

**Categorical Exclusion Documentation Format When Using  
Categorical Exclusions Not Established by Statute**



**CX No.: WY-070-CX12-196**

**A. BACKGROUND**

**BLM Office:** Buffalo Field Office

**Lease/Serial/Case File No.:** WYW168371

**Proposed Action Title/Type:** Nipple Butte 3-D Seismic Project

**Location of Proposed Action:** T. 56-58N, R.69-70W, Sections: Numerous (Please refer to attached project map below Figure 1). The project will encompass ~ 8,107.95 acres administered by the Bureau of Land Management, ~2,270 acres administered lands by the State of Wyoming, and ~16,470 acres of private ownerships. The project is in Campbell County, Wyoming.

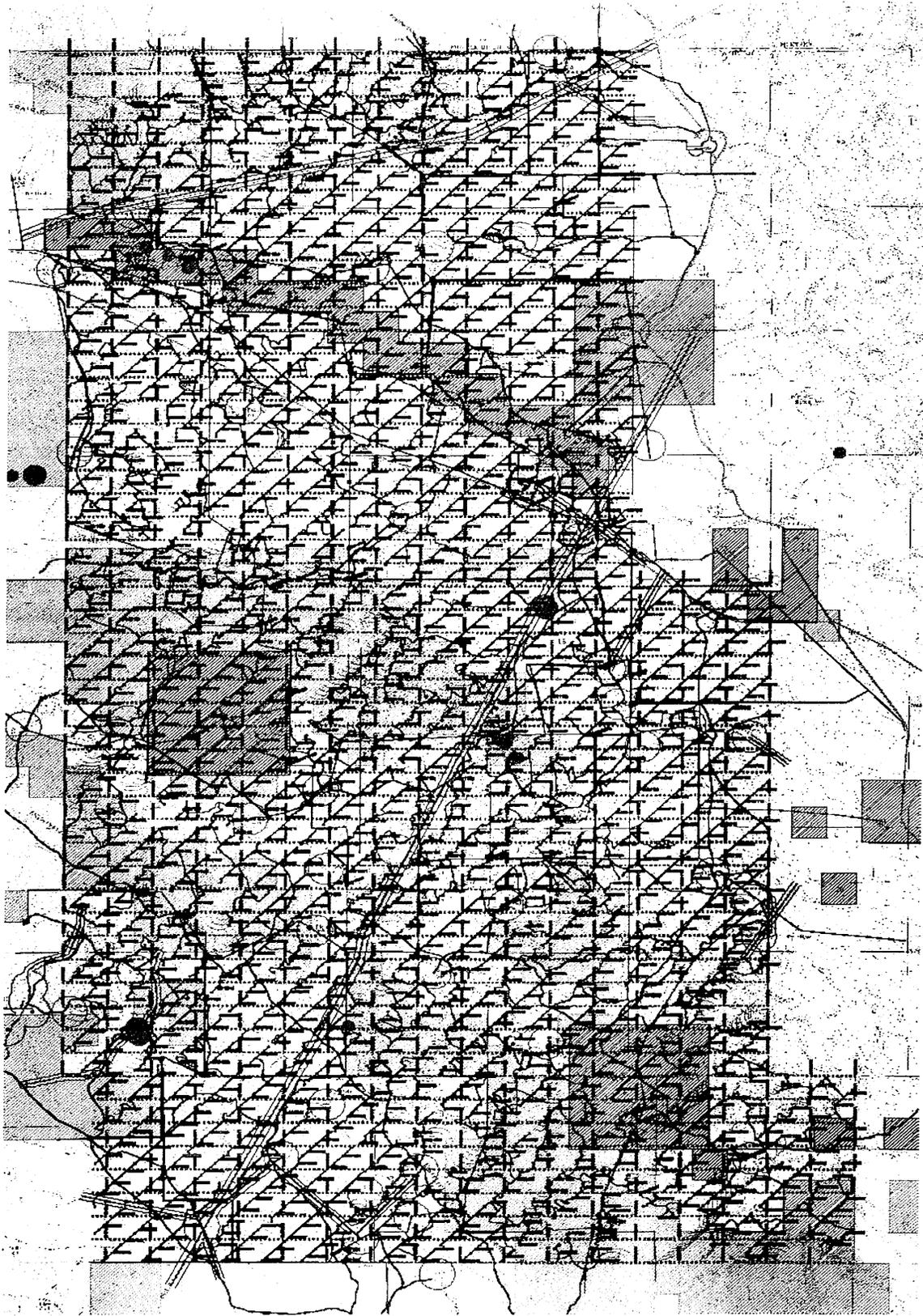
The Nipple Butte 3D seismological survey project area is located in northeastern Campbell County, approximately 43 miles north of Gillette, Wyoming and east of Wyoming state highway 59 at the Montana border. Elevation within the project area ranges from approximately 3,600 to 3,900 feet above sea level. The majority of the project area is comprised of broken terrain with small buttes and ephemeral drainages of Trail Creek, Dry Trail Creek, Dry Creek, Deer Trail Creek, and Eighty five Creek.

Terrain ranges from flat and rolling agricultural lands to rugged and steep terrain. Moderate to dense stands of ponderosa pine are found at some of the higher elevations, mostly in the southeastern portion of the project area. Current impacts to the project area include livestock grazing, gas lines including the Trans Canadian and the Belle Fourche pipelines, overhead power lines, and roads. A number of flowing wells for livestock use and associated water lines are found in the project area as well.

The floral communities present within the POD area are typical of the Northern Plains/upland ecotone. Creek bottoms are characterized by occasional boxelder (*Acer negundo*) plains cottonwood (*Populus sargentii*) and juniper. Woodland areas, which comprise roughly ten percent of the project area, are dominated by moderately dense stands of ponderosa pine (*Pinus ponderosa*) with a mix of juniper (*Juniperus* spp.) located along all drainages in the project area. Five general ecological systems were identified within the project area: Mixed-grass Prairie, Badlands, Ponderosa Pine Woodlands, Wooded Draw and Ravine, and Big Sagebrush Shrubland.

The 3-D survey will provide a high resolution image of subsurface geological features underlying the project area. The proposed 3-D seismic project is designed to accurately map structure, stratigraphy, rock and fluid properties in the subsurface.

Figure 1.



**Description of Proposed Action:**

On February 28, 2012 BLM had scoping meeting with the operator Ballard Petroleum with the following:

Name	Title	Company
Andy Perez	NRS	BLM
Darrel Meek	Permit Agent	Ballard Petroleum
Allen Rein	Permit Agent	Ballard Petroleum
Cella Meek	Permit Agent	Ballard Petroleum
Don Brewer	Wildlife Biologist	BLM
Clint Crago	Archaeologist	BLM
Bud Stewart	Wildlife Biologist	WGFD

BLM sent out the deficiency letter on March 6, 2012. On July 25, 2012, Ballard Petroleum Holding, LLC (Ballard) submitted a Notice of Intent and Authorization to Conduct Oil and Gas Geophysical Exploration Operations for a project titled Nipple Butte 3D. On July 26, 2012 BLM assigned a team to the Nipple Butte 3D. BLM had several meetings and conversations with Ballard in regards, to required surveys for wildlife, cultural, and plan of operations from the time the scoping meeting was held and the NOI was submitted.

The Nipple Butte 3D Seismic Project area contains approximately ~ 8,107.95 acres of BLM administered surface. The approval of this Notice of Intent is for the public surface only. (Ballard) will obtain a permit to conduct geophysical operations on the private surface from the Wyoming Oil and Gas Conservation Commission.

**Planning Surveys:**

3-D surveys are a system of uniform line grids perpendicular to each other. One set of lines are used for source points, which will serve as the energy source. The energy source is usually a dynamite charge set in a shot hole (hole drilled in the ground to a specified depth), or vibrations generated by a series of "vibroseis" trucks. On some occasions both energy sources are used. The perpendicular set of lines is receiver lines which collect the data. 3-D surveys provide a more detailed result than 2-D surveys.

Permitting a survey crew will locate and place temporary pin flags at receiver and source point locations using a high-accuracy global positioning system (GPS). Global Positioning is a system of satellite receivers that enable very accurate positioning of surveyed points. A survey crew will establish and flag the receiver and source point locations and travel routes between them. The survey crew will be responsible for positioning receiver points every 165 feet and source point locations every 165 feet apart such that they avoid all known and apparent cultural, natural, and existing land use features of importance. A 4 foot lathe will be place on source point locations to further identify its position.

Archaeologists will identify potential sites or areas of concern for cultural resources from file searches so Ballard Petroleum can avoid all known sites during our seismic operations on the Nipple Butte 3-D project. This will cover any areas that would be affected by disturbance from implementing the seismic survey (source points and overland access routes for vehicles). Identified sites or areas of potential concern for cultural resources will be flagged for potential avoidance according to approved criteria. All results from the archaeology file search will be provided to the land surveyors and where necessary, means of avoidance for these archaeological resources will be determined, and the lines relocated to avoid that area. The areas will be free of snow cover before archaeological professionals begin assessments. The cultural resource inventory will cover an area 50 ft wide on both sides of the seismic lines and all flagged access.

The drilling contractor will be the next crew in the field. The drilling contractor will utilize several trucks which will be responsible for drilling, loading, and backfilling of source points. There are many different sizes and types of drills, each designed for a specific condition. Terrain and permit conditions may also determine the type of drill used. Some of the different types of drills may require water to be used in their drilling operation. Therefore, a water truck may be utilized with each drill using water. A drilling supervisor will manage drill crews, with the help of the permit agent, to ensure that the least amount of damage is done to the property. This will ensure the fewest amount of track damage and will ensure the proper drill will be sent to the area to be drilled.

The recording crew will lay out the geophones and cables. The ground crew will walk the property manually laying the equipment along the surveyed lines and connecting the whole network together. Lightweight ATV's (all terrain vehicles) and helicopters can be utilized for moving equipment. When enough geophones and cables have been laid out recording can be started. Shot holes are sequentially detonated and the data is collected. The reflected sound waves are detected by listening devices called geophones which are laid out on the seismic lines. They are connected to cables which connect to a recording truck (dog house) where it is recorded onto computers. At the completion of recording, all seismic lines will be completely cleaned of all equipment (pin flags, lathe, and debris). Shot holes will be left in accordance of state regulations.

Ballard Petroleum will use the detonation of explosives set in the drilled shot holes to create the seismic energy source points for this seismic survey project. Each hole will be 60 feet deep with a 10# charge placed in the bottom of the hole. We will be using conventional, auger, and buggy mounted drills to create the shot holes. The reason for shot holes is because the terrain is too rough to allow vibrators to get around the area of operations. The buggy drills would travel off road and follow the path for the source line as modified by the archaeological and biological surveys and obstacles. No clearing or grading by heavy equipment of routes for the off road drilling program would be conducted. In some instances tree limbs may be removed to allow a passage of drill buggies and to prevent additional damage to the affected tree. Vegetation beneath the tires would be compressed; perennial grasses and herbaceous species would be flattened but would typically recover in the next growing season. More woody species, such as sagebrush, may be damaged, particularly the older more brittle stems, but the younger more flexible parts of the plant would likely bend under the pressure and typically recover in the current or next growing season. Where possible, the drills would proceed from one source location to the next with a single pass per source point. Each drill will work in a separate location from the others to avoid excess track damage. The drills would traverse the entire seismic line where possible to complete the drilling of the inline shot holes. Existing roads and trails would be used where possible to access the next area to be drilled along the seismic line. Each buggy drill vehicle would weigh 28,000 pounds, and each low-pressure tire would be approximately three feet wide. Total buggy width is approximately 10 feet with 2.3 foot wide tire treads. To account for maneuvering flexibility to avoid obstacles or sensitive resources, travel distance between lines and multiple passes, it is estimated that buggies would travel no more than approximately 1.5 miles for every mile of buggy drilled source points. Exceptions to traveling the entire seismic line would include altered routes to avoid environmentally sensitive areas. The large low pressure tires of a buggy drill would exert a pressure of about eight psi on the surface. The truck mounted drills will weigh approximately 50,000 to 54,000 pounds. The approximate tire width would be 8 inches wide per tire. The tires would exert a pressure of about 60 psi on the surface.

After placing the dynamite in a shot hole, a shot hole-plug would be placed in the hole as specified by the State of Wyoming Oil and Gas Commission regulations for seismic exploration. In a dry hole, no water encountered, the hole would be back-filled with drill cuttings to within 3 foot of the surface and a non metallic plug with identification would be installed in the hole. The remaining 3 foot would be tamped to the surface and covered with cuttings. A mound would be left for shrinkage and the hole would be raked to one inch on the level. If water is encountered while drilling, the hole will be back-filled with bentonite

to above the water level and cuttings to 3 feet below ground level and installed with a non metallic plug with identification. The remaining 3 feet will be tamped with cuttings, leaving a mound for shrinkage and raked to one inch on the level. The shots would be detonated individually according to the determined geologic condition. Detonation would typically produce a small plume of dust within a few feet of the hole. Shot holes will be triggered by the control truck stationed on an existing road or trail and a safety officer at a position with line-of-sight visibility, must at a minimum safe distance. The safety officer ultimately controls the detonation and allows detonations initiated by the control truck only if observations indicate the absence of people and animals near the shot hole.

Should the detonated explosives blow the plug and drill cuttings out of the hole (blowout), whatever limited surface damage would be repaired as part of the restoration/reclamation. This will involve replugging and replacing the hole packing materials with drill cuttings and soil that was blown out of the hole. For source locations located near drainages the locations will be shifted far enough up and out of the drainage and floodplain. Once the location has been established One Call Locate of Wyoming will be contacted. A locator will check each shot point location to make sure they are clear of pipelines, telephone lines, and utility lines, if needed they may have to be moved for proper clearance.

The offset distances are listed below:

- Buildings—occupied buildings 300-400 ft shot points
- Unoccupied/historic buildings as per cultural/natural features described below.
- Pipelines—140 to 350 ft. with further exception based on permission from owner. All operators will be contacted and Ballard warrants the landowner's agreement to proposed setback distances.
  - Water Wells—300 ft shot points
  - Springs—300 ft shot points.
  - Cultural features not sensitive to vibrations, such as lithic scatter, shall be avoided by a nominal buffer established by the BLM, as well as the research archaeologist.

Short term surface disturbances as a direct result of the seismic survey operations including drill buggy and truck mount drills passage to source locations and receiver line traffic area will be minimal and is considered casual use. Disturbance consists of the following; in some instances tree limbs may be removed to allow the passage of drills. Vegetation beneath the tires would be compressed; perennial grasses and herbaceous species would be flattened but would typically recover in the current or the next growing season. More woody species, such as sagebrush, may be damaged, but the younger more flexible parts of the plant would recover in the current or next growing season.

Recording equipment would be transported to the field and staging area (helicopter landing zones) by trucks using existing roads and trails. Sufficient equipment to lay out 6 sets of geophones, one length of seismic cables, and appropriate battery and field recording boxes would be placed in reinforced nylon cache bags at helicopter landing sites and flown to the pre-determined, flagged locations for stations along all receiver lines. One helicopter would be used for the project and would operate only during daylight hours. The helicopter would move 6 to 8 bags at a time suspended from a long line. The helicopter would operate at an altitude of approximately 50-75 feet above the receiver line and deposit one bag at a time using GPS pin flag locations provided by the surveyors. Ground crew members would walk to the first drop and manually connect the geophones and cables. Seismic cable and attached geophones would be laid out by hand around each station in a pre-determined pattern. The geophones mounted on a 4 inch spike would be placed into the ground using foot pressure. The crew members will continue on to the second pin flag until all geophones and cables have been laid out. After recording a series of stations each station's equipment would be retrieved on foot and bagged using a procedure of reverse placement and moved to a new receiver location by helicopter.

Approximately 40-60 recording crew members would conduct daily operations for 10-12 hours daily. Crew members would be organized into field groups of 4 to 6 personnel. A troubleshooting crew of 4 to 6 people would repair electrical problems during the operations, and gather data recorded in the field boxes. Crew members will carpool daily to the project area in the morning and return in the evening.

The recording control truck containing the data collection equipment would be on an existing road or trail or previously archaeologically cleared place to initiate the source detonation for the active receiver lines during the shot detonations.

The demobilization would proceed with the data acquisition. All pin flags, flagging, lathe, and other "trash" would be gathered daily as the field groups and crew members complete data-acquisition portions of the project. The "trash" would be collected at points on roads or trails and transported to vehicle staging areas where personnel would organize material, handle equipment, and dispose of the used/unused materials. The task would be completed within about 3 days after the conclusion of the data-acquisition.

Truck mounted drills will be driven to the project. Buggy drills will be transferred on transport tractor trailers. Operation of most support vehicles, including pickups, would be limited to existing roads or trails or routes or areas surveyed and previously cleared for archaeological resources. The staging area and recording trucks will try to utilize private property.

The helicopter may also land on existing roads, approved sources routes and trail intersections, existing well pads, and staging areas/landing zones within the project area to pick up and drop off equipment or personnel. There will be no staging areas or new roads, routes, or trails constructed, cut, or created through use on BLM property. The fueling of the helicopter will be fueled on private ground only. For spill protection the operator will have a double wall system on both the helicopter and the fuel truck.

Seismic survey activities will proceed systematically from north to south and east to west from the project area. If any seasonal restrictions occur we will begin in that area or leave that area until the end depending on the timetable.

Drilling activities will start as soon as approval is received from survey crew, permit agents, and oil company personnel. Drilling activity will take a few weeks to a month before other activities commence. Controlled detonation of explosive shots and recording will begin after placement of the initial receiver stations/geophones. After all source generation is completed along the receiver lines in a given area, the receivers would be picked up and moved ahead (leap-frog) and laid out to form the new leading edge of the receivers prior to re-initiating source generation. Recording crew would begin likely begin in July or August. Source generation and recording is expected to be completed in about 14 to 30 days for the recording crew.

The duration of the complete survey is expected to be about 90 to 120 days, including permitting, surveying, drilling, recording, mobilization, and demobilization. Activities would commence as soon as the appropriate permits are in place.

Safe operating distances would be maintained between shot holes and existing facilities including producing oil and gas wells, pipelines, electrical utility lines, and around helicopter field landing or staging area.

Gates would be used for crossing fences whenever possible. If however, a fence crossing is required for a location without a gate, the fence could be let down to create a temporary opening. Upon crossing of a temporary let down the opening would be immediately permanently rewired and stretched to the original

tension. Any facilities impacted by the proposed seismic survey would be repaired or replaced as soon as practical before the end of the project.

Fuel and lubricants would be temporarily stored in transportable containment-trailers at locations approved by the appropriate surface management agency in staging areas to minimize potential for accidental releases/spills. No other hazardous or potentially hazardous materials would be brought into the project area.

All spills or leaks of fuel, hydraulic fluid, lubricating oil, and coolant, including contaminated soil material, would be excavated to an appropriate container and transported to an approved disposal site. All solid waste or trash would be transported to an approved solid waste disposal facility.

An ERP (Emergency Response Plan) will be issued to each set of crews on the project. This ERP will have emergency telephone numbers for; poison control, sheriff, hazardous response teams, environmental spills, and quickest route to local hospital in case of an emergency. The ERP will have emergency staging plans in case the helicopter will be called upon. The ERP will contain coordinates for the local hospital in case the helicopter will be needed. The project manager will have a plan for accident or injuries. This plan will be based on what happened, location of the incident, number of casualties, suspected injuries and/or extent of the injuries, and the response time. All work on the project will stop until the crew is informed by the project manager to continue.

Vehicles would travel at speeds within set speed limits of main access roads and at slower speeds appropriate for conditions on more remote roads and trails.

Signs warning the public of seismic survey activity would be located at the closest road/trail intersections on either side of the next days planned activity.

Drilling/crew staff would keep the public a safe distance away from all drills and helicopter field landing or staging activity. All survey crew members would wear safety vests, hardhats, and goggles where required. All drillers/crew will wear hardhats. The shot hole detonation observer would wear a hardhat and safety goggles.

Prior to detonation, the shot hole observer would release 3 blasts from an air horn to warn any crew members or public of an impending detonation? A hand-held device operated by the observer would be used to interrupt detonation if an unsafe condition exists.

The helicopter will follow flight paths to be efficient while following activity-specific aviation operational safety standards for flight altitudes per Federal Aviation Administration rules. The helicopter and its crew will have certifications that include but are not limited to Federal Aviation Regulations Part 133. Rotorcraft External Load Operations, in the appropriate class. The helicopter refueling and servicing will occur at staging areas and may occur at airports. On designated surveyed land the helicopter may have contact with surveyed land, but will avoid low level over flights of towns, hospitals, ranch buildings, livestock, and wildlife.

Explosives and detonator caps would be stored in or near the project area in large, secure magazines (large locked steel boxes) per Federal Bureau of Alcohol, Tobacco, and Firearms requirements. Signage for the magazines would not be placed on the magazines, but on adjacent posts. Explosives/detonators would be transported in accordance with Federal Department of Transportation regulations.

**Water Resources, Wetlands/Riparian/Floodplain Protection:**

- Project water would be obtained from adjudicated commercial sources.

- No shot holes will be drilled within 100 feet of perennial surface water features.
- No wetland/riparian vegetation would be removed during placement of geophones. Helicopters would be used to place equipment to support placement of recording lines to reduce surface disturbance.
- No operations other than receiver placement would be performed within 200 feet or a greater distance as per the BLM of a spring.

**Soil Resource Protection:**

- No cross country travel would be permitted on slopes greater than approximately 25% by buggy drills. Shot holes on slopes greater than 25% will be offset.
- No vehicles would be operated during periods of saturated soil conditions when surface ruts greater than 4 inches would occur along straight travel routes.
- Buggy drills traffic would be planned to minimize the number of passes over the same ground, and to minimize the potential for soil compaction and for impacts to biological soil crusts.
- Vehicles would be instructed to travel at slow speeds to limit disturbance to soils and vegetation.
- The spinning of all vehicle tires would be avoided where possible to minimize the potential for soil displacement.

**Vegetation Resource Protection:**

- All equipment, including on-road and off-road equipment would be cleaned to remove weed seed and soil prior to commencing operations.
- Larger shrubs, trees, and other obstacles would be avoided where possible, no cutting or removal of shrubs, trees, and other obstacles is prohibited.

**Wildlife Resources:**

- Ballard Petroleum will comply with wildlife protection measures.
- Project activities would be conducted in compliance with applicable requirements of the Endangered Species Act of 1973, as amended.
- Project personnel would be subject to the following requirements: no harassing or shooting of wildlife; no dogs may be brought to the project area; no firearms permitted; and no littering.

**Livestock Grazing:**

- All gates within the project area would be left as they are found (open gates would be left open, closed gates would be closed).
- Damage to existing fences and other range improvements as a result of the seismic survey would be immediately repaired.
- Removal or alteration of existing range improvements would be prohibited unless prior approval from the appropriate BLM personnel is obtained.
- Ballard Petroleum personnel will be instructed to minimize contact and avoid harassment of livestock and wildlife.

**B. LAND USE PLAN CONFORMANCE**

**Land Use Plan Name:** Buffalo Resource Management Plan **Date Approved:** 1985, 2001 Update

The proposed action is in conformance with the applicable LUP because it is specifically provided for in the following LUP decision(s): Minerals Management – Oil and Gas

The proposed action is in conformance with the LUP, even though it is not specifically provided for, because it is clearly consistent with the following LUP decision(s) (objectives, terms, and conditions):

**Decision Record MM-7** – Continue to lease and allow development of federal oil and gas in the Buffalo Resource Area

### C. COMPLIANCE WITH NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9(B)(6):

**“Approval of Notices of Intent to conduct geophysical exploration of oil, gas, or geothermal, pursuant to 43 CFR 3150 or 3250, when no temporary or new road construction is proposed”.**

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. I’ve reviewed the proposed action and none of the extraordinary circumstances described below and in 516 DM 2 apply.

#### **Cultural:**

A Class III cultural resource inventory was performed for the Nipple Butte 3D seismic project prior to on-the-ground project work (BFO project no. 70120077). A class III cultural resource inventory following the Archeology and Historic Preservation, Secretary of the Interior’s Standards and Guidelines (48CFR190) and the *Wyoming State Historic Preservation Office Format, Guidelines, and Standards for Class II and III Reports* was provided to BFO by Ballard Petroleum. Clint Crago, BLM Archaeologist, reviewed the report for technical adequacy and compliance with Bureau of Land Management (BLM) standards, and determined it to be adequate. The following resources are located in or near the project area (E = Eligible for National Register of Historic Places, NE = Not Eligible, U = Unevaluated):

Site Number/Type/Eligibility	Site Number/Type/Eligibility	Site Number/Type/Eligibility
48CA752/Prehistoric Lithic Scatter/U	48CA753/Prehistoric Lithic Scatter/U	48CA754/Prehistoric Lithic Scatter/U
48CA2109/Prehistoric Stone Rings/U	48CA2110/Prehistoric Lithic Scatter/U	48CA2111/Prehistoric Stone Rings/U
48CA2112/Prehistoric Lithic Scatter, Stone Rings, Ceramics, Bone/E	48CA2113/Prehistoric Stone Rings/E	48CA2204/Prehistoric Lithic Scatter/NE
48CA2205/Prehistoric Lithic Scatter/NE	48CA2335/Prehistoric Stone Rings/U	48CA2336/Historic Cairn/NE
48CA2448/Prehistoric Stone Rings/U	48CA2603/Prehistoric Lithic Scatter/U	48CA6981/Historic Road/NE
48CA7131/Prehistoric Stone Circle/U	48CA7132/Prehistoric Stone Circle/U	48CA7133/Historic Cairn/U
48CA7134/Prehistoric Lithic Scatter/U		

All unevaluated or eligible sites within the project area will be avoided by project activities. Following the Wyoming State Protocol Section VI(A)(4) the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 8/2/2012 that no historic properties will be affected by the project.

#### **Wildlife:**

Western Land Services (WLS 2012) did surveys for bald-eagle winter roost habitat, raptors, Greater Sage-Grouse (sage-grouse) leks, prairie dog colonies, and mountain plover during spring of 2012 according to the PRB Interagency Working Group’s protocols, available at: [http://www.blm.gov/wy/st/en/field\\_offices/Bufalo/wildlife.html](http://www.blm.gov/wy/st/en/field_offices/Bufalo/wildlife.html). One hundred thirty-nine raptor nests were discovered within 0.5 miles all BLM land inside of the project boundary during the 2012 field survey. Of those nests, twenty-four were active during 2012 spring survey, information about the nests is located in the project file. Suitable nesting habitat is present and there is the potential for both raptor and migratory bird nests to be present within the project area. A timing limitation applied to operations during the breeding season will eliminate impacts to migratory birds nesting within 0.5 miles of those identified public lands. Human activities in close proximity to active raptor nests may interfere with nest productivity. Romin and Muck (1999) indicate that activities within 0.5 miles of a nest are prone to cause adverse impacts to nesting raptors. Geophysical exploration on private lands may occur during the

breeding season. Noise, surface disturbance, and human disturbance may negatively affect migratory birds and cause them to avoid the area while exploration activities are taking place. Disruptive activities near active nests may also result in the failure or abandonment of nests.

Field surveys conducted by WLS found minimal bald eagle winter roost habitat within the project area proper. Some potential roosting habitat can be found in the form of cottonwood trees along drainages or large ponderosa pines in upland areas. Rock outcrops and cliffs also offer potential roosting and nesting sites. The Little Powder River located three miles west of the project area offers more preferable roosting habitat, with year-round water flows and galleries of mature cottonwood trees (WLS 2010). If the project activities are not completed prior to November 1; then, a bald eagle roosting survey will be required beginning on December 1, to determine the presence of roosts within 1 mile of the public lands before operations may proceed. If a roost is located, a timing limitation will be implemented for activities occurring on public lands, decreasing negative impacts that may result from human disturbance in close proximity to roosts. The BLM encourages the operator to conduct operations in areas of the project outside of bald eagle winter roost habitat first. Geophysical exploration on private lands may occur in suitable habitats for bald eagle nesting or roosting. Noise, surface disturbance, and human disturbance may negatively affect bald eagles and cause them to avoid the area while exploration activities are taking place.

Current Wyoming Game & Fish Department records indicate two occupied sage-grouse leks occur within two miles of the project boundary. The timing of the project will proceed outside of the breeding/nesting period (April-June 30) for sage-grouse, therefore no impacts are anticipated towards breeding/nesting sage-grouse.

Ute ladies'-tresses orchid habitat will not be disturbed on public lands, and the project is likely to have no effect to the species.

#### **Extraordinary Circumstances (from 516 DM 2, Appendix 2)**

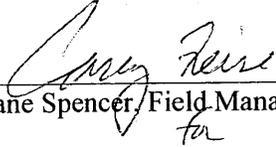
Extraordinary circumstances exist for individual actions within categorical exclusions which may:

- Have significant impacts on public health or safety.
- Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.
- Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [National Environmental Policy Act Section 102 (2) (E)].
- Have a highly uncertain and potentially significant environmental effects or involved unique or unknown environmental risks.
- Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.
- Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.
- Have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by either the bureau or office.
- Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.
- Violate a Federal law, or a state, local, or tribal law or requirement imposed for the protection of the environment.

- Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898).
- Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).
- Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).

**D. SIGNATURE**

Authorizing Official: \_\_\_\_\_

  
Duane Spencer, Field Manager  
for

Date: \_\_\_\_\_

8/9/12

**Contact Person**

For additional information concerning this CX review, contact:

Andy Perez  
Bureau of Land Management  
Buffalo Field Office  
1425 Fort St.  
Buffalo, WY 82834  
(307) 684-1166

## DECISION RECORD

Lease/Serial/Case File No.: WYW168370

**Recommendation/Rationale:** I recommend approving Ballard Petroleum's Notice of Intent to Conduct Geophysical Exploration Operations on public lands administered by the BLM in the NHB 3D Seismic Project Area with the mitigation measures described below. The Ballard Petroleum's Company will utilize the subsurface information gathered by this project to explore for and develop the oil and gas resources in this area. The subsurface data will limit unnecessary drilling, reduce surface disturbance, and reduce adverse impacts to other resources.

### Mitigation Measures:

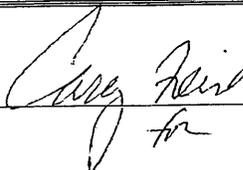
- 1) No Surface Disturbing activities are authorized with this action.
- 2) Disruptive activities are prohibited or restricted on public surface in the project area from March 15<sup>th</sup> through June 30 in suitable sage-grouse nesting and early brood-rearing habitat.
  - A. No surface disturbing activity shall occur within 0.25 miles of all identified burrowing owl nests from April 15 through August 31, annually, prior to a burrowing owl nest occupancy survey for the current breeding season. A 0.25 mile buffer will be applied if a burrowing owl nest is identified. This condition will be implemented on an annual basis for the duration of surface disturbing activities within the four known prairie dog town(s) located in the following area; T57N, R70W Sections 12 N1/2, 23 NWSW, 35 NWSE, and 33 NWNE.
  - B. No surface disturbing activity shall occur within ½ mile of all identified raptor nests from February 1 through July 31, annually, prior to a raptor nest occupancy survey for the current breeding season.
  - C. If the project activities are not completed prior to November 1; then, a bald eagle roosting survey will be required beginning on December 1, to determine the presence of roosts within 1 mile of the public lands before operations may proceed. If a roost is located, then a seasonal minimum disturbance-free buffer zone of 1 mile will be established for the bald eagle winter roost site during November 1 – April 1. The buffer zone and timing may be adjusted based on site-specific information through coordination with, and written approval from, the USFWS.
- 3) All identified cultural sites in the project area shall be avoided by at least 30 meters by all geophysical operations.
- 4) Vehicular travel shall be suspended when ground conditions are wet enough to cause rutting or other noticeable surface deformation and severe compaction. As a general rule, if vehicles or other project equipment create ruts in excess of four inches deep when traveling cross-country over wet soils, the soil shall be deemed too wet for vehicular use.
- 5) The staging area(s) shall be kept clean and free of litter. Appropriate human waste facilities will be provided and properly maintained. Such waste facilities shall be removed from the site upon completion of the project.
- 6) Roads will not be constructed for geophysical projects authorized under a categorical exclusion.
- 7) Operators of vehicles and equipment shall be responsible for not damaging fences and keeping gates

as found. As a last resort, should a fence be cut for access, that fence must be repaired to former or better condition, immediately after equipment has passed through.

8) If soil is disturbed to the extent that erosion is likely or visual impacts are readily apparent, the disturbed areas will be rehabilitated utilizing the following techniques:

- Ruts and vehicle tracks will be filled with soil and/or obliterated by either hand raking or similar method. When completing this work, care will be taken to minimize disturbance to surrounding lands that have not been disturbed. All areas where rehabilitation work is accomplished will be reseeded with the seed mix provided below.
- The seeded area should be hand raked to assure the seed is covered with approximately ¼ to ½ inch of soil.
- The seed shall be certified, pure live seed, and seed tags must be available if requested by the authorized officer. Certified weed free seed is to be used to rehabilitate disturbed land.

Loamy/Sandy Ecological Site Seed Mix		
Species	% in Mix	Lbs PLS*
<i>Western Wheatgrass</i> (Pascopyrum smithii)/or <i>Thickspike Wheatgrass</i> (Elymus lanceolatus ssp. lanceolatus)	30	3.6
<i>Bluebunch Wheatgrass</i> (Pseudoroegneria spicata ssp. Spicata)	10	1.2
<i>Green needlegrass</i> (Nassella viridula)	25	3.0
<i>Slender Wheatgrass</i> (Elymus trachycaulus ssp. trachycaulus)	20	2.4
<i>Prairie coneflower</i> (Ratibida columnifera)	5	0.6
<i>Indian ricegrass</i> (Achnatherum hymenoides)	5	0.6
<i>Blue flax</i> (Linum lewisii)	5	0.6
<b>Totals</b>	<b>100%</b>	<b>12 lbs/acre</b>

Specialist: 

Date: 8/9/12

Name: Duane Spencer Title: Field Manager

### Decision

I have reviewed the plan conformance and NEPA compliance record and have determined that the proposed project is in conformance with the approved land use plan and no further environmental analysis is required.

It is my decision to implement the project as described with the mitigation measures identified above and included in the Special Terms and Conditions along with the mitigation measures in the Standard Terms and Conditions attached to the Notice of Intent to Conduct Geophysical Exploration Operations.

Authorizing Official: \_\_\_\_\_

*Duane Spencer*  
Duane Spencer, Field Manager

Date: \_\_\_\_\_

*8/9/12*

### DECISION FACTORS

1. **Land Status Including Prior Existing Rights and Land Ownership of Adjacent Non-Federal Lands:** The affected public land in the project area is intermingled with private and Forest Service Lands. The approval of the NOI is only for geophysical operations on public lands. The Wyoming Oil and Gas Conservation Commission authorize geophysical operations on private lands in the project area.
2. **Pending Applications:** None.
3. **Economic and Social Effects:** NA
4. **Access:** Access to the project area is via State highways, existing county and private roads, and existing two-track trails.
5. **Land Use Capability and Past, Present, and Future Land Uses:** Livestock grazing, wildlife habitat, agriculture, oil and gas production, and residential & business uses are the primary land uses in the general area.
6. **Government and Public Support:** None.
7. **Legal Requirements:** No special legal requirements are applicable to this action.

### References

Romin, Laura A., and Muck, James A. May 1999. Utah Field Office Guidelines For Raptor Protection From Human And Land Use Disturbances. U.S. Fish and Wildlife Service, Salt Lake City, Utah

Western Land Services. 2012. Nipple Butte 3D Seismological Study: Wildlife and Habitat Review. July. Prepared for: Ballard Petroleum Holdings, LLC, Billings, Montana