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

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2004-170-EA

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

PROJECT NAME: EnCana/Polaris Seismic

LEGAL DESCRIPTION:

T. 2 S., R. 98 W. Section 36

T. 2 S., R. 97 W. Sections 32, 33, 34, 35

T. 3 S., R. 98 W. Sections 1, 2, 11, 14, 15, 22, 27, 33, 36

T. 3 S., R. 97 W. Sections 2, 4, 8, 9, 11, 14, 17, 20, 22, 23, 27, 30, 31, 33 34

T. 3 S., R. 96 W., Sections 8, 16, 17, 20, 21, 27, 28, 29, 30, 31, 33

T. 4 S., R. 98 W., Sections 1, 4, 8, 9, 11, 12, 14, 16, 17, 19, 20, 22, 23, 30

T. 4 S., R. 97 W., Sections 1, 3, 4, 5, 8, 9, 11, 12, 14, 17, 19, 20, 22, 23, 26, 27

T. 4 S., R. 96 W., Sections 4, 6, 9, 16, 21, 28, 29, 31, 32

T. 5 S., R. 96 W., Sections 6, 7, 12

APPLICANT: EnCana, and Polaris Explorer USA, Inc.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction:

Proposed Action: Polaris Explorer USA, Inc. has requested a Geophysical Exploration Permit. Their bond for \$50,000, #MT000059 is on file for this project.

Approximately 59 total miles of 2-D seismic line is proposed. Of the total 59 miles proposed, only 19 miles will be on BLM surface. Source points will be by vibroseis trucks. Vibroseis trucks will be used on the 19 miles of existing BLM roads. 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. Staging areas, landing areas, equipment 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. *No helicopters or shot holes will be used on BLM lands.* Receiver points will be 55 feet apart. Source points will be 330 feet apart.

No Action Alternative: No seismic testing would take place.

NEED FOR THE ACTION: EnCana 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):

Name of Plan: 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."

<u>AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:</u>

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 shot/source point and geophone/jug lines have been inventoried at the Class III (100% pedestrian) level (Karpinski and Karpinski 2004, Compliance Dated 8/02/2004) with seven sites located in the project area of potential effect.

Environmental Consequences of the Proposed Action: Provided the avoidance recommendations and mitigation measures outlined below are followed for avoidance of five 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: Five of the cultural resources must be avoided by all seismic line activity. Further, seismic line personnel are to avoid entering these sites at all times and be confined to the jug/geophone and source line routes only to avoid further impacts to the sites. Two of the sites are the existing upgraded historic roads and should not be adversely impacted by travel over the surface, or vibration activities.

Site 5RB 848: no shot/source points are permitted between stations 2-1510 and 2-1542. Geophone/jug lines may be laid adjacent to the site on the existing road.

Site 5RB 4740: no shot/source points are permitted between stations 2-1482 and 2-1485. Geophone/jug lines may be laid adjacent to the site on the existing road.

Site 5RB 4741: no shot/source points are permitted between stations 2-1460 and 2-1480. Geophone/jug lines may be laid through the site on the existing road.

Site 5RB 4831: no shot/source points are permitted between stations 2-1189 and 2-1187. Geophone/jug lines may be laid adjacent to the site on the existing road.

Site 5RB 4832: no shot/source points are permitted between stations 4-1505 and 4-1524. Geophone/jug lines may be laid adjacent to the site on the existing road.

A Natural Resource Specialist shall conduct field compliance to ensure the above restrictions are adhered to in order to avoid any impacts to all standing structures.

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, rednaped 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 August 4) 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 potentially disruptive at close range, the operation of vibroseis trucks limited to existing roads at this late date would be brief and would not prompt nest abandonment or prolonged adult absences. 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. Goshawks 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 and none would be expected in the immediate vicinity of established roads in these larger valleys.

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. Several leks (used for reproductive display from March through mid-May) are located on sagebrush ridgelines in the upper half of the Stewart watershed. Nesting functions associated with these leks (April through mid-July) are fulfilled in suitable ridgeline habitats in the southern half of the project area. The most easterly seismic line would traverse about 0.5 mile of potential nest habitat.

Colorado River cutthroat trout occupy a number of larger perennial systems off the Roan Plateau, but there are no occupied habitats in the Piceance Basin. The small tributary streams traversed by the proposed project on BLM-administered lands are typically constrained by flow volume or persistence and are unable to support viable fisheries.

Environmental Consequences of the Proposed Action: Seismic activity can represent a locally intense land use that is capable of disrupting sensitive seasonal use activities of raptors and sage grouse. However, conducted during the late summer through early fall months, this proposed method of seismic (i.e., vibroseis on existing roads) would not coincide with any sensitive wildlife reproductive functions, nor have any influence on the character of vegetation as wildlife cover and forage.

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. A small portion of the seismic lines are in the Parachute Creek watershed which is tributary to the Colorado River, with the majority of the lines in the Piceance Creek watershed, and 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 = $5.0 \, \text{mg/l}$, pH = 6.5 - 9.0, Fecal Coliform = $2000/100 \, \text{ml}$, and $630/100 \, \text{ml}$ 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: The proposed seismic routes follow some of the larger tributaries of Piceance Creek that, particularly on federally-administered headwater lands, support small-scale riparian communities with intermittent or small perennial flows.

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. 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, threatened, endangered or sensitive plant species, flood plains, prime and unique farmlands, Wilderness or Wild and Scenic Rivers exist within the area affected by the proposed action. Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. 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 seismic routes generally follow major valleys that intermittently support perennial or intermittent flows that sustain at least rudimentary invertebrate-based aquatic systems. Portions of Fawn and Willow Creeks (principally private lands through irrigated haylands) support a limited fishery comprised of introduced trout.

Environmental Consequences of the Proposed Action: The proposed seismic operation would be confined to existing roads and would not intersect or involve any intermittent or perennial channel associated with aquatic habitats.

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 wooded 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 Cooper's and sharpshinned hawk.

Environmental Consequences of the Proposed Action: Because this seismic operation would be confined to existing roads and have no affect on adjacent vegetation, there would be no effective influence on habitat conditions as forage or cover for wildlife.

Proposed seismic activity represents a localized and transient form of disturbance. Although vehicle use confined to existing roads could result in brief, short-distance displacement of big game from preferred aspen habitats, the potential extent of such disruptions would constitute a minute fraction of the project area's forested habitat base. This project would have no meaningful adverse influence on the Piceance big game population.

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. At this time of year, there is no reasonable probability that transient, short duration truck traffic along existing roadways 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.

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.

OTHER NON-CRITICAL ELEMENTS: 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	X		
Cadastral Survey	X		
Fire Management	X		
Forest Management	X		
Geology and Minerals	X		
Hydrology/Water Rights			X
Law Enforcement		X	
Paleontology			X
Rangeland Management		X	
Realty Authorizations			X
Recreation	X		
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

HYDROLOGY AND WATER RIGHTS

Affected Environment: There are many springs located within the proposed action. For the most part, these springs are not located along roadways, but in the upper reaches of the drainages.

Environmental Consequences of the Proposed Action: If EnCana abides by the standards set by the state there should not be any impacts.

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

Mitigation: None.

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). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project areas most resemble a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: If action coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of seismic personnel and vehicles an increase of traffic could be expected increasing the likelihood of human interactions, and the sights and sounds associated with the human environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

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.

REFERENCES CITED:

Karpinski, Mark and Beth Karpinski

2004 A Class III Cultural Resource Inventory for the Proposed Figure Four 2-D Seismic Project, Garfield and Rio Blanco Counties, Colorado. TRC Mariah Associates, Inc., Laramie Wyoming.

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
Michael Selle	Archeologist	Cultural Resources Paleontological Resources

Name	Title	Area of Responsibility
Mark Hafkenschiel	Rangeland Management Specialist	Invasive, Non-Native Species
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
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	ORP	Wilderness
Caroline Hollowed	Hydrologist	Soils
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	ORP	Access and Transportation
Ken Holsinger	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)

CO-110-2004-170-EA

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 Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

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

MITIGATION MEASURES:

- 1. 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.
- 2. Five of the cultural resources must be avoided by all seismic line activity. Further, seismic line personnel are to avoid entering these sites at all times and be confined to the jug/geophone and source line routes only to avoid further impacts to the sites. Two of the sites are the existing upgraded historic roads and should not be adversely impacted by travel over the surface, or vibration activities.

Site 5RB 848: no shot/source points are permitted between stations 2-1510 and 2-1542. Geophone/jug lines may be laid adjacent to the site on the existing road.

Site 5RB 4740: no shot/source points are permitted between stations 2-1482 and 2-1485. Geophone/jug lines may be laid adjacent to the site on the existing road.

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Site 5RB 4831: no shot/source points are permitted between stations 2-1189 and 2-1187. Geophone/jug lines may be laid adjacent to the site on the existing road.

Site 5RB 4832: no shot/source points are permitted between stations 4-1505 and 4-1524. Geophone/jug lines may be laid adjacent to the site on the existing road.

A Natural Resource Specialist shall conduct field compliance to ensure the above restrictions are adhered to in order to avoid any impacts to all standing structures.

- 3. 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, 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.
- 4. 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.
- 5. 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.
- 6. 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: KW Ditalsen / Am Macox

NAME OF ENVIRONMENTAL COORDINATOR: Caurline P. Halbard \$ 3/04

SIGNATURE OF AUTHORIZED OFFICIAL: That C. Walter

08/03/04 DATE SIGNED:

ATTACHMENTS: Map of the Location of the Proposed Action

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