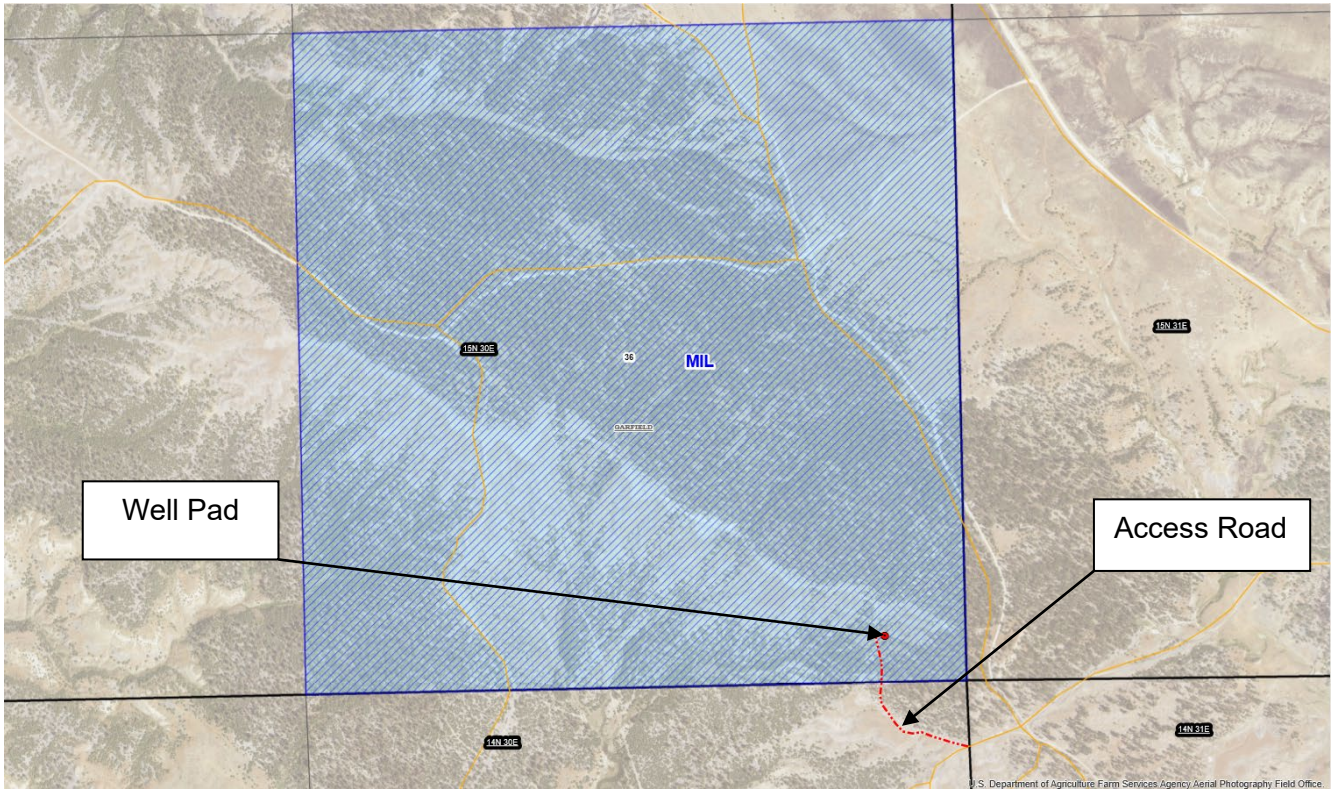
EIS

More Detailed EA

No Further Analysis

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|--------------------------------------|--------------------------------|
| <b>EA Checklist<br/>Approved By:</b> | <b>Name:</b> Trevor Taylor     |
|                                      | <b>Title:</b> MMB Bureau Chief |
| <b>Signature:</b>                    | <b>Date:</b> 8/27/20           |





Map showing approximate location of well pad.