

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Proposed Oil Well- Benton Bench State #4-05-28-4
Proposed Implementation Date:	Summer/Fall 2011
Proponent:	Primary Petroleum Company LLC, Suite 800, 744-4 th Ave SW, Calgary, AB T2P3T4-Lessee & Operator
Location:	Section 5, T28N, R4W State #4-5-Lot 4, 2279' FNL & 330' FWL
County:	Pondera
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Primary Petroleum Company LLC -lessee and operator has requested permission to drill one oil well on state land. State well #4-5 will be drilled through multiple formations to a total depth of 4,500' in order to core sample and test each of the formations. If acceptable levels of recoverable oil are encountered the lessee will the reenter the well and drill horizontal through the formation. The well will then be fracked and then a commercial well site will be developed. The proposed well is located on land that is classified as grazing. A drilling pad will be constructed and a rig will drill the well. If tests indicate that commercial quantities of recoverable oil are not present, then the well will be plugged in conformance with standards approved by the Montana Board of Oil and Gas Conservation. After drilling operations have been completed, the disturbed areas will be reclaimed. The area will be recontoured and the topsoil redistributed over the area. The site will then be returned to native rangeland. The well site will be accessed by traveling West 330' through state land, West 2,640' through deeded land, and South 4,013' through deeded land to the Larkspur Road. The proponent will temporarily disturb a small portion of the landscape. 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.

II. PROJECT DEVELOPMENT

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

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

Primary Petroleum Company LLC -Lessee and Operator
DNRC-Surface and Mineral Owner
Tom and John Peterson-Lessees, Lease #10264
Montana Board of Oil and Gas Conservation

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

Montana Board of Oil and Gas Conservation permit form 22 has been preliminarily approved for this well. The API number for the well is 25-073-21850. Primary Petroleum Company LLC has the State of Montana Oil and Gas lease #OG-40319-11 associated with this state land. DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project.

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Deny Primary Petroleum Company LLC -Lessee and Operator authorization to drill the oil well.

Alternative B (the Proposed action) – Grant Primary Petroleum Company LLC -Lessee and Operator authorization to drill the oil well using the Conrad Unit Office’s recommendations to minimize adverse environmental impacts.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT
<ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter “NONE” if no impacts are identified or the resource is not present.</i>

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.

Soils at the proposed well sites are silty to sandy in texture. Topography is gently rolling to steep hills and suitable for oil production and access road use. The proposed action may cause localized areas of soil erosion and compaction from the manipulation of vehicles and equipment on the surface. The top 6 inches of soil will be removed from the well site and stock piled for reclamation purposes. A road on state and deeded land will be constructed to access the well site. A large amount of site leveling will occur as the well is located on rolling topography. Road construction will be necessary as there is no road to the well site. The proposed action will temporarily disturb a small portion of the landscape. Reclamation and returning this site to rangeland production will minimize long-term soil loss. The well site will be fenced in order to prevent livestock from entering the well site. No long-term negative impacts on the soil resources are expected. The rangeland areas will be reseeded per the seeding recommendations included in item #7. Also, the erosion concerns will be further mitigated by the utilization of silt fence and straw waddles to prevent soil erosion of the cut and fill areas.

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.

There are no documented and/or recorded water rights associated within the proposed project area. There is a spring located below the proposed project area, but it is far enough from the well site that no damage will occur to it. The proponent will be required to protect the surface water by installing silt fence and straw waddles around the disturbed soils in order to prevent them from eroding into the surface water. Also, the drilling company will be using fresh water drilling fluids in order to lessen the environmental impact caused by drilling the well. There will be a mud pit utilized, but there will be no reserve pit. These actions will mitigate any potential damage to surface and ground water.

Other water quality and/or quantity issues will not be impacted by the proposed action.

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.

Dirt work associated with pad building, access road building, well drilling, and vehicle traffic on the county road will generate airborne dust. These activities will minimally affect air quality for a very limited amount of time. No cumulative effects to air quality are anticipated.

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.

A 300' X 300' area consisting of 2.07 acres of classified grazing land will be impacted by the removal of topsoil and the manipulation of vehicles on the ground surface at the well site location. Also, an access road that is 330' long X 40' wide consisting of 0.30 acres will be built to access the well site. The proponent will be responsible for noxious weeds that may arise from implementing this proposed action. The site will be returned to grazing land following site reclamation. The proposed action will impact a small portion of the landscape. The grazing land will be reclaimed and reseeded with the following species: western wheatgrass 35%, slender wheatgrass 35%, blue bunch wheatgrass 15%, green needle grass, 10%, and Lewis blue flax 5%. The seeding rate will be 7 lbs/acre if drilled and 14 lbs/acre if broadcast seeded.

A review of Natural Heritage data through the NRIS was conducted for T28N, R4W. There were zero species of concern and zero potential species of concern noted on the NRIS survey.

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.

The area is not considered critical wildlife habitat. However, this tract provides habitat for a variety of big game species (mule deer, whitetail deer, and pronghorn antelope), predators (coyote, fox, and badger), upland game birds (sharp tail grouse, Hungarian partridge), other non-game mammals, raptors and various songbirds. The proposal does not include any land use change which would yield changes to the wildlife habitat. The proposed action will not impact wildlife forage, cover, or traveling corridors. Nor will this action change the juxtaposition of wildlife forage, water, or hiding and thermal cover. Wildlife usage is expected to return to "normal" (pre-action usage) following the drilling operations. The proposed action will not have long-term negative effects on existing wildlife species and/or wildlife habitat.

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.

There are no threatened or endangered species, sensitive habitat types, or other species of special concern associated with the proposed project area. At this time, no known unique, endangered, fragile or limited environmental resources have been identified within the proposed project area.

A review of Natural Heritage data through the NRIS was conducted for T28N, R4W. There were two species of concern and three potential species of concern noted on the NRIS survey: Birds—Burrowing Owl and Ferruginous Hawk. Mammals—Hayden's Shrew. Fish—Brook Stickleback and Brassy Minnow. This particular tract of native rangeland does not contain many, if any of these species. If any are present, they will be dispersed into the surrounding permanent cover and return to the project area once it is completed.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

On October 25, 2011, an inventory of cultural and paleontological resources of the area of potential effect (surface area only) of the proposed oil well and the associated access road route was completed. Despite a detailed examination of the project area, no cultural or paleontological resources were identified. No additional archaeological investigative work is recommended for the proposed well and access road as it relates to state land. The proposed action will have No Effect to state owned Heritage Properties.

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.

The proposed action will occur in a remote area and will not cause a large change in the aesthetic character of the land. The main industries in this area are agricultural, grazing, and oil and gas production. If a producing well is developed, a small portion of the lands aesthetic character will be changed. Daytime noise levels may slightly increase during the time of the project, but noise levels will return to "normal" (pre-action conditions) after the project is completed. No other changes to the aesthetics character of the land area are expected.

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.

The demand on environmental resources such as land, water, air, or energy will not be affected by the proposed action. The proposed action will not consume resources that are limited in the area. There are no other projects in the area that will affect the proposed project.

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.

There are no other projects or plans being considered on the tract listed on this EA.

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.

The proposed well will not change human safety in the area.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

The intent of the proponent's action is to locate and remove oil for commercial sale. If tests indicate the existence of economically recoverable quantities of oil, a producing well will be established, and extraction will follow. If a producing well is developed, the Common School Trust will receive royalty payments at current market rate for all oil produced by the well. Activities associated with the proposed action will minimally affect the surface use of the land (grazing). A minimal amount of acreage will be taken out of production if a producing well is developed. All actual damages to the surface have been mitigated between the surface lessee and the proponent. The project will not add to or deter from other industrial, commercial, or agricultural activities in the area.

No direct or cumulative impacts are anticipated as a result of the proposal.

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 action will create a well drilling and road construction job and generally add to the economy of surrounding communities.

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.

The proposed action will add to the tax revenue.

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

There will be an increases in traffic, changes in traffic patterns, but there will be no need for additional fire protection or police services. The increase in traffic and changes in traffic patterns will be mitigated by Primary Petroleum Company LLC building a new road capable of let large equipment pass each other so there are no traffic delays. The proponent is also working with Pondera County to mitigate any need for additional road maintenance due to increased traffic as the road is being constructed and the well is being drilled.

There will be no direct or cumulative effects on government services.

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.

The proposed action is in compliance with State and County laws. No other management plans are in effect for the 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.

This tract of state land is rural and generally has low recreational value. The tract is not legally accessible and the proposed action is not expected to impact general recreational and wilderness activities on this state tract.

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

The proposal does not include any changes to housing or developments.

No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

The proposed action will not impact the cultural uniqueness or diversity of the area.

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 proponent has interest in the State of Montana Oil and Gas Lease #OG-40319-11 that is associated with this state tract. This lease entitles them to reasonable development of oil and gas wells on this tract after DNRC approval. The Common School trust will be compensated for all oil removed from a producing well. The Common School trust will receive \$1,000.00/acre for a total of \$3,000.00 for surface damages on the well site. The surface lessee will receive \$100.00 for surface damages on the well site. Also, the Common School trust will receive a damage payment for the access road being constructed. The road is 330.00' long, 40.0' wide and consists of 0.30 acres. The access road will generate a one-time fee for surface damages of \$30.00/rod X 20 rods for a total of \$600.00.

	Name: Tony Nickol	Date: December 9, 2011
	Title: Land Use Specialist, Conrad Unit, Central Land Office	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B (the Proposed action) – Grant Primary Petroleum Company LLC authorization to drill the oil well using the Conrad Unit Office’s recommendations to minimize adverse environmental impacts.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Significant impacts are not expected to occur as a result of the proposed oil well on state land. Erosion control measures, such as silt fence, will be used to minimize soil erosion during drilling. No archaeological sites were observed within the project area. Following drilling operations, all disturbed areas will be recontoured and reseeded to the seed mixture outlined in this EA. If the well is economical to produce, the common school trust will receive royalty payments. If well is not developed for production, it will be plugged and abandoned in accordance with BOOG regulations. Other mitigation measures which are common and effective have been incorporated into the proposed action to minimize the potential for environment impact.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Erik Eneboe
	Title: Conrad Unit Manager, CLO, DNRC
Signature: 	Date: December 20, 2011

