

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION

NORTHEASTERN LAND OFFICE

DNRC - Trust Land Management Division



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STATE OF MONTANA

RECEIVED

HAVRE UNIT OFFICE
PO BOX 868
210 SIXTH AVENUE
HAVRE MONTANA 59501-0868

NOV 9 2004

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

November 5, 2004

MEMORANDUM

TO: Clive Rooney, Area Manager, Northeastern Land Office
Wanda Walks, Mineral Leasing Section, Helena Office

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

RE: Seismic Permit No. 1441
Grant Geophysical / Klabzuba Oil & Gas, Inc.
Township 34.0 North, Range 15.0 East, MPM
Section 09: N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ (Surface Only)
Section 14: NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ (O&G), N $\frac{1}{2}$ (Surface)
Section 16: All
Section 20: All (No Surface)
Hill County

Grant Geophysical is proposing to conduct a 2-D seismic project across the above referenced tracts of state land. Grant Geophysical will be conducting the seismic work on behalf of Klabzuba Oil & Gas, Inc. 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 seismic project will involve approximately 1 $\frac{3}{4}$ miles across the surface of state grazing land. 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 state's surface lessee(s); Hans Verploegen and Joseph H. Verploegen, to inform them of the proposed seismic project. 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 grazing land associated with these tracts of state land. The vegetation will be matted down and the total available livestock forage on these tracts will be lowered. However, there will be minimal negative impacts to the remaining natural resources found on these tracts of state land, if the proponent conducts this project during dry or frozen surface conditions and complies with the Departments terms and conditions for seismic activity on state land.

I have concluded in the Environmental Assessment Checklist that no major environmental impacts are expected with this project. I have attached the EA 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 this project across the above referenced tracts of state land. Listed below are the stipulations for Seismic Permit No. 1441:

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 state owned land and shall prevent or eradicate the spread of those noxious weeds onto land adjoining the leased premises.
3. One of these tracts of state land does contain significant archaeological, historical, and/or paleontological resources. Several stone circles were observed in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 16, T34N, R15E. This area will be off limits to all seismic recording vehicles for this project. 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 state lands, vehicles and ATV's used on state land must be power washed prior to use on the project.
6. Permittee shall contact the state's surface lessee(s) Hans Verploegen and Joseph H. Verploegen, 48 hours prior to any seismic activity on these tracts of state 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 these tracts of state 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. Lohman Coulee and its associated intermittent drainages located in Sec. 16, T34N, R15E will be off limits to all seismic recording vehicles for this project. All receiver lines in these areas will be placed by hand crews.
11. All gates will be closed and all fences that are taken down will be repaired to their original condition 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 these tracts of state 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 within a reasonable time period following the completion of the proposed seismic project.

Enclosure: EA Checklist

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Seismic Permit No. 1441	Proposed Implementation Date: December 15, 2004
Proponent: Grant Geophysical, Inc., PO Box 383, Havre, MT 59501	
Type and Purpose of Action: Grant Geophysical is proposing to conduct a 2-D seismic project for the exploration of natural gas formations across several tracts of state surface and subsurface owned lands. The seismic project will involve approximately 1¼ miles across the surface of state grazing lands. Grant Geophysical will be conducting the seismic project on behalf of Klabzuba Oil & Gas, Inc., whom is the oil & gas lease holder on a majority of these tracts.	
Location: Township 34.0 North, Range 15.0 East, MPM Section 09: N½NW¼, SE¼SE¼ (Surface only) Section 14: NE¼NW¼, S½NW¼, NE¼ (O&G), N½ (Surface) Section 16: All Section 20: All (No Surface)	County: Hill County, Montana

I. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	The Department of Natural Resources and Conservation (DNRC) has been petitioned by Grant Geophysical to conduct a 2-D seismic project across the above referenced tracts of state land. Klabzuba Oil & Gas, Inc. has hired Grant Geophysical to conduct this seismic project. Klabzuba Oil & Gas, Inc. is the State of Montana's oil and gas lessee on two of these tracts of state land. The Montana DNRC sent out scoping letters to the state's surface lessee(s), Hans Verploegen and Joseph H. Verploegen, identifying the proposed seismic project across these tracts of state land.
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	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 activity on State School Trust Lands. Grant Geophysical will need to obtain a seismic permit from the Montana DNRC, prior to conducting any seismic activity on state 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.

3. ALTERNATIVES CONSIDERED:	<p>Action Alternative: The Montana DNRC will give Grant Geophysical permission to conduct this 2-D seismic project across these tracts of state land. The Montana DNRC will issue Grant Geophysical a seismic permit to conduct a 2-D seismic project for the exploration of natural gas formations across these tracts of state land.</p> <p>No Action Alternative: Deny Grant Geophysical permission to conduct a 2-D seismic project across these tracts of state land. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state land.</p>
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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 these tracts of state land. The soils are suitable for this type of activity, but may experience some compaction due to the heavy equipment that is used. Lohman Coulee and its associated intermittent drainages will be off limits to all seismic recording vehicles for this project. All receiver lines in these areas will be placed by hand crews. There are no special reclamation considerations for this project.</p> <p>No Action Alternative: The soils that are located on these tracts of state land will not be disturbed. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state land.</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

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?

Action Alternative: The proposed seismic routes do not contain any important surface and/or groundwater resources. 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. This type of activity does not have the potential to contaminate drinking water or degrade the present water quality found in this area.

No Action Alternative: The water quality, quantity, and distribution currently found on these tracts of state land 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 a seismic permit to conduct this 2-D seismic project across these tracts of state land.

6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

Action Alternative: The seismic project is expected to have a minimal impact on the air quality located within the surrounding area of the proposed activity. An increase in traffic across the existing trails and roads by the seismic company will produce some particulates during the initial stages of the project. However, after the seismic company completes the project, traffic will return to normal in these areas and air quality will be good.

No Action Alternative: The present air quality will not be impacted on these tracts of state land. No pollutants or particulates will be produced in this area. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state land.

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*).

Action Alternative: The proposed project is expected to have a minimal impact on the vegetative cover, quantity, and quality across these tracts of state land. The vegetation in the immediate area of disturbance will be matted down and the total available livestock forage will be lowered on these tracts. There are no rare plants or cover types associated with these tracts of state land. 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 Lohman Coulee and its associated intermittent drainages. All receiver lines will be laid by hand crews in these areas to avoid increased erosion on these thin soils. The vegetative communities found within these areas will not be disturbed by the heavy equipment that the seismic company uses for this type of project.

No Action Alternative: The vegetative communities found throughout the proposed project area will not be altered on these tracts of state land. Rare plants and/or cover types will be impacted by this project. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project for the exploration of natural gas formations across these tracts of state 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 species may be temporarily dispersed in this area, throughout the course of 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 or diminished by allowing Grant Geophysical to conduct this project. The Montana DNRC has implemented mitigated measures to ensure that the wildlife and bird species found in this area will not be permanently impacted.

No Action Alternative: The terrestrial and avian life and their associated habitats will not be impacted on these tracts of state land. Wildlife and bird species will not be temporarily dispersed in this area. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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. There are no wetlands located within the immediate area of the proposed disturbances. Federally listed, threatened, and endangered species will be able to migrate through this area with minimal disturbance. There are no sensitive species or species of special concern known to use these areas as habitat. However, the potential of occasional use does exist. 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 and/or limited environmental resources found within the area of the proposed project will not be impacted. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

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

Action Alternative: The Montana DNRC has surveyed the proposed project areas for existing cultural resources. Several tepee rings were observed in the SE4SE4NW4, Sec. 16, T34N, R15E. This area will be off limits to all seismic recording vehicles. The Montana DNRC Archaeologist, Patrick Rennie, 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 these tracts of state land will remain intact. Unknown historical and archaeological resources present on these tracts of state land will not be disturbed. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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. The seismic project will be visible to the surrounding communities and public, until next year when native grasses begin new growth. The project will create some excessive noise throughout the entire length of time it takes to complete the project. However, the noise levels will return to normal once the project is completed and the seismic company pulls out of the area. The aesthetic character of the land will not be permanently altered with this type of project.

No Action Alternative: The aesthetics that currently exist on these tracts of state land will not be diminished. There will be no excessive noise produced in this area. The project will not be visible to the public. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

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 grazing land associated with these tracts of state land will receive some impacts with this type of activity. The project will take place while the ground is frozen or dry, in order to limit the impact to the soil and vegetative resources. The project will not use resources that are limited in the area. There are no other activities in the area that will affect the project or surrounding communities.

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

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 tracts of state land to assess the impacts that these projects have on the surrounding ecosystem. The Montana DNRC will continue to administer the licensed surface activities that are currently taking place on these tracts of state land.

No Action Alternative: No further studies, plans, or projects are planned for these tracts of state land at this time. The Montana DNRC, Trust Land Management Division will continue to perform field inspections on tracts of state owned land every ten years in accordance with Montana State Statute. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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?	<p>Action Alternative: Grant Geophysical, its subcontractors, and/or their employees understand the risks involved with this type of project. They assume the risks involved in a 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.</p> <p>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 a seismic permit to conduct this 2-D seismic project across these tracts of state land.</p>
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	<p>Action Alternative: The Montana DNRC has set up stipulations for Grant Geophysical to ensure that the industrial, commercial, and agricultural activities that currently exist on these tracts of state land 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, future, forage production on this tract of grazing land. Damages to the native rangeland will be settled with the state's surface lessees within a reasonable time period following the completion of the proposed seismic project.</p> <p>No Action Alternative: The industrial, commercial, and agricultural activities will not be altered on these tracts of state land. Native rangeland forage production will remain the same. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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 Grant Geophysical'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 seismic company's employees travel all around the United States doing seismic projects and they will simply move on to the next job. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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 within Hill County. The local and state tax base will remain the same.</p> <p>No Action Alternative: The local and state tax base will not be impacted. Tax revenue will not be created or eliminated within Hill County. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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 course of 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 on these tracts of state land.</p> <p>No Action Alternative: There will be no additional demands for government services in this area. Substantial traffic will not be added to the existing roads and trails in this area. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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 state land has the potential to increase the development of natural gas and oil wells. This type of development has the ability to increase the income-generating capacity of the land on these tracts of state land. If natural gas or oil formations are found on the state land, additional revenue may get be generated for the trust beneficiaries, through royalties from the sale of natural gas and/or oil, if those wells are successful for commercial production.</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 these tracts of state land. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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. These tracts of state land do have legal access for recreational activities. 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.</p> <p>No Action Alternative: The access to and quality of the recreational activities found in this area will continue to remain the same. These tracts of state land have legal access and will continue to be used for recreational purposes by people who possess a State Lands Recreational Use License. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state 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 project. The proposed activity will increase traffic on the designated roads into the areas of the project. The increase in traffic will occur throughout the entire time it takes to complete the seismic project. The proposed project is located in a rural area. This area is primarily used for livestock grazing purposes and the production of dryland agricultural commodities.</p> <p>No Action Alternative: The density and distribution of population and housing will not change in this area. The proposed project will not have any impact on the density and distribution of population and housing in this area regardless of the decision from the Montana DNRC. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct this 2-D seismic project across these tracts of state land.</p>
<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>Action Alternative: This project will have a minimal impact on the traditional lifestyles found in this area. The social structures and mores will not be impacted by the proposed seismic activity, especially since these communities are located in rural areas.</p> <p>No Action Alternative: The social structures and mores will continue to stay the same. The native and traditional lifestyles found in this area will not be disrupted. Grant Geophysical will not be issued a seismic permit to conduct seismic activities on these tracts of state land.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>Action Alternative: The proposed activity will not cause a shift in any of the unique qualities found within the surrounding area. The seismic project will not change the cultural uniqueness and/or the diversity currently found on these tracts of state land.</p> <p>No Action Alternative: The cultural uniqueness and diversity of the land and its people will not be altered. The Montana DNRC will not issue Grant Geophysical a seismic permit to conduct seismic activities on these tracts of state land.</p>

