

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Round Prairie 3-D Extension

Proposed Implementation Date: October 2012

Proponent: Global Geophysical Services, Inc., P.O. Box 276, Whitefish, MT 59937

Type and Purpose of Action: Global Geophysical Services has made application to conduct a 3D Seismic survey on State land in Roosevelt and Sheridan County. The project is described as the Round Prairie 3D Extension, under permit #1582. The project would include 11,887.71 State mineral acres + Lots 1,2, Medicine Lakebed of Sec. 5-T31N-R56E (not sure how many mineral acres the State owns in this tract). Of these mineral acres, the State owns 8,887.71 surface acres. A payment of \$5/acre (\$4 to the State and \$1 to the lessee) for all surface acres has been discussed and would result in the State receiving \$35,550.84 for the proposed action. This payment amount may or may not be accurate because it is at the discretion of the land board members and the Minerals Management Bureau and may be altered.

Counties: Roosevelt and Sheridan County

State Owned Mineral Tracts:

All of Sections 16 and 36 in T29N-R54E;
 N2NW4, SW4NW4, SE4NE4, SE4 of Sec. 16; SE4SE4 of Sec. 21; W2NE4 of Sec. 28; N2NW4 of Sec. 36 in T29N-R55E;
 W2 of Sec. 11; All of Sec. 16; N2NW4 of Sec. 17; SE4NW4 of Sec. 19; NE4, N2SE4 of Sec. 27, All of Sec. 36 in T29N-R56E;
 All of Sec. 16 and W2, NW4NE4 Sec. 36 in T29N-R57E;
 Lots 1-6 inc, SE4NE4, SE4, NE4SW4, S2SW4 of Sec. 36 T30N, R54E;
 N2, SE4, N2SW4, SE4SW4 of Sec. 16 and All of Sec. 36 in T30N-R55E;
 N2, SE4 of Sec. 16 and All of Sec. 36 in T30N-R56E;
 All of Sections 16 and 36 in T30N-R57E;
 E2 of Sec. 36 in T31N-R55E;
 Lots 1,2, Medicine Lakebed of Sec. 5; N2NW4, SE4NW4, SW4NE4 of Sec. 16; NW4 of Sec. 36 in T31N-R56E;
 E2E2, NW4SE4 of Sec. 10; NE4NE4, S2 of Sec. 14; S2 of Sec. 15; All of Sec. 16; NE4 of Sec. 21; N2, N2SW4 of Sec. 22;
 N2N2, SE4 of Sec. 23; All of Sec. 36 in T31N-R57E

State Owned Surface Tracts:

All of Sections 16 and 36 in T29N-R54E;
 N2NW4, SW4NW4, SE4NE4, SE4 of Sec. 16; SE4SE4 of Sec. 21; W2NE4 of Sec. 28 in T29N-R55E;
 NE4, N2SE4 of Sec. 27 in T29N-R56E;
 All of Sec. 16 and SW4, NW4NE4 Sec. 36 in T29N-R57E;
 Lots 1-6 inc, SE4NE4, SE4, NE4SW4, S2SW4 of Sec. 36 T30N, R54E;
 N2, SE4, N2SW4, SE4SW4 of Sec. 16 and S2, NW4 of Sec. 36 in T30N-R55E;
 N2, SE4 of Sec. 16 and N2,SW4 of Sec. 36 in T30N-R56E
 All of Sections 16 and 36 in T30N-R57E;
 E2 of Sec. 36 in T31N-R55E;
 SE4NW4, SW4NE4 of Sec. 16; NW4 of Sec. 36 in T31N-R56E;
 E2E2, NW4SE4 of Sec. 10; NE4NE4, S2 of Sec. 14; S2 of Sec. 15; All of Sec. 16; NE4 of Sec. 21; N2, N2SW4 of Sec. 22;
 N2N2, SE4 of Sec. 23; All of Sec. 36 in T31N-R57E

I. PROJECT DEVELOPMENT

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

Kirsten Andersen, permit agent for Global Geophysical Services contacted the Department of Natural Resources and Conservation, Minerals Management Bureau, Helena Office. Global Geophysical Services applied for a permit from the Department of Natural Resources and Conservation to conduct a 3D seismograph survey operation on State land. The Department of Natural Resources and Conservation, Glasgow Unit Office is responsible to complete the Environmental Assessment process for the seismograph survey.

The Glasgow Office, DNRC solicited Montana Fish Wildlife and Parks (MT FWP) for comments. MT FWP sent

	<p>a response letter on August 17, 2012.</p> <p>Surface lessee's received "Surface Lessee Notice of Settlement of Damages" forms from the proponent. This form provides each lessee with notice of the proposed action and explains that they, as lessees, are entitled to compensation for damages resulting from the proposed action.</p> <p>The proponent would be required to receive permission, from FSA, to trespass on all lands enrolled in CRP. A list of lands enrolled in CRP was provided to Kirsten Anderson.</p>
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	<p>The other agencies that may have jurisdiction for this type of project would be the Montana Board of Oil and Gas, Montana Secretary of State Office, Sheridan and Roosevelt County Commissioners, and Sheridan and Roosevelt FSA offices. A County permit and proof of qualification to conduct business in the State of Montana would also be required.</p>
3. ALTERNATIVES CONSIDERED	<p>Action Alternative: Grant permit #1582 to Global Geophysical Services to conduct a 3D seismic survey on State land.</p> <p>No Action Alternative: Deny permit #1582 to Global Geophysical Services to conduct a 3D seismic survey on State land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

RESOURCE	[Y/N] POTENTIAL IMPACTS
	<p>N = Not Present or No Impact will occur. Y = Impacts may occur (explain below)</p>
4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactable or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?	<p>No unusual geologic features are located within the proposed study area. The seismograph project would likely alter the surface soils on the State land via soil compaction. The compacted surface soils would return to their current production capabilities shortly after the project was completed.</p> <p>Action: The project would disturb and compact the soil near the surface of the land located along the proposed survey routes. These impacts would be temporary and the soil's structure and capability would return to normal in the future.</p> <p>No Action: No impacts to the area's geology, soil quality, soil stability, and soil moisture will occur.</p>
5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water	<p>There are numerous documented and/or recorded water rights within the proposed project area. The proponent will be required through stipulation to stay 300 feet from springs, water wells, streams, lakes, or</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>maximum contaminant levels, or degradation of water quality?</p>	<p>water storage reservoir facilities. This project is not anticipated to create potential violations of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality.</p> <p>Action: Groundwater resources and quality would remain unchanged. Water quality, quantity, and distribution would also remain unchanged.</p> <p>No Action: No impacts will occur to the areas current water quality, quantity, and distribution.</p>
<p>6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>No Class I Airsheds are located near this area.</p> <p>Action: Air quality would be slightly reduced due to an increase of pollutants and particulates during the proposed action from the burning of fossil fuels to power the necessary equipment. Air quality in the project area would quickly return to normal upon completion of the proposed project.</p> <p>No Action: No impacts will occur to the areas air quality.</p>
<p>7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>A search of Montana State Library's "Natural Resource Information System" identified a list of 5 "species of concern". The listed species may or may not be present within the project area. The project would only be allowed to be conducted during dry and/or frozen ground conditions, so impacts to the project area's vegetation are not anticipated.</p> <p>Action: Impacts to the areas vegetation cover, vegetative communities, and/or rare plants are not anticipated to occur.</p> <p>No Action: No impacts to the areas vegetation cover, vegetative communities, and/or rare plants will occur.</p>
<p>8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>Landscape consists of native rangeland, agricultural land, tame pasture land, CRP land, oil and gas well sites, and some residential and farm dwellings. The area's wildlife has adapted to living in and around these landscapes and has learned to cope with the activities associated with each. The wildlife within the project area would likely be displaced during the survey and then return to the project area.</p> <p>Action: Although animals would be temporarily displaced, none of the wildlife, birds, and/or fish species are anticipated to be negatively affected by the proposed action.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

	<p>No Action: No impacts will occur to important wildlife, birds, and/or fish species.</p>
<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?</p>	<p>Various types of perennial and seasonal wetlands are present within the proposed action area. A search of Montana State Library's "Natural Resource Information System" identified a list of 35 "species of concern" and 10 "potential species of concern". 32 of the listed species are bird species, 8 are fish species, 2 are reptile species, 1 is an insect species, 1 is an amphibian species, and 1 is a mammalian species. The list of species is attached. The majority of the species primarily utilize wetland and stream areas. The remaining species may be temporarily displaced during the proposed action; however, these species would be able to return to the project area when the work is completed and no lasting impacts are anticipated.</p> <p>Action: No impacts to unique, endangered, fragile, and/or limited environmental resources are anticipated.</p> <p>No Action: No impacts will occur to any unique, endangered, fragile, and/or limited environmental resources.</p>
<p>10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>No major historical, archaeological, and/or paleontological sites or resources are known to exist within the proposed action area. Numerous stone features are likely scattered throughout the tracts.</p> <p>Action: The proposed action would not substantially affect the historical, archaeological, and/or paleontological sites and/or resources within the action area.</p> <p>No Action: No impacts will occur to any historical, archaeological, and/or paleontological sites or resources.</p>
<p>11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>The study is planned to be wide spread and not limited to just the State land. Seismic studies are typically completed within a few months time and the equipment would then leave the area. The area may have a few minor surface scars and compacted wheel tracks, but it should return to its normal state within 1-2 growing seasons.</p> <p>Action: Aesthetics would be temporarily impacted during the study, but this project would not have lasting impacts to the aesthetics of the State land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

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	No Action: No impacts will occur to the State land's aesthetics.
12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?	<p>Project area is predominately used for farming and ranching. The area has a history of activity related to oil production, and the activity level has greatly increased due to the success of the Bakken oil formation in terms of feasible oil production.</p> <p>Action: Proposed action would not result in the use of any of the areas limited resources. Nearby activities are not anticipated to impact this project.</p> <p>No Action: No impacts to the areas limited resources will occur.</p>
13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?	<p>The proponent and several other companies have conducted seismic studies throughout both Roosevelt and Sheridan County in the past. The proposed project's findings would likely be used together with previous and future studies to better map out subsurface resources in the area.</p> <p>Action: No known documents, studies, plans, or projects would be negatively impacted.</p> <p>No Action: No documents, studies, plans, or projects will be impacted.</p>

III. IMPACTS ON THE HUMAN POPULATION

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RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	<p>The proposed study would result in temporary human health and safety risks. The movement of trucks and equipment along and across roads would increase the chance of traffic accidents within the project area. Global Geophysical realizes their employees would be subject to risks associated with operating and working around the heavy machinery needed to complete the project.</p> <p>Action: An increase to temporary human health and safety risks related to operating, working around, and moving equipment across the landscape would result from the proposed action.</p> <p>No Action: No impacts to human health and safety will occur.</p>
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES	Project area is predominately used for farming and

<p>AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>ranching. The area has a history of activity related to oil production and the activity level has greatly increased due to the success of the Bakken oil formation in terms of feasible oil production.</p> <p>Action: No impacts to the areas industrial, commercial, and agricultural activities and/or production are anticipated to occur from the proposed action.</p> <p>No Action: No impacts to the areas industrial, commercial, and agricultural activities and/or production will occur.</p>
<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>The project itself would not change the quantity or distribution of employment. Global Geophysical employees or a second party would be conducting the study.</p> <p>Action: The quantity of employment opportunities and distribution of employment would remain unchanged.</p> <p>No Action: No impacts to the quantity and/or distribution of employment will occur.</p>
<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>The proposed action would not create or eliminate tax revenue. The School Trust associated with each tract permitted would receive a single payment through a surface damage settlement payment agreed upon between the DNRC and Global Geophysical Services. The payment is currently anticipated to be around \$4.00/acre to the State trust and \$1.00/acre to the lessee. The State trust would receive \$35,550.84 for the proposed action at the \$4/acre rate.</p> <p>Action: No impacts to the State of Montana's taxes and/or local taxes are anticipated. The State trust would receive the Surface Damage payment which is estimated to be \$35,550.84.</p> <p>No Action: No impacts to State of Montana taxes, local taxes, and/or Trust revenues will occur.</p>
<p>18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?</p>	<p>Additional traffic would occur during the proposed action in the form of both passenger type vehicles and heavy equipment used to conduct the survey.</p> <p>Action: The proposed action would not create a new demand on government services. Traffic levels would increase during the survey. Traffic levels would return to normal upon completion of the project.</p> <p>No Action: No impacts to the demand of government services will occur.</p>
<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</p>	<p>No impacts to environmental plans and/or goals</p>

<p>Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>pertinent to this area are anticipated. Zoning and management plans for this area would not be impacted by the project.</p> <p>Action: No impacts to locally adopted environmental plans and goals and/or zoning and management plans for this area would occur.</p> <p>No Action: No impacts to locally adopted environmental plans and goals and/or zoning and management plans for this area will occur.</p>
<p>20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?</p>	<p>Short term displacement of game and non-game animals would likely occur during the project. The area would quickly return to normal after the completion of the project.</p> <p>Action: Quality of recreational opportunities may be impacted; however, the area would return to normal shortly after the completion of the project.</p> <p>No Action: No impacts to quality or access of recreational or wilderness areas will occur.</p>
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>The project itself would not result in an increased demand for housing.</p> <p>Action: Proposed action would not increase population or require additional housing.</p> <p>No Action: No impacts to population or housing will occur.</p>
<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>Action: No disruptions to native or traditional lifestyles and/or communities are anticipated to occur.</p> <p>No Action: No impacts concerning the disruption of native or traditional lifestyles will occur.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>Action: Cultural uniqueness and diversity qualities are not anticipated to be impacted.</p> <p>No Action: No impacts to cultural uniqueness and diversity will occur.</p>
<p>24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>Action: None</p> <p>No Action: None</p>

EA Checklist Prepared By: _____

Matthew Poole
Land Use Specialist

Date: November 20, 2012

