

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION

NORTHEASTERN LAND OFFICE

Energy Trust Land Management Division



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HAVRE, MONTANA 59501-0868

STATE OF MONTANA

DEC 08 2004

December 7, 2004

MEMORANDUM

TO: Clive Rooney, Area Manager, Northeastern Land Office
Wanda Walks, Mineral Leasing Section, Minerals Management Bureau

FR: Dan Dobler, Havre Unit Manager, Northeastern Land Office *Dan Dobler*

RE: Seismic Permit No. 1443
Grant Geophysical / Klabzuba Oil & Gas, Inc.
Township 35.0 North, Range 22.0 East, MPM
Section 36: All (Minerals Only)
Blaine County, Montana

RECEIVED

DEC 7 2004

CLIMATE CHANGE DIVISION

Grant Geophysical is proposing to conduct a 2-D seismic project across the above-referenced tract of land. The surface is owned by David & Teresa Cornell and the mineral rights are owned by the State of Montana. Grant Geophysical has been hired on behalf of Klabzuba Oil & Gas to complete this seismic project. This type of project will create low impact energy sources by using vibroseis equipment. This equipment is used to locate shallow natural gas producing formations.

The proposed project will cross approximately 1 mile of agricultural and grazing land on the above referenced tract. The surface impacts will consist mainly from limited vehicular travel across the surface and soil compaction from the tires and vibrating platform. The proponent will be required to contact David & Teresa Cornell to inform them of the proposed seismic project across this tract of land. The proponent will be required to settle all surface damages within a reasonable time period following the completion of the proposed seismic project. This project will have minor environmental impacts on the native rangeland and agricultural land associated with this tract. Native vegetation will be matted down and the forage value will be lost for livestock grazing purposes. The project may compact the soils on the agricultural land, thus reducing the potential yield of small grain crops in the future. The natural resources that currently exist on this tract of land will receive minimal negative impacts from this project, if the proponent conducts this project during frozen or dry surface conditions and complies with the Departments terms and conditions for seismic activity.

I have attached an Environmental Assessment Checklist for your review. Please review the EA Checklist, sign and date it, and return an executed copy to the Havre Unit Office. Please forward a copy of the executed EA Checklist to Connie Daruk in Helena, so that she can forward it to the Environmental Quality Council. I am recommending that the Department issue Grant Geophysical a seismic permit to conduct a seismic project across the above referenced tract of land. Listed below are the stipulations for Seismic Permit No. 1443:

STIPULATIONS

1. Permittee shall contact the Havre Unit Office, 48 hours prior to commencing any surface activity at PO Box 868, Havre, MT 59501, phone (406) 265-5236.
2. The permittee shall be responsible for controlling any noxious weeds introduced by permittee's activity on this tract of land and shall prevent or eradicate the spread of those noxious weeds onto land adjoining the premises.
3. The surface of this tract is privately owned and is being used for dryland agricultural purposes for the production of small grains and grazing land for livestock use. The Department is not aware of any existing cultural or archaeological resources on this tract of land. If any of these resources are located in the direct route of the proposed seismic line, the permittee shall cease all activity and immediately contact the Havre Unit Office and the Department Archaeologist in Helena.
4. It is the responsibility of the permittee to make sure that the seismic company that has been contracted to do the seismic work under this permit has a valid permit with the county and has registered their bond with the Secretary of State's Office.
5. In order to prevent the introduction of noxious weeds on this tract of land, all vehicles and ATV's must be power washed prior to use for this project.
6. Permittee shall contact David & Teresa Cornell, 48 hours prior to any seismic activity on this tract of land.
7. Seismic activity will occur on dry or frozen ground only. No activity will be allowed during muddy conditions.
8. No vehicle oil changes or petroleum disposal shall occur on this tract of land.
9. There will be no off-road traffic other than necessary to accomplish the seismographic goals.

10. Vehicles will not be allowed to traverse steep slopes greater than 25%, or areas with very thin soils that may be rutted and left open to erosion.
11. All gates will be closed, and all fences that are taken down will be repaired as soon as possible.
12. All flagging tape will be removed from the roads and fences leading into the site, along designated routes, and fence lines indicating where gates are located, once the project is completed.
13. There may be woody species present on this tract of land like snowberry, woods rose, and Russian olive. Trucks should avoid these species by going around them. If woody draws are present, these areas must be avoided. If the permittee wants to cross a woody draw they must receive written permission from the Havre Unit Office on the agreed upon crossing location.
14. The permittee shall settle all surface damages with David & Teresa Cornell within a reasonable time period following the completion of the proposed seismic project.
15. The seismic company is prohibited from any seismic activity within 300 feet of any springs, water wells, streams, lakes, or water storage reservoir facilities to maintain the integrity of these water resources.
16. The seismic company is prohibited from crossing the intermittent drainages and steep slopes that are found within the northwest quarter of this section. All receiver lines will be placed by hand crews in this area.

Enclosure: EA Checklist

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Seismic Permit No. 1443	Proposed Implementation Date: January 15, 2005
Proponent: Grant Geophysical, Inc., C/o Scott Lindenmuth, PO Box 383, Havre, MT 59501	
Type and Purpose of Action: Grant Geophysical, Inc. is proposing to conduct a 2-D seismic project for the exploration of natural gas on a tract of land, in which the surface is privately owned and the mineral rights are owned by the State of Montana. Grant Geophysical has been hired on behalf of Klabzuba Oil & Gas, Inc. to complete this seismic project. The project is expected to cross approximately one mile of agricultural and grazing land.	
Location: <u>Township 35.0 North, Range 22.0 East, MPM</u> Section 36: All (Minerals Only)	County: Blaine

I. PROJECT DEVELOPMENT

<p>1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.</p>	<p>The Department of Natural Resources and Conservation (DNRC) has been petitioned by Grant Geophysical, Inc. to conduct a 2-D seismic project across the above referenced tract of land. The Montana DNRC has sent out a scoping letter to David & Teresa Cornell, identifying the proposed seismic project on this tract of land. David & Teresa Cornell own the surface on this tract of land and the State of Montana owns the mineral rights.</p>
<p>2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:</p>	<p>The Montana DNRC's, Havre Unit Office, Minerals and Management Bureau, and the Montana Board of Oil & Gas are the only governmental agencies with jurisdiction for this type of project on land in which the surface is privately owned and the mineral rights are owned by the State of Montana. Grant Geophysical, Inc. will need to obtain a seismic permit from the Montana DNRC, prior to conducting any seismic activity on this tract of land. The seismic company that has been contracted to do the seismic work under this permit must have a valid permit with the county and have registered their bond with the Secretary of State's Office.</p>
<p>3. ALTERNATIVES CONSIDERED:</p>	<p>Action Alternative: The Montana DNRC will give Grant Geophysical, Inc. permission to conduct a 2-D seismic project for the exploration of natural gas formations across this tract of land. The Montana DNRC will issue Grant Geophysical, Inc a seismic permit to conduct this 2-D seismic project for the exploration of natural gas formations on this tract of land.</p> <p>No Action Alternative: The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS
<p>4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>Action Alternative: The soils will receive a minimal disturbance with this type of activity. The proposed seismic project will only take place while the ground is frozen or dry. No unusual geological features are present on this tract of land. The soils are suitable for this type of activity, but may experience some compaction due to the heavy equipment that is used for this type of project. There are no special reclamation considerations for this project.</p> <p>No Action Alternative: The soils that are located on this tract of land will not be disturbed. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>
<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 maximum contaminant levels, or degradation of water quality?</p>	<p>Action Alternative: The area located within the proposed seismic project does contain important surface and/or groundwater resources at different times of the year. The seismic company is prohibited from any seismic activity within 300 feet of any springs, water wells, streams, lakes or water storage reservoir facilities in order to maintain the integrity of these water resources. This type of activity does not have the potential to contaminate drinking water or degrade the present water quality found in this area.</p> <p>No Action Alternative: The water quality, quantity, and distribution will not be impacted. Water quality standards will not be violated. Drinking water will not be degraded in this area. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project on this tract of land.</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>Action Alternative: The project is expected to have a minimal impact on the air quality in the surrounding area of the proposed project. An increase in traffic across the area by the seismic company will produce some dust particulates during the initial stages of the project. However, after the seismic company completes the project, traffic will be minimal in these areas and air quality will return to normal.</p> <p>No Action Alternative: The air quality currently found in this area will not be impacted. No pollutants or particulates will be produced. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project on this tract of land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?

The vegetative communities found on the native rangeland include the following plants: western wheatgrass (*Agropyron smithii*), needle-and-thread (*Stipa comata*), blue grama (*Bouteloua gracilis*), green needlegrass (*Stipa viridula*), sedges (*Carex spp.*), sandberg bluegrass (*Poa secunda*), cudweed sagewort (*Artemisia ludoviciana*), fringed sagewort (*Artemisia frigida*), dense clubmoss (*Selaginella densa*), silver sagebrush (*Artemisia cana*), and woods rose (*Rosa woodsii*).

The agricultural land contains residual stubble from last year's spring wheat crop and summerfallow that will be seeded to spring wheat in the spring of 2005.

Action Alternative: The proposed project is expected to have a minimal impact on the native rangeland vegetative cover, quantity, and quality. The vegetative communities in the immediate area of disturbance will be matted down and the forage value of the plants will be lost for livestock grazing purposes. There are no rare plants or cover types located within the immediate area of the proposed disturbance. The agricultural land will receive some soil compaction from the seismic recording equipment. This compaction may reduce the potential yield of the spring wheat crop that will be planted here in the spring of 2005. There will be no vehicular activity, other than specified on the plat map. The seismic company will not be allowed to traverse up, down, or across the steep slopes that are found within the area located in the northwest quarter of this section. The seismic company is prohibited from any seismic activity within 300 feet of any springs, water wells, streams, lakes or water storage reservoir facilities in order to maintain the integrity of these water resources.

No Action Alternative: The vegetative communities found throughout the proposed project area will not be altered. Unknown rare plants and cover types will not be impacted. The agricultural land will not receive any soil compaction. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Is there substantial use of the area by important
wildlife, birds or fish?

Action Alternative: The area of the proposed activity is used by many different types of wildlife and bird species. Wildlife may be temporarily dispersed in this area during the seismic project. Wildlife and bird species found in this area will not be permanently relocated, as a result of this activity. Once the project is completed, wildlife and bird species will return to normal activities in this area. Wildlife habitat will not be lost by allowing the project to proceed. The Montana DNRC has mitigated measures to ensure that the wildlife and bird species found in this area will not be permanently relocated.

No Action Alternative: The terrestrial and avian life and their associated habitats will not be impacted on this tract of land. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

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?

Action Alternative: The timing of this project will take place while the ground is frozen or dry. This should minimize the overall disturbance to existing habitat types and ecosystem. Federally listed, threatened, and endangered species will be able to migrate through this area with minimal disturbance. There are sensitive species and species of special concern known to use these areas as habitat. Those species will be minimally impacted by the seismic activity on this tract of land. The seismic company will complete their work in one to two days and they will leave the area completely. All wildlife species found in this area will return to normal everyday activities, once the seismic company finishes the project and leaves this area.

No Action Alternative: The unique, endangered, fragile or limited environmental resources found in the area of the proposed disturbance will not be impacted. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?

Action Alternative: Patrick Rennie, Montana DNRC Archaeologist, was contacted for his input on cultural resources in this area. He has seen no evidence that 2-D seismic activities, on frozen or dry ground, have any ability to impact any kind of cultural resource.

No Action Alternative: Historical and archaeological resources present on this tract of land will remain intact. Unknown historical and archaeological resources present on this tract of land will not be disturbed. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

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?

Action Alternative: The proposed project is located in a rural area. This project will not be visible to the surrounding communities, as this tract of land is surrounded by private land. The project will create some excessive noise, throughout the entire length of the project. However, the noise levels will return to normal once the project is completed and the seismic company pulls out of the area.

No Action Alternative: The aesthetic character that is currently found on this tract of land will remain the same. There will be no excessive noise levels in this area. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, and AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?

Action Alternative: The agricultural and grazing land will receive some minimal impacts with this type of project. The project will take place while the ground is frozen or dry, in order to limit the impact to the vegetation on the native rangeland and reduce soil compaction on the agricultural land. The project will not use resources that are limited in the area. There are no other activities in the area that will affect this project.

No Action Alternative: There will be no demands on the environmental resources of land, water, air or energy on this tract of land. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?

Action Alternative: The Montana DNRC will continue to monitor mineral and surface management activities on these lands in order to assess the impacts from this type of project on the surrounding ecosystem. The Montana DNRC will continue to administer the licensed activities that are currently authorized to take place under Klabzuba Oil & Gas, Inc.'s oil and gas lease with the State of Montana on this tract of land.

No Action Alternative: The Montana DNRC does not have any other studies, plans, or projects for this tract of land at this time. The Montana DNRC, Trust Land Management Division will continue administer all mineral and surface management activities on lands that are owned by the State of Montana. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

III. IMPACTS ON THE HUMAN POPULATION

RESOURCE

POTENTIAL IMPACTS AND MITIGATION MEASURES

14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?

Action Alternative: Grant Geophysical, Inc., its subcontractors, and/or their employees understand the risks involved with this type of project. They assume the risks involved in seismic project as an occupational hazard. The project will have no long-term impacts to the human health and safety of the people found in this area.

No Action Alternative: The human health and safety risks found in this area will continue to remain minimal. There will be no human health or safety risks to the seismic company, subcontractors, and/or its employees, if this project is denied. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.

<p>15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>Action Alternative: The Montana DNRC has set up stipulations for the seismic company to ensure that the industrial, commercial, and agricultural activities will not be altered with this type of project. The native rangeland will be impacted with this type of activity. The proposed project will matt the grass down, but will not impact the long-term, forage production of the native grazing land found on this tract. The overall damages to the agricultural land should be minimal since the crops have been harvested. The project will produce some soil compaction on the agricultural land, which may lower the potential yield of wheat crops for the next year of so. Damages to the grazing land and agricultural land will be settled with David & Teresa Cornell within a reasonable time period following the completion of the proposed seismic project.</p> <p>No Action Alternative: The industrial, commercial, and agricultural activities currently found on this tract of land will not be altered. Native rangeland forage production will remain the same. The agricultural production will not be lowered from soil compaction. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>
<p>16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.</p>	<p>Action Alternative: This project will not alter the quantity and distribution of employment in this area. The project will create short-term jobs for the seismic company's employees, but will have no impact on the local quantity and distribution of employment.</p> <p>No Action Alternative: The quantity and distribution of employment will not be impacted in the surrounding area. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>
<p>17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?</p>	<p>Action Alternative: The project will not create or eliminate tax revenue in Blaine County. The local and state tax base will remain the same in this county, regardless of the outcome of this seismic project.</p> <p>No Action Alternative: The local and state tax base will not be impacted in this county. Tax revenues in Blaine County will not be created or eliminated. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</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>Action Alternative: The project will increase traffic on the existing roads throughout the entire length of time it takes to complete this project. Traffic will return to normal, once the seismic company has completed the project. The project will not require other services such as police, fire departments, or schools. No additional government services will be needed for this project.</p> <p>No Action Alternative: There will be no additional demands for government services on this tract of land. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>
<p>19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?</p>	<p>Action Alternative: The goal of the Montana DNRC/TLMD is to manage the State of Montana's trust land resources to produce revenue for the trust beneficiaries, while considering environmental factors and protecting the future income-generating capacity of the land. Exploring for natural gas and oil formations on land, in which the State of Montana owns the mineral rights has to potential to increase revenues for the trust beneficiaries. Natural gas and oil exploration has the ability to increase the income-generating capacity of the land. If natural gas or oil formations are found on this tract of land, Klabzuba Oil & Gas, Inc. may decide to drill and exploratory well to tap this resource. If the well is successful, additional revenue may get be generated for the trust beneficiaries, through royalties from the sale of natural gas and/or oil.</p> <p>No Action Alternative: There will be no impacts to the locally adopted environmental plans or goals that the Montana DNRC/TLMD has for this tract of land. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</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>Action Alternative: The location of the proposed project does have recreational potential. However, this tract of land does not have legal access for recreational activities by the public. The surface of this tract is privately owned by David & Teresa Cornell and they control all recreational activities on this tract of land. Upland game bird hunting, big game hunting, bird watching, and hiking are just some of the types of recreational activities that take place in this area. The proposed project will not alter these activities. Recreational activities will not be impacted with this type of project on this tract of land.</p> <p>No Action Alternative: The access to and quality of the wilderness and recreational activities found in this area will continue to remain the same. This tract of land is not legally accessible to the general public and will continue to remain this way. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>Action Alternative: The density and distribution of population and housing will not be impacted with the approval of the proposed seismic project. The proposed project will increase traffic on the designated roads into the area, throughout the entire length of time it takes to complete the project. The location of the proposed project is in a rural area. This area is primarily used for livestock grazing purposes and the production of dryland agricultural commodities. This project will not add to the population or require additional housing in this area.</p> <p>No Action Alternative: The density and distribution of population and housing will not change in this area. The Montana DNRC will not issue Grant Geophysical, Inc. a seismic permit to conduct a 2-D seismic project across this tract of land.</p>

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	N.S.I
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By: Clive Rooney
Name

Area Manager, Northeastern Land Office
Title


Signature

12-73-4
Date