U.S. Department of the Interior Bureau of Land Management White River Field Office 73544 Hwy 64 Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-152-EA

CASEFILE/PROJECT NUMBER (optional): CO-11000-3150-04-01

PROJECT NAME: Williams Seismic

LEGAL DESCRIPTION: T4S R97W T4S R98W T5S R97W T5S R98W

APPLICANT: Williams and Dawson Geophysical

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction:

Proposed Action: Dawson Geophysical has requested a Geophysical Permit. Their bond for \$50,000, #QL-J91-16737-002 is on file for this project.

The applicant completed a 2D seismic survey on 70 linear miles within the Trail Ridge area in the fall of 2003.

This proposed action is an extension of the project completed in 2003. Approximately 22 miles of 2-D line is proposed. 5 miles will be on BLM surface. Source points will be vibroseis trucks or dynamite shot points, drilled by buggy mounted drill rigs or heli-portable drill rigs. Vibroseis trucks will be used on 0.6 miles of existing roads and 0.28 miles of sage brush. Heli-portable drill rigs will be used on 2.6 miles of source line. Buggy drills will be used on 1.6 miles of source line. The receiver line consists of a series of receivers connected by an electric cable laid parallel to the source line. The receivers in the line will collect information from the vibrations.

The proposed seismic lines, as portrayed on the attached map, were modified on the ground to follow the existing roads and trails as much as possible. In areas not accessible by roads and trails, the applicant proposes to employ heli-portable drills, or buggy drills, to drill forty-foot holes in which ten-pound charges will be placed. No drill pads will be constructed. Staging areas, landing areas, explosive storage, etc. will be on private surface. All source points, receiver lines and use areas on BLM lands will have an archaeological survey prior to the start of the project. There will be no blading of access routes, cutting of trees or off road travel by wheeled

vehicles other that the buggy drills. Receiver points will be 55 feet apart. Source points will be 330 feet apart.

No Action Alternative: *No seismic testing would take place.*

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

NEED FOR THE ACTION: Dawson Geophysical requested approval to do seismic testing.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

<u>Name of Plan</u>: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

<u>Decision Number/Page</u>: Page 2-5: "Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action. During periods of low precipitation, air quality in the area of the proposed action is often diminished by dust caused by human disturbance.

Environmental Consequences of the Proposed Action: The proposed action could result in short term, local impacts to air quality during the seismic activity, due to vehicles traveling on roads and dust being blown into the air. This impact would only last as long as they are working on the project.

Environmental Consequences of the No Action Alternative: No increase in dust will occur.

Mitigation: None.

CULTURAL RESOURCES

Affected Environment: The proposed routes across BLM lands have been inventoried at the Class III (100% pedestrian) level (Frizell, Derks and Frizell 2003, Compliance Dated 9/4/2003) with four cultural resources identified.

Environmental Consequences of the Proposed Action: Provided the avoidance recommendations and mitigation measures outlined below are followed for avoidance of the sites there will be no impacts to cultural resources. BLM will coordinate with the applicant regarding location of theses sites.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: All cultural resources must be avoided by all seismic line activity. Further, seismic line personnel are to avoid entering the sites at all times and be confined to the jug and source line routes only to avoid further impacts to the sites.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Houndstongue, yellow toadflax, mullein, bull and Canada thistle are all present in the project area. Their potential for spread and proliferation is directly proportional to the extent and duration of earthen disturbance in the project area.

Environmental Consequences of the Proposed Action: The proposed action is expected to create a small amount of earthen disturbance. With mitigation (see below) there will be little proliferation of these noxious species.

Environmental Consequences of the No Action Alternative There will be no change from the present situation.

Mitigation: In order to preempt noxious weed invasion, all disturbed sites should be revegetated with Native Seed Mixture #6. This may mean broadcast seeding and hand raking to insure seed coverage. Monitor the project area for a minimum of three years post completion to detect establishment of noxious weeds on disturbed sites. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer.

MIGRATORY BIRDS

Affected Environment: There are a number of migratory birds that fulfill nesting functions in these aspen and mountain shrub types during the months of May, June, and July, including several species identified as having higher conservation interest by the Rocky Mountain Bird Observatory, Partners in Flight program (i.e., Brewer's sparrow, green-tailed towhee, blue grouse, common poorwill, Virginia's warbler, broad-tailed hummingbird, red-naped sapsucker, purple martin, Cordilleran flycatcher, and MacGillivray's warbler). With the exception of the mature aspen-associated cavity-dwellers (i.e., the relatively rare purple martin and uncommon red-naped sapsucker), most nesting attempts are complete by the first or second weeks of July. Nest activity of the later nesting species can extend into late July or early August.

Environmental Consequences of the Proposed Action: This project would be implemented late in the breeding season of 2004 (after July 9) at a point when virtually all primary nesting attempts of passerine birds have been completed. Later nesting species are predominantly cavity dwellers, whose chicks, by the nature of the nest substrate, are not vulnerable to premature or inadvertent nest departure. Although intense at close range, helicopter and buggy drilling activity is localized and brief and at this late date would not prompt nest abandonment or prolonged adult absences. Intermittent ground crew activity is low intensity and transient. Proposed seismic activity during these timeframes would have no measurable influence on the breeding activities of migratory birds.

Environmental Consequences of the No Action Alternative: There would be no action immediately authorized that would have potential to disrupt the breeding activities of migratory birds. Alternate plans for seismic work could very well involve the period between late May and early July during the peak of migratory bird breeding activity, thereby increasing the potential for more substantive effects on breeding efforts.

Mitigation: None.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no listed, proposed, or candidate animals that occupy or derive important benefit from the project area. Sensitive species that are associated with upper Piceance Creek and the Roan Plateau include northern goshawk, northern sage grouse, and Colorado River cutthroat trout. Goshawk occupy woodland and forest types throughout the year in northwest Colorado, preferring to nest in mature aspen and coniferous forests (May through July). BLM has no records of goshawk nest sites in close association with proposed seismic lines. Biological consultants systematically searched suitable nest substrate (i.e., aspen) within 0.25 mile of all seismic lines in June 2004 and found no evidence of goshawk nesting activity.

Sage grouse occupy higher elevation sagebrush ranges across the Piceance Basin and Roan Plateau. Similar to many populations throughout the west, this population has undergone dramatic decline over the last 20 years. Suggested reasons for these birds' decline are varied, but no definitive issues have been established for this population of birds. Only one strutting ground

has been documented in the Willow and Hunter Creek watersheds and these sites are no longer recognized by the Colorado Division of Wildlife. Two active strutting grounds are situated on the west side of Puddin Ridge in close proximity to the southern ends of Lines 32 and 34. Birds attend these sites from March through May. Nesting functions associated with these leks (April through mid-July) continue to be fulfilled in suitable sagebrush habitats throughout the project area.

Colorado River cutthroat trout occupy a number of larger perennial systems off the Roan Plateau. However, the smaller tributary streams traversed by the proposed project are, by reasons of flow volume or persistence, unable to support a fisheries.

Environmental Consequences of the Proposed Action: Seismic activity, particularly techniques that involve the use of helicopters and off-road buggy drills, can represent a recurrent, high intensity use that is capable of disrupting sensitive seasonal use activities of raptors and sage grouse.

Conducted during the late summer through early fall months, this proposed method of seismic (i.e., no vegetation clearing with cross-country buggy and heli-portable drilling, no wheeled support vehicles off-road, and vibroseis on existing roads) would pose no reasonable risk to raptor or sage grouse reproductive activities (including reproductive display and nesting). Heli-portable drilling and helicopter crew support is a locally intense and often recurrent source of disturbance, but leaves virtually no trace of surface use and has no subsequent influence on wildlife habitat conditions. Off-road buggy drilling will be offset forward and back; their wide track over shrub vegetation does not lend itself to subsequent use by pickup trucks or ATVs. The crushing or rolling-over of older shrub vegetation in these higher elevation sagebrush and serviceberry would not result in significant plant mortality; their tracks would not offer a clearly defined linear feature and canopy character would redevelop indistinguishable from surrounding growth within 1 to 2 years.

Environmental Consequences of the No Action Alternative: There would be no action immediately authorized that would have potential to influence special status wildlife.

Mitigation: In the event this operation is not conducted or completed prior to February 2005, further NEPA analyses regarding seismic's affect on sage grouse strutting, nesting, and brood-rearing function, and raptor nest use (including inventory) would be required.

Finding on the Public Land Health Standard for Threatened & Endangered species: Habitats associated with the project area meet the public land health standard for Threatened & Endangered animals in terms of utility and condition. As proposed, this operation would have no conceivable influence on sagebrush character as sage grouse habitat, nor woodland character as potential goshawk nesting and wintering habitat and would, therefore, not interfere with continued meeting of the standard.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: There are no Threatened, Endangered or Sensitive plant species occurring in the proposed area or affected by the proposed action.

Environmental Consequences of the Proposed Action: None

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species. Thus there would be no effect on achieving the land health standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at this site.

Impact of Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated.

Impact of No Action Alternative: No hazardous or other solid wastes would be generated under the no action alternative.

Mitigative Measures: The operator shall be required to collect and properly dispose of any solid wastes generated by this project.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: BLM conducted a review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment to see if any water quality concerns have been identified. The seismic lines are in Parachute Creek, Roan Creek, which are tributary to the Colorado River, and Piceance Creek, which is tributary to the White River. The proposed seismic lines are in Segment 11e, of the Colorado River Basin and Segment 16 of the White River Basin.

The State has classified these segments as "Use Protected" reaches. Their designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected.

For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli. This segment retained its Recreation Class 2 designation after sufficient evidence was received that a Recreation Class 1a use was unattainable.

Environmental Consequences of the Proposed Action: Impacts to water quality from permitting the seismic routes, such as increase in sediment transport, would be minimal.

Environmental Consequences of the No Action Alternative: Impacts are not expected from the no action alternative.

Mitigation: None

Finding on the Public Land Health Standard for water quality: : Impacts to this watershed would *not* cause it to no longer meet the water quality standards established by the State of Colorado which is the Public Land Health Standard for water quality.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: Involvement of intermittent or perennial channels that support riparian vegetation on federal surface is limited to West Willow Creek and Camp Gulch. In both cases, riparian vegetation is generally confined to a narrow 1 to 1.5 foot channel with limited flow (less than 1/4 cubic foot per second).

Environmental Consequences of the Proposed Action: This seismic operation would have no influence on the character or function of any riparian or wetland (i.e., spring sites) communities in the project area. The only disturbance that these systems would be subjected to would be pedestrian travel by small groups of surveying, drilling, and recording personnel. No wheeled vehicles would be used for the transport of equipment or personnel off existing roads. All buggy and helicopter drill use would be confined to terrestrial communities beyond channel features (e.g., floodplain). Support and vibroseis truck use in valleys, including those supporting riparian vegetation, would be confined to existing roads.

Environmental Consequences of the No Action Alternative: There would be no action immediately authorized that would have potential to influence riparian or wetland systems in the project area.

Mitigation: None

Finding on the Public Land Health Standard for riparian systems: The proposed action would not involve surface disturbance of wetlands or channels supporting riparian vegetation. Because there would be no potential for direct or indirect modification of these systems, its implementation would be incapable of altering riparian and wetland conditions or function as they pertain to the public land health standards.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACECs, flood plains, prime and unique farmlands, Wilderness or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: Soils of the area are generally deep and well drained with a loam surface texture and channery sandy clay loam subsoil extending to greater than 30 inches. In an undisturbed condition runoff is slow and the erosion hazard is slight. However, if the surface is disturbed, and runoff is rapid the erosion hazard can be severe.

Environmental Consequences of the Proposed Action: : Little, if any, negative impacts are expected as a result of the proposed action.

Environmental Consequences of the No Action Alternative: Impacts from the no action alternative are not expected.

Mitigation: Vehicle traffic will be restricted to existing roads and trails.

Finding on the Public Land Health Standard for upland soils: Impacts to these soils would *not* cause it to no longer meet the standards established by the State of Colorado which is the Public Land Health Standard for soils.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Vegetation in the project area is variable, with the drainages dominated by basin big sagebrush with a grass/forb understory. The uplands are dominated by Wyoming and mountain big sagebrush mixed with Utah serviceberry with a diverse understory of grasses and forbs. Interspersed with the above types are groves of aspen woodlands that occur primarily on the north slopes.

Environmental Consequences of the Proposed Action: The primary threat to the health of the native plant communities in the project area would be from entry and proliferation of noxious and invasive species initially occurring on unmanaged earthen disturbance created by the project.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: : In order to preempt noxious weed invasion, all disturbed sites should be revegetated with Native Seed Mixture #6. This may mean broadcast seeding and hand raking to insure seed coverage. Monitor the project area for a minimum of three years post completion to detect establishment of noxious weeds on disturbed sites. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): Upland plant communities in the project area currently meet the Standard. These plant communities will continue to meet the Standard as a result of the proposed action.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The proposed action would not intersect any intermittent or perennial channel on BLM surface that supports anything but the most rudimentary invertebrate-based aquatic system.

Environmental Consequences of the Proposed Action: This seismic testing would have no influence on aquatic systems or attendant riparian vegetation. The only disturbance that these systems would be subjected to would be pedestrian travel by small groups of surveying, drilling, and recording personnel. No wheeled vehicles would be used for the transport of equipment or personnel off existing roads. Saturated soil conditions are avoided during the drilling of shot holes for practical reasons. There is sufficient latitude in shot hole placement to accommodate avoidance of riparian and wetland vegetation.

Environmental Consequences of the No Action Alternative: There would be no action immediately authorized that would have potential to influence aquatic habitats.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): Project implementation would have no potential to adversely influence the character, function, or condition of channel systems or the downstream aquatic communities they support. Neither the proposed or no-action alternatives have any reasonable potential for directly or indirectly modifying channel conditions/function or water quality parameters as they pertain to the public land health standards for aquatic habitat.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The higher elevation portions of the Roan Plateau and Piceance Basin are generally occupied by elk and deer from May through December. The most important function of this area is fulfilled from May through September when deer and elk rear their young. At this time, animal distribution and use is centered on forested tracts and sources of water.

The numerous tracts of aspen forest dispersed throughout the project area are also favored nesting habitat for a number of woodland dwelling raptors, including, for example, Cooper's and sharp-shinned hawk. Biological consultants systematically searched suitable nest substrate (i.e., aspen) within 0.25 mile of all seismic lines in June 2004. Seven nests were mapped, 2 of which were active red-tailed hawk nests located 0.35 miles and 0.22 miles from the nearest seismic line. One nest (at 0.22 mile from nearest line) held 1 chick of advanced age (i.e., imminent fledging) on 16 June; the other holding 2 downy young (at least 21 days old). It is calculated that these chicks, 0.35 mile from the nearest line, would fledge no later than 9 July.

Environmental Consequences of the Proposed Action: Because support vehicle use would be confined to existing roads and helicopter and buggy drilling operations have virtually no affect on vegetation, this form of seismic testing would have no effective influence on habitat conditions as forage or cover for wildlife.

Proposed seismic activity, particularly the extensive use of helicopters across the area's wooded tracts, would be an intense, but localized and transient form of disturbance. These influences could have locally important affects (e.g., temporary displacement into poorer cover) on big game raising younger offspring in July. Under the condition that helicopter use would remain confined to established flight lines and with strategically selected staging areas, this operation could be adjusted so as to affect a very small fraction of the project area's forested tracts. As such, the project would have no meaningful adverse influence on the affected big game population. It is unlikely that the buggy use on existing roads or open ridgelines would displace animals from tracts of woodland cover.

The impact of this seismic operation on woodland raptor nesting activity is identical to the discussion for northern goshawk in the T&E Animal section. There is no reasonable probability that low level helicopter flights along the lines, either during drilling or equipment transport, would adversely influence raptor nesting efforts.

Environmental Consequences of the No Action Alternative: There would be no potential to disrupt sensitive wildlife functions.

Mitigation: In the event this operation is not conducted or completed prior to February 2005, further NEPA analyses regarding seismic's affect on big game summer range functions and raptor nest use (including inventory) would be required. In addition, the project proponent will coordinate with the BLM in planning to minimize the effective influence of helicopters on big game habitats during June and July.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): Habitats associated with the project area meet the public land

health standard for animal communities in terms of utility and condition. As proposed, this operation would have no conceivable influence on habitat character from the forage or cover perspective and it would be performed largely during one of the least sensitive timeframes for big game and raptors. Neither the proposed or no-action alternative would interfere with continued meeting of the standard.

<u>OTHER NON-CRITICAL ELEMENTS</u>: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not	Applicable or Present No Impact	Applicable & Present and Brought Forward for
	Present	Tresent, No Impact	Analysis
Access and Transportation	Х		
Cadastral Survey	Х		
Fire Management			
Forest Management	Х		
Geology and Minerals	Х		
Hydrology/Water Rights			Х
Law Enforcement		Х	
Paleontology			Х
Rangeland Management		Х	
Realty Authorizations			Х
Recreation	Х		
Socio-Economics		Х	
Visual Resources			Х
Wild Horses	Х		

HYDROLOGY AND WATER RIGHTS

Affected Environment: There are several springs located within the proposed action. BLM has an absolute water right for .002 cfs. These springs are BLM 185-02, 185-03, 185-49, and 194-09. These springs are located in T5S R97W sections 6, 7, and 12.

Environmental Consequences of the Proposed Action: If Williams abides by the standards set by the state (see mitigation below); there should not be any impacts.

Environmental Consequences of the No Action Alternative: Impacts are not anticipated from the no action alternative.

Mitigation: The applicant will follow Colorado Rule 333: SEISMIC OPERATIONS, C(2) Blasting Safety Setbacks in the Colorado Oil and Gas Conservation Commission Rules and Regulations, 300 series, Drilling, Development, Producing and Abandonment. For a 10 lb. Charge the setback is 600 ft.

PALEONTOLOGY

Affected Environment: The proposed action is in an area where the Parachute Creek Member of the Green River Formation out crops. The BLM has classified the Parachute Creek Member as a Category I formation indicating that it produces fossils of scientific interest.

Environmental Consequences of the Proposed Action: If there is no excavation into the underlying formation for road upgrade and improvement, there should be no damage to important fossils. Excavation into the underlying bedrock for road, drill pad or work/staging areas may impact important fossils but the extent of the impacts cannot be determined at this time.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: If there is to be any road maintenance work, all exposed outcrops of the formation shall be examined by a BLM-approved paleontologist who will prepare a report listing fossils present, if any, and recommended mitigation. The report shall be submitted to the BLM prior to the initiation of construction. If it becomes necessary to excavate into the underlying bedrock to upgrade and improve the road then a paleontological monitor shall be required.

REALTY AUTHORIZATIONS

Affected Environment: The proposed seismic lines cross and approach existing pipeline rights-of-way.

Environmental Consequences of the Proposed Action: There are 6 pipeline rights-of-way on the public lands near or on the proposed seismic lines.

Environmental Consequences of the No Action Alternative: None

Mitigation: The Colorado One Call Law procedures must be used when crossing or approaching existing pipelines at a distance that causes safety concerns.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management area (ERMA). The ERMA will is managed custodially to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

Environmental Consequences of the Proposed Action: If proposed action occurs within big game hunting season (September through November) it may impact any hunters due to the

impression that helicopter over flights cause big game animals to flee an area although this is unlikely as this area is difficult to access for public land hunters.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: This project is in an area classified as VRM Class 3. VRM Class 3 management allows for development as long as the development does not dominate the new landscape.

Environmental Consequences of the Proposed Action: Seismic lines will follow existing roads, which will not be upgraded. Guidelines for VRM Class 3 will be met.

Environmental Consequences of the No Action Alternative: No impacts

Mitigation: None needed

CUMULATIVE IMPACTS SUMMARY: No cumulative impacts were identified.

PERSONS / AGENCIES CONSULTED: BLM specialists.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Caroline Hollowed	Hydrologist	Air Quality
Tamara Meagley	NRS	Areas of Critical Environmental Concern
Tamara Meagley	NRS	Threatened and Endangered Plant Species
Mike Selle	Archeologist	Cultural Resources
		Paleontological Resources
Mark Hafkenschiel	Rangeland Management	Invasive, Non-Native Species
	Specialist	
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal
		Species, Wildlife
Marty O'Mara	Hazmat Collateral	Wastes, Hazardous or Solid
Caroline Hollowed	Hydrologist	Water Quality, Surface and Ground
		Hydrology and Water Rights

Name	Title	Area of Responsibility
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	ORP	Wilderness
Caroline Hollowed	Hydrologist	Soils
Caroline Hollowed	Hydrologist	Vegetation
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	ORP	Access and Transportation
Max McCoy	NRS	Fire Management
Paul Daggett	Mining Engineer	Geology and Minerals
Mark Hafkenschiel	Rangeland Management Specialist	Rangeland Management
Linda Jones	Reality Specialist	Realty Authorizations
Chris Ham	ORP	Recreation
Max McCoy	NRS	Visual Resources
Valerie Dobrich	NRS	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

СО-110-2004-152-ЕА

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a <u>Finding of No Significant Impact on</u> the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve the implementation of the seismic testing project as described in the proposed action with mitigation measures listed below.

<u>MITIGATION MEASURES</u>: All cultural resources must be avoided by all seismic line activity. Further, seismic line personnel are to avoid entering the sites at all times and be confined to the jug and source line routes only to avoid further impacts to the sites.

In the event this operation is not conducted or completed prior to February 2005, further NEPA analyses regarding seismic affect on sage grouse strutting, nesting, and brood-rearing function, raptor nest use (including inventory), and big game summer range functions would be required. In addition, the project proponent will coordinate with the BLM in planning to minimize the effective influence of helicopters on big game habitats during July.

In order to preempt noxious weed invasion, all disturbed sites should be revegetated with Native Seed Mixture #6. This may mean broadcast seeding and hand raking to insure seed coverage. Monitor the project area for a minimum of three years post completion to detect establishment of noxious weeds on disturbed sites. Eradicate all noxious weeds using materials and methods approved by the Authorized Officer.

The applicant will follow Colorado Rule 333: SEISMIC OPERATIONS, C(2) Blasting Safety Setbacks in the Colorado Oil and Gas Conservation Commission Rules and Regulations, 300 series, Drilling, Development, Producing and Abandonment. For a 10 lb. Charge the setback is 600 ft.

If there is to be any road maintenance work, all exposed outcrops of the formation shall be examined by a BLM-approved paleontologist who will prepare a report listing fossils present, if any, and recommended mitigation. The report shall be submitted to the BLM prior to the initiation of construction. If it becomes necessary to excavate into the underlying bedrock to upgrade and improve the road then a paleontological monitor shall be required.

Vehicle traffic will be restricted to existing roads and trails.

COMPLIANCE/MONITORING: This project will be inspected at the time work is being completed and again when clean-up is completed.

NAME OF PREPARER: Max M- Cor 7-13-04 NAME OF ENVIRONMENTAL COORDINATOR: Cambrie P. Hollowed 7/13/04 Ul SIGNATURE OF AUTHORIZED OFFICIAL: Field Manager DATE SIGNED: 7/13/04

ATTACHMENTS: Map of the Location of the Proposed Action Detailed Map

CO-110-2004-152-EA

