United States Department of the Interior
Bureau of Land Management

October 2004

Environmental Assessment UT-080-2004-0294

Decision Record, Finding of No Significant Impact, and Environmental Assessment for Dawson Geophysical Company's Coyote Wash 3-D Seismic Exploration Project, Uintah County, Utah

Applicant/Address: **Dawson Geophysical Company**
8400 East Prentice Avenue, Suite 1500
Greenwood Village, CO 80111

U.S. Department of the Interior
Bureau of Land Management
Vernal Field Office
170 South 500 East
Vernal, UT 84078
Phone: (435) 781-4400
FAX: (435) 781-4410

LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS DOCUMENT

2-D	Two dimensional seismic exploration
3-D	Three dimensional seismic exploration
ACEC	Area of critical environmental concern
acre-ft	Acre-foot/feet
ARPA	*Archaeological Resource Preservation Act*
ATV	All-terrain vehicle
BCC	Birds of Conservation Concern
BLM	Bureau of Land Management
Book Cliffs RMP	*Final Environmental Impact Statement on the Book Cliffs Resource Management Plan*
CEQ	Council on Environmental Quality
C.F.R.	*Code of Federal Regulations*
COE	U.S. Army Corps of Engineers
Dawson	Dawson Geophysical Company
DR	Decision Record
EA	Environmental assessment
EIS	Environmental impact statement
ESA	*Endangered Species Act*
FONSI	Finding of No Significant Impact
ft	Foot or feet
GPS	Global positioning system
Horse Point EA	*Decision Record, Finding of No Significant Impact, and Environmental Assessment for the WesternGeco Horse Point 3-D Seismic Exploration, Uintah and Grand Counties, Utah, EA No. UT-080-2002-219*
lb(s)	Pound(s)
mi	Mile(s)
Moon Ridge EA	*Decision Record, Finding of No Significant Impact, and Environmental Assessment for the Trace Energy Service Inc.'s Moon Ridge 3-D Seismic Exploration Project, Uintah and Grand Counties, Utah, EA No. UT-080-2003-0256*
NEPA	*National Environmental Policy Act of 1969*
NRHP	National Register of Historic Places
ORV	Off-road vehicle
PIF	Partners in Flight
R22E	Range 22 East
RFAS	Reasonably foreseeable action scenarios
RMP	Resource Management Plan
ROD	Record of Decision
SITLA	State Institutional Trust Lands Administration
SMA	Surface Management Agency
SS	Special status
T8S	Township 8 South
TEPC	Threatened, endangered, proposed, and candidate
UDWR	Utah Division of Wildlife Resources
UPIF	Utah Partners in Flight
U.S.C.	*United States Code*
USDI	U.S. Department of the Interior
USFWS	U.S. Fish and Wildlife Service
UWC	Utah Wilderness Coalition
Veritas 2-Mile EA	*Environmental Assessment for a 2-Mile Seismic Line, Sections 8 and 9, Township 12 South, Range 22 East, Uintah County, Utah, by Veritas DGC Land, Inc., EA No. UT-080-2001-475*
Veritas EA	*Environmental Assessment for 2-D Seismic Exploration by Veritas DGC Land, Inc., Uintah County, Utah, UT-080-2002-21*
VFO	Vernal Field Office
VRM	Visual Resource Management
West	Western EcoSystems Technology Inc.
WIU	Wilderness Inventory Unit
WSA	Wilderness Study Area

Front Cover Photograph: Helicopter Lowering Heli-portable Drill.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Vernal Field Office
170 South 500 East
Vernal, UT 84078
(435) 781-4400 Fax: (435) 781-4410

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
1792
UT080

Dear Public Land User:

The completed *Environmental Assessment for Dawson Geophysical Company's Coyote Wash 3-D Seismic Exploration Project, Uintah County, Utah,* is provided for your information and use. The document contains responses to public and agency comments and subsequent corrections and additions to the earlier EA document.

I would like to thank those of you who provided suggestions and comments on the initial EA. Your help has been valuable in preparing this completed assessment.

A Decision Record is attached with this EA. The Decision Record outlines the decision and rationale that was used to determine the alternative selected and the Conditions of Approval.

Sincerely,

William Stringer

William Stringer
Field Manager

Attachment

FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
Environmental Assessment for Dawson Geophysical Company's
Coyote Wash 3-D Seismic Exploration Project,
Uintah County, Utah
UT-080-2004-0294

FONSI: Based on the analysis of potential environmental impacts contained in the attached environmental assessment (EA), I have determined that the action will not have a significant effect on the human environment and an environmental impact statement is therefore not required.

DECISION: The authorization for the decision is pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and implementing regulations found in 43 CFR Part 3150.

It is my decision to approve the Notice of Intent to Conduct Oil and Gas Exploration Operations (NOI) and to authorize the geophysical project to proceed as proposed, subject to the attached Form 3150-4, Terms and Conditions, attached Conditions of Approval, and voluntary Applicant Committed Environmental Protection Measures (ACEPMs) developed within this environmental assessment. Consultation between this Office and the State Historic Preservation Officer raised the concern of possible cultural resources being brought to the surface due to surface activities associated with the project, on certain portions of the rerouted lines. Therefore, it is also my decision to require a qualified archaeologist be on-site during surface-disturbing activities on areas identified as having high potential for cultural resources along those routes that have been changed to avoid known cultural sites.

A BLM compliance specialist, or quality control inspector, will be on-site, as appropriate, to inspect, monitor, and photograph the field operations to ensure that the operator is in compliance with the Conditions of Approval placed on this project. While geophysical seismic survey operations are underway, a regularly scheduled monitoring report will be prepared by the specialist. A final monitoring and compliance report will be prepared at the conclusion of the project. The purpose for monitoring is to gather additional information on the realized impacts to resources from such a project and to obtain additional information as to the relevancy and applicability of the Conditions of Approval applied to such projects.

RATIONALE: The decision to approve the NOI has been made in consideration of the environmental impacts of the proposed action, as well as cost concerns to the Applicant. The action is in conformance with the 1985 Book Cliffs RMP because seismic exploration is a necessary part of oil and gas operations. The Book Cliffs RMP states that gas and oil resources would be developed on lands deemed suitable for that under a scenario that gives adequate environmental protection. Specifically, the RMP states on page 7: "Oil and gas, tar sands, oil

shale, and gilsonite will be leased while other resource values will be protected or mitigated." It is also consistent with the Uintah County's General Land Use Plan (1998) which emphasizes multiple-use public land management practices, responsible use and optimum utilization of public land resources.

Discussion of the Need for the Action and the Alternatives: The decision to implement the action, coupled with the Standard Terms and Conditions, ACEPMs, and Special Terms and Conditions as attached, does not result in unnecessary or undue degradation of the environment, and does not create substantial cumulative direct and/or indirect effects. As stated in the purpose and need section of the EA, this action provides the most effective, and cost-efficient method of obtaining needed quality data deemed essential in better targeting areas for the exploration and development of potential producing formations underlying Federal lands, while minimizing impacts to the environment.

In addition to the No Action Alternative, four (4) other alternatives were initially considered, but eliminated from further analysis.

The No Action Alternative was not selected because it would deprive present and future leaseholders the opportunity to obtain subsurface geologic information. Without such data, oil and gas operators would have a high probability of drilling non-productive well, thus resulting in a higher probability of unnecessary surface disturbance, such as new roads, and related impacts. The No Action Alternative also would not allow operators the opportunity to use the seismic data to site specific well locations to minimize environmental impacts.

The four other alternatives were eliminated from further analysis due to their inability to meet the purpose of and need for the action.

- Use of 2-D Seismic Techniques: 3-D seismic techniques provide more accurate spatial data in support of minimizing exploration risks to surface resources. 3-D techniques specifically provide true structural dip, better and more stratigraphic information, map views of reservoir properties, higher resolution; and, better aerial mapping of fault patterns and connections. 2-D techniques provide less accurate spatial data that would result in greater exploration risks and potentially greater impacts to the surface environment.
- Use of Surface Shots as an Energy Source: The use of surface shots would not provide the quality of data necessary and would likely result in greater environmental impacts than that assessed for the proposed action. Surface shots present a greater fire danger and often result in increased surface disturbances in the vicinity of the shots (depending on ground conditions and amount of explosives used).
- Limiting Exploration to Existing Roads and Vehicle Trails: Implementation of this alternative would result in unacceptably large voids in the data collected in order to adequately access the subsurface resource potential, thus failing to meet the stated purpose of and need for the action. An independent analysis of the fold plot analysis, conducted by Interactive Earth Sciences Corporation (October, 2004) supports this conclusion.
- Exclude the Proposed White River ACEC from the Project Area: Current BLM direction requires adherence to existing land use plans when making land use decisions. The 1985

Book Cliffs RMP did not designate any Areas of Critical Environmental Concern. As stated above, the EA is in conformance with the current RMP. Impacts to resources that individually and/or together have met initial criteria for ACEC designation have been analyzed in this EA. With the application of the Conditions of Approval, the temporary to short-term effects of completing the seismic survey will not affect the values of those resources for which the ACEC designation is being sought.

No exploratory or development wells were considered by the Proposed Action or are connected to the Proposed Action. If additional leasing occurs, or Applications for Permit to Drill are submitted, additional environmental documentation will be required.

In conclusion the geophysical survey involved in the project area is appropriate and beneficial. As described in the book, *Hydrocarbon and Mineral Resources of the Uintah Basin*, 1992, seismic surveys used in conjunction with existing well data are very helpful in predicting where hydrocarbon-trapping zones may be found. However, it is acknowledged that using seismic data alone does not guarantee the success of the wells being drilled, but it is anticipated that fewer exploratory wells would be drilled if operators had access to good seismic data processed with current technology.

Consultation has been conducted and concluded with the U.S. Fish and Wildlife Service, the Utah State Historic Preservation Officer and Native American Tribes having an affiliation with the Uintah Basin (refer to Section 5 of the EA).

The EA was made available for a 30-day public review and comment period from August 23 through September 21, 2004. Six comment letters were received. None of the letters provided substantial new information for incorporation into the final assessment. Comments received dealt with the range of alternatives assessed in the document, floodplains, soils, wildlife; cultural resources, Native American concerns, special status species and cumulative impacts. Three letters expressed support for the project, which required no response. The BLM's response to some of these comments resulted in editorial changes to the EA. These changes were made to clarify and/or expand remarks to improve readability and understanding. Synopses of the comments received and the BLM responses are included in Chapter 5 of the EA. The reader is referred to this chapter for a more complete presentation of the comments and BLM's responses.

Appeal:

The decision is effective upon the date of this decision, as shown below; and, the approval is signed by the authorized officer. The decision or approval may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR 3150.2. If an appeal is filed, a copy of the notice of appeal must be filed in this office (the Vernal Field Office, 170 South 500 East, Vernal, Utah, 84078) within thirty (30) days of receipt of the decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition for stay pursuant to 43 CFR 3150.2(b), the petition for stay should accompany your notice of appeal and shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied;
(2) The likelihood of the appellant's success on the merits;
(3) The likelihood of irreparable harm to the appellant or resources if the stay is not granted; and
(4) Whether the public interest favors granting the stay.

William Stringer
Vernal Field Manager

10/14/04
Date

BLM Form 3150-4
FS Form 2800-16
(June 2003)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DEPARTMENT OF AGRICULTURE
FOREST SERVICE

RECEIVED
MAR 25 2004
VERNAL, UTAH

FORM APPROVED
OMB NO. 1004-0162
Expires: December 31, 2005

NOTICE OF INTENT AND AUTHORIZATION TO CONDUCT OIL AND GAS GEOPHYSICAL EXPLORATION OPERATIONS

NOI Case File No. UTU 76172

Lessee or Operator: Dawson Geophysical	Project Name: Coyote Wash 3D
Address: 508 West Wall Suite 800	Do you have a bond on file with the Agency? ☒ Yes ☐ No
City: Midland State: Tex	Which Agency? ☒ BLM ☐ Forest Service
Zip Code: 79701 Phone No. (Include area code): 800-332-4766	Bond No.: QL1-591-1637-003 Bond Amount: $ 50 000.00
E-Mail Address:	

Geophysical Co.: Dawson Geophysical	Geophysical Co. Representative: Randy Shannon
Address: 508 West Wall Suite 800	Address: 508 West Wall, Suite 800
City: Midland State: Texas	City: Midland State: TX
Zip Code: 79701 Phone No. (Include area code): 800-332-4766	Zip Code: 79701 Phone No. (Include area code): 800-332-4766
E-Mail Address: geoseismic@sprynet.com	Cellular Phone No. (Include area code): 432-413-3199

Local Rep./Party Chief: Randy Shannon

. Legal Description: Give the legal and land description of the lands involved using Meridian, Township, Range, and Section(s), or metes and bounds as appropriate:

T8S R22E Sections 25, 26, 27, 34, 35
T8S R23E Sections 31, 33, 34, 35
T8S R24E Sections 31

T9S R22E Sections 1, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 35
T9S R23E Sections 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20
21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35
T9S R24E Sections 6, 7, 18, 19, 30, 31
T10S R22E Section 1
T10S R23E Sections 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 17, 18
T10S R24E Section 6

You must also submit a map with a minimum scale of one-half inch per mile showing the general area and project location. We recommend a 7 1/2-minute USGS quadrangle or the scale commonly used in the area. For seismic operations, your maps should include source and receiver lines, surface ownership, and any Federal lands under lease. When survey lines are along property boundaries between Federal and private lands, indicate which side of the line you will use.

2. Do you hold any Federal leases within the project area? ☒ Yes ☒ No (If yes, indicate location and lease numbers on an attached map.) Note: There is no fee for operations on your Federal lease.

3. If you are proposing seismic exploration, how many miles of source line (2-D), or acres (3-D) (to the nearest 10 acres) of survey are on:

a. Your Federal Lease _____ b. Other Federal lands _____

. When do you expect to start exploration? Receeding Phase August 1 How long will the project last? 60 +- days.

Describe any of your critical time frames associated with the proposed project, such as equipment or contractor availability.
Timeline is listed for project in POA, Survey, Drilling, etc

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on reverse)

Description and Type of Operations *(check all that apply)*:

a. Survey Type: ☐ 2-D ☒ 3-D ☐ Gravity/Magnetic ☐ Other *(explain)*: _____

Describe the survey type:

See POA

b. Survey Method: ☐ Surface charge ☒ Shothole ☒ Vibroseis ☐ Other *(explain)*: Dual Source, Buggy Vibrators Buggy Drills as needed, Heliportable Drills if needed.

What type and amount of explosives per source point will you use? 10 lb Dynoseis

What shotpoint pattern and spacing will you use? 311/1760 What will be the shothole depth? 40 feet

Did you attach or display a diagram of the shotpoint pattern on the project map? ☒ Yes ☐ No

Describe the survey method:

See POA

c. Transport Method: ☒ Vibrator Trucks ☒ Pick-up Truck ☒ Buggy/ATV ☐ Backpack ☒ Helicopter

Describe your transportation plans, including types and numbers of vehicles and how you will access the project area:

See POA

d. Operating Procedures: Describe your operating procedures, including how you will minimize surface impacts. Describe support facilities you need, such as helispots, camps, or powder magazines; construction of roads or trails; proposed plugging procedures for shotholes; and general clean-up procedures.

See POA

Randy Shannon (Printed name of authorized company representative)

(Authorized company representative signs here to indicate this application is complete)

3/25/2004 (Date)

(continued on next page)

PLAN OF ACTION
FOR SEISMIC EXPLORATION
VERNAL FIELD OFFICE
COYOTE WASH 3D SEISMIC SURVEY

This report is to detail field procedures of Dawson Geophysical in their three dimensional (3-D) seismic survey in Uintah County, Utah. The program is to be conducted on lands in Townships 8, 9, and 10 South and Ranges 22, 23, and 24 West. Dawson Geophysical will comply with all Federal, State and local laws and regulations.

This report addresses the following concerns:

1: Cultural
2: Wildlife
3: Visual
4: Reclamation

In compliance with NEPA, Dawson Geophysical and the VFO/ BLM will agree upon specific special stipulations for the program.

The following personnel will be responsible for compliance:

Andy Keyes	- Party Manager
Randy Shannon	- Project Manager
Ron Sandberg	- Field Observer
Mario Reyes	- HSE Officer
Chris Morris	- Supervisor

Prior to commencement of each phase of operations, a meeting will be held and all participants will be informed of BLM policies regarding his/her field duties. These meetings will be documented and signed. Individual crew members, subcontractors, and Dawson Geophysical will be held accountable for their personal performance with respect to these policies.

OPERATIONS SCHEDULE

COYOTE WASH SEISMIC PROGRAM

	OPERATION	COMMENCEMENT DATE
Phase I	Surveying and Archeaological Inventory	April 1, 2004
Phase II	Drilling	July 1, 2004
Phase III	Recording	August 1, 2004
Phase IV	Reclamation and completion	October 10, 2004

A 3D seismic survey is a technique for the high definition of the subsurface geology. This survey consists of approximately 80 square miles. The amount of land traversed by the operation will be approximately 500 acres. The name of the prospect is Coyote Wash 3D. A map showing the project location will be provided with the NOI, and any updated maps will be forwarded to your office as well. In the project area, there are approximately 88% BLM Lands, 11% State Lands, and 1% Private. Permits from Private Lands will be acquired before the program begins. The prospect is proposed to be completed utilizing a dual source. Vibrator buggies will be used where terrain allows with the shothole method used in the other areas. We are currently estimating about 25% of the project will be acquired by drills. Drilling will be done utilizing drill buggies, and if needed heliportable drills. The BLM will be notified, and furnished a map of the vibrator and shothole locations after the survey is completed.

During Phase I: A ten person survey crew will place pinflags and flagging on all receiver and source points. We will be utilizing the GPS survey system. The crew will be utilizing pickup trucks, and ATV's for access during this phase of the operation. We will use orange pinflags on the receiver lines and pink pinflags on the source points. The receiver stations are 220 feet apart and are spaced 880 feet apart. The source point stations are 311 feet apart inline, and 1760 feet in a diagonal crosslink. During this operation, a BLM approved archaeologist, will flag for avoidance all areas of cultural concern in required areas. We will use red and red/white flagging for cultural avoidance. The cultural survey will cover all areas which are to be driven by the source units. This includes all source lines and receiver lines driven for access as well as cross country access routes. Existing roads and trails will be utilized where possible to reduce cross country travel.
At this time any wildlife issues that exist in the project area will also be addressed, and dealt with as well.

During Phase II: The shotholes on this project will be forty feet deep with a 10 pound charge of Dynoseis. The shotholes will be plugged at the time of drilling in accordance

with the State of Utah regulations. Lath will be utilized to mark the shotholes location. All access to shotholes in sensitive areas will be approved before they are drilled. Explosive storage and staging areas are planned to be on deeded land if possible, if not your office will be contacted for possible locations on Federal Lands, and if locations are selected on BLM properties, they will have archaeological clearance prior to entry.

During Phase III: This survey will utilize vehicle and helicopter support for moving recording equipment. Dawson will utilize 8 Kawasaki Mules where possible in compliance with casual use, as defined in 3150. In addition Kawasaki Mules will also be utilized for trouble shooting, and shooting the shotholes where possible. Light duty pickups may also be utilized where permitted. All access on BLM lands will be approved in sensitive areas by the BLM. Dawson field crews will be provided with updated maps showing approved drive routes, and areas of avoidance as well as being supplied this information at a start up meeting prior to entry into the field.

During Phase IV: Project reclamation will concurrently proceed with the completion of Phase III. All pinflags, flagging and trash will be collected as the program progresses. All paths of departure from roads and trails will be reclaimed to BLM regulations. As the program progresses forward, a final inspection will be completed.

Please Chris Morris at 303 409-7787 or myself for further information.

Randy Shannon
Project Manager
303-618-4083

Terms and Conditions

1. The Bureau of Land Management or Forest Service (Agency) must approve any surface disturbing activities in addition to those approved in this NOI, such as route changes, placement of magazines, towing with a tractor, blading, dozing, snow removal, and vegetation removal. I will notify the Agency in writing of any changes in the original proposal and have Agency approval in writing for the changes before proceeding with them. Stacking source points to avoid sensitive resources or areas does not require prior Agency approval.

2. This NOI expires on _____ , unless the Agency extends it in writing before that date.

3. I understand that this NOI does not grant any exclusive right to the described lands for geophysical exploration, or other purposes. The land area described above is at all times subject to any other lawful uses by the United States, its lessees, permittees, licensees, and assigns.

4. I will notify the Agency at least **2** days, but no more than **14 Days,** prior to initiating the project and entering upon the public lands.

5. In the field each seismic crew must have with it a copy of the approved NOI and its terms and conditions.

6. The Agency may suspend or terminate this NOI if there is a violation of any of its conditions.

7. I will suspend operations when the operations may unnecessarily damage the surface, such as when rutting would occur due to wet soil conditions.

8. I will indemnify the United States for any liability for damage to life or property resulting from the occupancy or use of public lands under the NOI.

9. I will take all reasonable precautions to prevent and suppress fires. The Agency may specify in writing the fire prevention and firefighting equipment I need. At my expense, I will extinguish all fires set or caused as a result of operations under this NOI and will report all fires to the Agency.

10. I will diligently protect from unnecessary damage United States land and property covered by this NOI. I will pay the United States for any damage resulting from my or my agents' or employees' violation of the terms of this NOI or any law or regulation applicable to the lands involved.

11. I will store and handle powder magazines and explosives according to U.S. Bureau of Alcohol, Tobacco and Firearms standards (see 27 CFR Part 55). I will properly secure loaded shotholes.

12. I will complete shothole plugging under Agency guidelines and the guidelines of any other local, Federal or State regulatory authority.

13. I will remove all materials and equipment I placed on the premises and restore the site to the Agency's satisfaction immediately after I complete the project unless the Agency approves other arrangements.

14. I will file a Notice Of Completion Form within 30 days after completing operations and reclamation. If the location of the project is different from that in the approved NOI. I will submit a revised map with the NOC (1:24,000 scale, where available, including source points.

15. I will pay to the United States $ **- 0 -** per _____, according to the Agency's regulations.

16. This geophysical exploration project is subject to the attached Conditions Of Approval **Page 1** through **Page 6** and Exhibits _____.

WARNING: If you purposely give false or misleading information, you may be fined $10,000, sent to prison, or both (see Title 18 U.S.C. 1001 statement on page 1).

I agree that I and my agents will conduct the geophysical exploration under all Federal, State and local laws, and applicable regulations and will comply with this NOI and any attached terms and conditions.

(Printed Name of Authorized Company Representative)	(Signature of Authorized Company Representative)	(Date)

(Printed Name of Agency Signing Officer)	(Signature of Agency Signing Officer)	(Title of Agency Signing Officer)	(Date)

NOTICE AND PAPERWORK REDUCTION ACT STATEMENT

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this Notice of Intent and Authorization to Conduct Oil and Gas Geophysical Exploration Operations.
AUTHORITY: 30 U.S.C. 181 et seq.
PRINCIPAL PURPOSE: We use the information to process your Notice.
ROUTINE USES: (1) The processing of the operator's Notice of Intent and Authorization to Conduct Oil and Gas Geophysical Exploration Operations. (2) To determine that mitigating measures are made to protect the environment. (3) Transfer to appropriate Federal agencies when concurrence is required prior to granting a right in public lands or resources. (4) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, your right to conduct geophysical exploration activities may be revoked.

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) requires us to inform you that:

BLM will collect this information under 43 CFR 3150.

FS will collect this information under 36 CFR 251.15.

BLM/FS will use this information to process geophysical exploration notices.

No Federal agency may collect or sponsor a collection of information unless it displays a currently valid OMB control number.

Response to this request is required to obtain a benefit.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 1 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing of the form. Direct comments regarding the burden estimate or any other aspect of this form to the U.S. Department of the Interior, Bureau of Land Management (1004-0162), Bureau Information Collection Clearance Officer (WO-630), Mail Stop 401LS, 1849 C Street, N.W., Washington, D.C. 20420.

COYOTE WASH 3D SEISMIC EXPLORATION PROJECT
CONDITIONS OF APPROVAL

Waivers, Exceptions, Modifications

A waiver, exception, or modification may be granted by the Authorized Officer if either the resource values change or the operator demonstrates that impacts to the resource can be mitigated. The operator must make such a request in writing.

BLM CONDITIONS OF APPROVAL

Cultural Resources

- A qualified archaeologist, funded by the operator, shall be on-site during surface disturbing activities on avoidance route areas that have a high potential for cultural resources being brought to the surface. The avoidance routes are travel pathways that will be used to avoid known cultural resources. The areas to be monitored will be identified by the authorized officer.
- Protective measures that will be taken by the operator are detailed in Section 2.2.6 of the Environmental Assessment for Dawson Geophysical Company's Coyote Wash 3-D Seismic Exploration Project, Uintah County, Utah, UT-080-2004-0294 and the Applicant Committed Conditions of Approval (COAs) listed in this document.

Threatened, Endangered, Candidate, Proposed, (TEPC) and Special Status (SS) Plant and Animal Species

- Black-footed ferret: No drilling, detonation of explosives, or recording shall occur from May 1 through July 15 within 1/8 mile of the home range of a female ferret.
- Mountain plover: No drilling, detonation of explosives, or recording shall occur from March 15 through August 15 during the mountain plover potential nesting habitat.
- Virginia warbler, black-throated gray warbler, gray vireo, Brewer's sparrow, sage sparrow, pinyon jay: No drilling, detonation of explosives, or recording shall occur within these species' potential nesting habitat.
- Protective measures that will be taken by the operator are detailed in Section 2.2.6 of the Environmental Assessment for Dawson Geophysical Company's Coyote Wash 3-D Seismic Exploration Project, Uintah County, Utah, UT-080-2004-0294 and the Applicant Committed Conditions of Approval (COAs) listed in this document.

Paleontological Resources

- As deemed necessary by the BLM, a BLM representative will be present during surface disturbing activities in areas containing high values for Paleontological resources.
- Protective measures that will be taken by the operator are detailed in Section 2.2.6 of the Environmental Assessment for Dawson Geophysical Company's Coyote Wash 3-D Seismic Exploration Project, Uintah County, Utah, UT-080-2004-0294 and the Applicant Committed Conditions of Approval (COAs) listed in this document.

COYOTE WASH 3D SEISMIC EXPLORATION PROJECT
CONDITIONS OF APPROVAL

Wildlife Resources

- Pronghorn antelope: No drilling, detonation of explosives, or recording shall occur from May 15 through June 20 within pronghorn antelope kidding habitat.
- Migratory birds: For the species identified in Section 3.2.2.4 of the EA, no drilling, detonation of explosives, or recording shall occur within these species' potential nesting habitat.

Recreation

- Fantasy Canyon: No source points shall be located within 660 feet of Fantasy Canyon. This will ensure that peak particle velocities of 0.75 inches/second will not be exceeded.
- Protective measures that will be taken by the operator are detailed in Section 2.2.6 of the Environmental Assessment for Dawson Geophysical Company's Coyote Wash 3-D Seismic Exploration Project, Uintah County, Utah, UT-080-2004-0294 and the Applicant Committed Conditions of Approval (COAs) listed in this document.

APPLICANT COMMITTED CONDITIONS OF APPROVAL

Cultural Resources

- All eligible prehistoric or historic archaeological sites and properties found within the project area shall be avoided.
- If an archaeological site and/or property are found at any time on BLM-administered lands during the project, all surface-disturbing work at such site will immediately cease and the BLM will be contacted. Any further work on that site will not resume until and unless authorized by the BLM.
- Workers will be instructed to leave undisturbed and uncollected any artifacts they may discover.
- Any receiver lines that would be used for access by buggy-mounted drills or vibroseis buggies, as well as any other cross-country access routes for buggy-mounted drills, vibroseis buggies, or pickups, will be subject to a Class III inventory.
- No vehicle used in geophysical operations, including ATVs, pickup trucks, service trucks, buggy-mounted drills, and vibroseis buggies will depart from any road that traverses an area where cultural resources have been identified.
- Before commencing recording operations, edges of roads within cultural resource sites will be clearly and completely identified with flagging, fences, lath, or other visible markers.
- No shot holes will be drilled on any road segments located within the boundaries of a cultural resource site.
- Avoidance of significant cultural sites not located near or across existing roads will be achieved by means of flagged cross-country site avoidance routes.
- Source point locations and access routes will be revised to avoid all sites identified within the project's area of potential influence. Source points within sites will be moved outside site boundaries, and source points located immediately adjacent to sites will be moved further from the sites in order to provide a minimum buffer of 100 feet (30 m) between the site boundary and the project's area of potential influence. Source points would be moved 220, 440, or 660 feet north or south and/or 75 feet radially.

Revised access routes marked with pink flagging tape will be placed around sites to separate the access route from the site area by at least 100 feet (30 m). Revised source point and access route locations will be inventoried. Barricades consisting of crossed laths with pink fluorescent flagging will be placed at the start and end of revised access routes to re-direct seismic traffic along the revised routes.

Paleontological Resources

- If any vertebrate fossil sites are discovered during project activities on BLM-administered lands, those activities at such sites that would disturb those vertebrate fossils shall immediately cease and the BLM will be contacted. Project-related activities at such sites will not recommence until authorized by the BLM. Any collection of fossils or other mitigation will be at the expense of Dawson.

Threatened, Endangered, Candidate, Proposed, (TEPC) and Special Status (SS) Plant and Animal Species

- Greater Sage-grouse: No drilling shall occur and no explosives will be detonated within greater sage-grouse nesting habitat (suitable habitat within 2.0 miles of an active lek) during the breeding and nesting season from March 1 through June 15 unless an exception is granted by the applicable SMA.
- Mexican Spotted Owl: No drilling, detonation of explosives, or recording shall occur from March 1 through August 31 in potential Mexican spotted owl (MSO) nesting habitat or within 0.5 miles of potential MSO nesting habitat until breeding surveys are completed to determine the presence or absence of breeding owls. Current U.S. Fish and Wildlife Service (USFWS) protocols shall be followed.

  Mitigation measures identified for soils will be applied along the length of all source lines occurring in potential MSO habitat. These mitigation measures will minimize potential impacts by minimizing the potential for source lines to subsequently be used for ORV travel.

Wildlife/Raptors

- No drilling/recording shall occur within 0.5 miles of an active raptor nest (1.0 miles for an active peregrine falcon nest) during the mating/nesting season in accordance with accepted raptor protection dates as provided in the table below. If drilling/recording are proposed for any line on BLM-administered lands during the raptor mating/nesting season, a BLM biologist or a qualified biologist acceptable to BLM will survey the area 0.5 miles on each side of the line(s) where drilling/recording will occur prior to any surface disturbing activities to determine whether active raptor nests are present.

Raptor Protection Dates
(from the Diamond Mountain RMP [BLM, 1994])

Raptor	Seasonal Buffer		
bald eagle	January 1	through	August 15
great horned owl	February 1	through	May 15
golden eagle	February 1	through	July 15

Raptor Protection Dates (from the Diamond Mountain RMP [BLM, 1994])			
Raptor	**Seasonal Buffer**		
peregrine falcon	February 1	through	August 31
ferruginous hawk	March 1	through	July 15
Mexican spotted owl	March 1	through	August 31
long-eared owl	March 15	through	June 15
Northern harrier, osprey, prairie falcon, red-tailed hawk, Swainson's hawk	April 1	through	July 15
burrowing owl	April 1	through	August 15
short-eared owl	April 10	through	June 15
merlin	April 15	through	June 25
Northern goshawk	April 15	through	August 20
American kestrel	May 1	through	June 30
Cooper's hawk	May 1	through	August 15
turkey vulture	May 15	through	August 15
sharp-shinned hawk	June 20	through	August 15
bald eagle winter roost areas	November 1	through	March 15
** These seasonal ½ mile buffers around occupied raptor nests have been developed and successfully applied for several years with input from, and in coordination with, the Utah Division of Wildlife Resources (UDWR) and the U.S. Fish and Wildlife Service (USFWS). The USFWS 2002 Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances, was reviewed for consistency with the proposed project.			

Soils, Vegetation, Riparian, Floodplains

- Vibroseis buggies on source lines shall travel in a "V" formation to minimize repetitive damage to soils and vegetation.
- No dozing shall occur, and no other types of heavy equipment will be used for removing or clearing vegetation.
- In areas of pinyon, juniper, or other trees, the operator will avoid damaging or cutting trees to the extent practicable. Large trees will be avoided to the extent practicable.
- All vehicle drivers shall be instructed to travel at slow speeds to limit disturbance to soils and vegetation.
- No vehicles shall be operated during periods of saturated soil conditions when surface ruts deeper than 4 inches will occur along straight travel routes.
- The operator will not take vehicles on or within 300 feet of a wetland or riparian area except on existing roads or as otherwise approved by the landowner.
- No drilling or shooting shall occur within 500 feet of any flowing stream.
- As determined necessary by the BLM or the appropriate landowner, the operator shall rake out vehicle tracks visible from existing roads or trails to disguise the seismic lines and discourage use by off-road vehicles (ORVs). All such vehicle track depressions/ruts will be raked out to approximate the original contour.

- All compacted areas (areas compressed and hardened by the weight of vehicles) shall be scarified (the breaking up of the compaction) to improve water filtration, reduce surface runoff, provide a seedbed for the establishment of vegetation, and discourage subsequent ORV use. All scarified areas will be reseeded with a mix of native and non-intrusive, non-native plant seed species on a site-specific basis as determined by the appropriate SMA.
- The operator shall install hand-constructed water bars along seismic lines where necessary, as determined by the appropriate SMA.
- Biological soil crusts (about 10% of the disturbed track area) shall be raked into the tracks from the sides when the tracks disturb biological soil crusts, as determined by the appropriate SMA.
- When geophysical operations are complete, signs and barricades shall be placed in appropriate areas as deemed necessary by the appropriate SMA to discourage the use of seismic lines for ATV travel.

Invasive, Non-Native Species (Noxious Weeds)

- The operator will power-wash all equipment prior to entering the project area to remove soils and mud and reduce the potential for introduction of invasive weeds from outside the project area.

Seismic Operations

- In the event that geophysical operations are postponed or suspended for a period of time longer than two weeks, the operator will notify BLM at least 48 hours in advance of resuming operations.
- Heli-portable drills shall be used in terrain too steep (slopes in excess of 40%) or rough for access by buggy-mounted drills or vibroseis buggies, or areas where ATVs are prohibited.
- After shot holes are loaded, the holes will be backfilled and plugged in accordance with the State of Utah Division of Oil, Gas and Mining regulations, which are accepted by the BLM. Shot holes drilled through water-bearing zones will be filled with bentonite to a point above the water-bearing zone. Any drill cuttings not used in backfilling the shot hole will be scattered about the immediate area.
- Vehicles traveling along seismic lines, where buggy-mounted drills or vibroseis buggies will be used, shall be limited to a 30-foot wide corridor. However, the entire corridor will not be disturbed.
- All vehicle operators will be instructed to travel at slow speeds.
- All vehicles and construction equipment will be properly maintained to minimize exhaust emissions and shall be properly muffled to minimize noise.
- All ATVs shall be equipped with spark arresters.
- All four-wheel drive buggies will be diesel-powered.
- All vehicles will be equipped with fire extinguishers and shovels.
- The operator will as appropriate coordinate project activities with the Vernal Field Office Fire Dispatch, (435) 781-2071. When a helicopter is on location within the project area, it will be equipped with a water bucket.
- All trash, flagging, stakes, and cap leads will be collected and disposed of at an approved sanitary landfill. No potentially harmful materials or substances will be left on or near the seismic lines.
- The operator will maintain a safe operating buffer between shot holes and existing facilities in accordance with accepted industry standards (based on peak particle velocities) as shown in the table below

Distance from Shot Holes to Various Objects*						
Object	Size of Charge (lbs) and Setback Distance (ft)					
	1	5	6-10	11-15	20-35	41-50
Pipeline <6 inches diameter	- -	120	140	230	280	340
Pipeline 6-12 inches diameter	- -	165	250	340	420	510
Pipeline >12 inches diameter	- -	240	350	460	540	680
Telephone line	- -	50	67	91	96	138
Railroad track or paved highway	- -	180	260	340	220	520
Electric power line	- -	300	300	300	300	300
Oil well, water well, building with foundations, spring, or underground cistern	200	500	700	850	1,320	1,550
*Accepted Industry Standards Based on Peak article Velocities. Exceptions to these distances may occur with the written permission of the facility owner or SMA.						

- Any facilities damaged, destroyed, or removed because of geophysical exploration will be immediately repaired or restored to original condition or replaced with a similar facility.
- The operator will be responsible for keeping fences up and gates closed. Gates will be used for crossing fences whenever practicable. If a fence must be crossed at a location other than at an existing gate, the fence will be cut and H-braces installed to support the existing fence. If livestock are present, a temporary gate will be installed to prevent livestock movement through the fence. Any temporary openings will be permanently wired shut, and the wires stretched to their original tension.
- The operator shall post signs at locations along roads entering the proposed project area to alert people entering the area that seismic operations will be occurring. Dates of the operations occurring and more specifics as to the area of impact will be included on the signs.
- The operator will station personnel around areas to be detonated to keep an adequate safety zone between the area to be detonated and any individuals or vehicles. This will ensure that no injury or property damage will occur. The operator's personnel and their contractors will stay at least 75 feet away from shot holes being detonated. Other people will be kept at least 300 feet away from shot holes being detonated. Personnel will be posted to ensure that no one unknowingly drives into an area being detonated.
- The operator requires their personnel and subcontractors to wear hunter orange during the hunting season as a safety precaution.
- In order to minimize impacts to the environment from personnel involved in the project, the operator's employees and contractors will be subject to the following requirements:
  - No firearms permitted to be carried.
  - No harassing or shooting of wildlife.
  - No trash left in any unauthorized location.
  - No unnecessary off-road driving.
  - No collecting of plants.

DECISION RECORD, FINDING OF NO SIGNIFICANT IMPACT, AND ENVIRONMENTAL ASSESSMENT FOR DAWSON GEOPHYSICAL COMPANY'S COYOTE WASH 3-D SEISMIC EXPLORATION PROJECT, UINTAH COUNTY, UTAH

EA No. UT-080-2004-0294

Prepared for

Bureau of Land Management
Vernal Field Office
Vernal, Utah

By

TRC Mariah Associates Inc.
Laramie, Wyoming
MAI Project 42554

October 2004

TABLE OF CONTENTS

Page

1.0 PURPOSE OF AND NEED FOR 1-1
1.1 INTRODUCTION 1-1
1.2 BACKGROUND 1-1
1.3 NEED FOR THE PROPOSED ACTION 1-4
1.4 PURPOSE OF THE PROPOSED ACTION 1-4
1.5 CONFORMANCE WITH BLM LAND USE PLAN 1-4
1.6 RELATIONSHIP TO STATUTES, REGULATIONS, AND OTHER PLANS 1-5
1.7 IDENTIFICATION OF ISSUES 1-7
1.7.1 Introduction 1-7
1.7.2 Critical Elements of the Human Environment 1-8
1.7.2.1 Cultural Resources 1-8
1.7.2.2 Native American Religious Concerns 1-8
1.7.2.3 Threatened, Endangered, Proposed, and Candidate (TEPC) Species and Special Status (SS) Species 1-8
1.7.2.4 Floodplains 1-8
1.7.3 Other Resource Issues 1-8
1.7.3.1 Paleontological Resources 1-9
1.7.3.2 Soils 1-9
1.7.3.3 Vegetation 1-9
1.7.3.4 Wildlife Resources 1-9
1.7.3.5 Recreation 1-9
1.7.3.6 Lands Having Wilderness Characteristics 1-9
1.8 SUMMARY 1-10

2.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION 2-1
2.1 INTRODUCTION 2-1
2.2 ALTERNATIVE A - PROPOSED ACTION 2-1
2.2.1 Surveying, Drilling, Shooting, and Recording 2-1
2.2.1.1 Surveying 2-1
2.2.1.2 Drilling 2-2
2.2.1.3 Shooting and Recording 2-4
2.2.2 Access and Staging Areas 2-5
2.2.3 Schedule and Work Force 2-6
2.2.4 Reclamation 2-7
2.2.5 Surface Disturbance 2-7
2.2.6 Applicant-committed Environmental Protection Measures 2-8
2.2.6.1 Seismic Operations 2-8
2.2.6.2 Cultural Resources 2-10
2.2.6.3 Invasive, Non-native Species (Noxious Weeds) 2-11
2.2.6.4 Paleontology 2-11
2.2.6.5 Soils, Vegetation, Riparian, Floodplains 2-12
2.2.6.6 Threatened, Endangered, Proposed, and Candidate (TEPC) and Special Status (SS) Plant and Animal Species 2-13
2.2.6.7 Wildlife/Raptors 2-13
2.3 ALTERNATIVE B - NO ACTION 2-13

TABLE OF CONTENTS (CONTINUED)

Page

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS 2-14
2.4.1 Use of 2-D Seismic Techniques 2-14
2.4.2 Use of Surface Shots as an Energy Source 2-15
2.4.3 Limit Seismic Exploration to Existing Roads and Vehicle Trails 2-15
2.4.4 Exclude the Proposed ACEC From the Project Area 2-15

3.0 THE AFFECTED ENVIRONMENT 3-1
3.1 INTRODUCTION 3-1
3.2 RESOURCES BROUGHT FORWARD FOR ANALYSIS 3-1
3.2.1 Critical Elements of the Human Environment 3-1
3.2.1.1 Cultural Resources 3-1
3.2.1.2 Native American Religious Concerns 3-4
3.2.1.3 Threatened, Endangered, Proposed, and Candidate (TEPC) and Special Status (SS) Species 3-4
3.2.1.4 Floodplains 3-9
3.2.2 Other Resources 3-9
3.2.2.1 Paleontological Resources 3-9
3.2.2.2 Soils 3-12
3.2.2.3 Vegetation 3-13
3.2.2.4 Wildlife Resources 3-15
3.2.2.5 Recreation 3-17
3.2.2.6 Lands Having Wilderness Characteristics 3-17

4.0 ENVIRONMENTAL IMPACTS 4-1
4.1 INTRODUCTION 4-1
4.2 DIRECT/INDIRECT IMPACTS 4-2
4.2.1 Alternative A - The Proposed Action 4-2
4.2.1.1 Cultural Resources 4-2
4.2.1.2 Native American Religious Concerns 4-3
4.2.1.3 Threatened, Endangered, Proposed, and Candidate (TEPC) and Special Status (SS) Species 4-3
4.2.1.4 Floodplains 4-6
4.2.1.5 Paleontological Resources 4-6
4.2.1.6 Soils 4-7
4.2.1.7 Vegetation 4-12
4.2.1.8 Wildlife Resources 4-13
4.2.1.9 Recreation 4-16
4.2.1.10 Lands Having Wilderness Characteristics 4-18
4.2.1.11 Mitigation Measures 4-19
4.2.1.12 Residual Impacts 4-19
4.2.1.13 Monitoring and/or Compliance 4-20
4.2.2 Alternative B - No Action 4-20
4.3 CUMULATIVE IMPACTS 4-20
4.3.1 Introduction 4-20
4.3.2 Present and Past Actions 4-20

TABLE OF CONTENTS (CONTINUED)

Page

4.3.3 Reasonably Foreseeable Action Scenarios (RFAS) 4-21
4.3.4 Cumulative Impacts..... 4-21
4.3.4.1 Cultural Resources 4-22
4.3.4.2 Native American Religious Concerns 4-22
4.3.4.3 Threatened, Endangered, Proposed, and Candidate (TEPC) and Special Status (SS) Species 4-22
4.3.4.4 Floodplains 4-23
4.3.4.5 Paleontological Resources..... 4-24
4.3.4.6 Soils..... 4-24
4.3.4.7 Vegetation 4-25
4.3.4.8 Wildlife Resources 4-25
4.3.4.9 Recreation 4-25
4.3.4.10 Lands Having Wilderness Characteristics..... 4-26

5.0 CONSULTATION AND COORDINATION..... 5-1
5.1 INTRODUCTION..... 5-1
5.2 PERSONS, GROUPS, AND AGENCIES CONSULTED..... 5-1
5.3 SUMMARY OF PUBLIC PARTICIPATION..... 5-2
5.3.1 Comment Analysis 5-2
5.3.2 List of Commenters..... 5-2
5.3.3 Response to Public Comments..... 5-2
5.3.4 NEPA Compliance, Purpose and Need, and Range of Alternatives 5-3
5.3.5 Floodplains..... 5-4
5.3.6 Soils..... 5-4
5.3.7 Wildlife 5-5
5.3.8 Cultural Resources 5-7
5.3.9 Native American Religious Concerns 5-7
5.3.10 Threatened, Endangered, Proposed, Candidate, and Special Status Species 5-8
5.3.11 Cumulative Impacts..... 5-9
5.3.12 Compliance and Monitoring..... 5-9
5.3.13 Recreation 5-10
5.4 LIST OF PREPARERS..... 5-10

6.0 REFERENCES AND GLOSSARY 6-1
6.1 REFERENCES CITED..... 6-1
6.2 GLOSSARY OF TERMS 6-5

APPENDIX A: INTERDISCIPLINARY TEAM ANALYSIS RECORD

APPENDIX B: LETTER FROM THE U.S. FISH AND WILDLIFE SERVICE REGARDING THE COYOTE BASIN 3-D SEISMIC PROJECT

APPENDIX C: MSDS FOR DYNOSEIS

LIST OF FIGURES

Page

Figure 1.1 Project Location and Surface Ownership 1-2

Figure 1.2 Location of Source Lines and Receiver Lines 1-3

Figure 2.1 Buggy-Mounted Drill 2-3

Figure 2.2 Heli-portable Drill 2-3

Figure 2.3 Vibroseis Buggy 2-5

Figure 3.1 Well Locations in the Proposed Project Area and Adjacent Areas 3-2

Figure 3.2 Visual Resource Management Classes 3-3

Figure 3.3 Floodplains and Lands Having Wilderness Characteristics 3-10

Figure 3.4 Vegetation Types in the Proposed Project Area 3-14

Figure 3.5 Pronghorn Range Types 3-16

Figure 3.6 The Gargoyle, One of the Formations in Fantasy Canyon 3-18

Figure 4.1 Buggy-drilled Shot Hole. Arrow Points to Hole Where Wires Protrude. The Rest of the Disturbance is Drill Cuttings Only 4-8

Figure 4.2 The Light Gray Cuttings and the Tire Tracks of a Buggy-mounted Drill 4-8

Figure 4.3 A Heliportable Drilled Hole. Light Yellow Cuttings in a Compact Circle Are Visible on Top of Gray Cuttings. Arrow Points to Yellow Wires Protruding from Hole That Will Be Used to Detonate Explosives and Thereafter Removed 4-9

Figure 4.4 Seismic Line (Created by Truck-Mounted Drill) Ran from Where Photographer Is Standing to Horizon. Impacts Were Negligible, Even in the Cryptobiotic Soils 4-11

Figure 4.5 Seismic Track (by Buggy) Through Sagebrush. Sagebrush Branches Broken by Tires But Tall and Healthy Between Tracks 4-13

Figure 4.6 Bear Tracks (Photo Taken 4 p.m., October 1, 2003, on the Moon Ridge Seismic Project). Trail Had Been Brushed at 3 p.m. Same Day, and Drilling Was Completed at Noon of Same Day. Trail Led to Two Source Lines, and Drillers Had Worked in Area for 1 Week. Deer Track Occurred Near Bear Track, and Elk Track Occurred 0.25 mi East. Elk Had Been Rutting and Hid in Trees Near Drilling Activity During the Day. Wildlife Do Not Appear Bothered by Seismic Activity 4-17

LIST OF TABLES

Page

Table 1.1 Major Federal, State, and Local Permits and Approvals for the Coyote Wash 3-D Seismic Exploration Project 1-6

Table 2.1 Distance from Shot Holes to Various Objects 2-9

Table 2.2 Raptor Protection Dates for Mating/Nesting (from the Diamond Mountain RMP [BLM 1993]) 2-14

Table 3.1 Threatened, Endangered, Proposed, and Candidate (TEPC) and Special Status (SS) Plant Species Potentially Occurring in the Coyote Wash 3-D Project Area 3-5

Table 5.1 List of All Persons, Agencies, and Organizations Consulted for Purposes of this EA 5-1

Table 5.2 List of Preparers 5-10