

Decision Memo

North Nucla 2D Seismic Survey

USDA Forest Service
Grand Mesa, Uncompahgre, Gunnison National Forest
Norwood, Ouray, and Grand Valley Ranger Districts
Montrose and Mesa Counties, Colorado

T49N, R15W, sections 19, 29-36;
T49N, R14W, sections 31, 32;
T49N, R13W, sections 34, 35;
T48N, R16W, sections 1, 2;
T48N, R15W, sections 1, 4, 5;
T48N, R14W, sections 5, 6, 8-11, 13, 14, 24,
All within the New Mexico Principal Meridian

Background

The Grand Mesa, Uncompahgre, and Gunnison National Forests (GMUG) received a proposal from Veritas DGC Land Inc. (Veritas) to conduct a seismic survey on the Uncompahgre Plateau. The “Nucla North 2-D Seismic Survey” is generally located about 10 to 20 miles north and northeast of the town of Nucla in Montrose County, Colorado and includes portions of the Norwood, Ouray, and Grand Valley Ranger Districts (please refer to Exhibit A). The proposed area includes Forest Service, BLM, and private lands. Portions of the project occurring on private lands are not subject to Forest Service or BLM authorization.

The purpose of this Forest Service action is to accommodate the exploration of energy resources on National Forest System lands. The need is to authorize the survey subject to terms and conditions of a USDI-BLM & USDA-FS ‘Authorization to Conduct Oil and Gas Geophysical Exploration Operations’.

Decision

I have decided to authorize Veritas to conduct a 2D seismic survey as described on the NFS lands shown on the map (Exhibit A). The authorization is subject to the terms and conditions of a USDI-BLM & USDA-FS ‘Authorization to Conduct Oil and Gas Geophysical Exploration Operations’, including a set of ‘Conditions of Approval’ (COA) for preventing or controlling adverse impacts on surface resources and uses on NFS lands attached as Exhibit B of this Decision Memo. The BLM will issue a separate authorization for BLM lands.

Environmental impacts associated with this action will be minimal, and no extraordinary circumstances significantly affecting the environment were found to exist. I have determined that

authorizing this activity, prescribing the COA, and any activities conducted in compliance with this authorization and the COA will not individually or cumulatively have a significant effect on the human environment. I have based my conclusions on information presented in this document and the entirety of the Project Record. Therefore, this action is categorically excluded from documentation in an environmental impact statement or an environmental assessment

The project includes seismic source lines on seven road segments totaling about 30 miles along portions of Forest System Development Road (FSDR) corridors 402, 503, 505, 505.1A, 600, 663, and 663.1A. All required drilling would occur on or adjacent to those existing roads, and would include approximately 700 source holes (based on 220 foot spacing) to a depth of 40 feet along the source lines, using a buggy mounted or rotary drill rig.

Approximately 2.5 miles of receiver line will be hand placed in two separate lines oriented roughly north and south within T48N R15W, Section 31 and T48N R13W, Section 19; on the western and eastern ends of the project area respectively. Receiver related equipment will be dropped by helicopter prior to layout. The project will occur in late August and September of 2008, and will take approximately 25-34 days to complete.

The project has a limited potential to affect cultural resources given its location along existing travel corridors, past experience with similar projects, and inclusion of a COA requiring avoidance of any identified significant resources discovered during the course of activities. A summary of known cultural resources based on previous inventories is pending, and a COA will require that significant sites be avoided during ground-disturbing activities.

Surveys will be conducted by the Forest Service in June of 2008 to determine the presence of northern goshawk (*Accipiter gentilis*) within the project area. The northern goshawk is listed as a sensitive species in Region 2 of the Forest Service, and is also identified as a Management Indicator Species on the GMUG National Forest. If any active goshawk nests are located during the survey, a COA excludes activities within 1/4 mile of an active nest if those activities would cause nesting failure or abandonment. This condition is in accordance with Forest Plan standard and guideline 02 - b. (9053GM) for Aquatic and Terrestrial Habitat Management (FLMP page III-26).

The proposed action falls under a category established by the Chief, in Forest Service Handbook 1909.15 Sec. 31.2 (category 8). The category includes short term (one year or less) mineral, energy or geophysical investigations and their incidental support activities that may require cross-country travel by vehicles and equipment, construction of less than one mile of low standard road, or use and minor repair of existing roads.

As a condition of this Decision Veritas agrees to abide by the provisions set forth in conditions

of approval (COA) attached as Exhibit B.

There is a project file for this action located at the Norwood Ranger District Office.

Public Involvement

The scoping period began on May 14, 2008 with the publication of the legal notice in the Daily Sentinel of Grand Junction; Colorado. Forty nine scoping letters were mailed to interested and affected individuals, organizations, and agencies. Seven replies were received. Three were supportive or offered no specific comment; and the comments or concerns raised by the remaining four respondents are addressed in the conditions of approval that are made part of the authorization.

Findings Required by Other Laws

This decision is consistent with the GMUG Land and Resource Management (LRMP) as required by the National Forest Management Act. The project responds to the goals and objectives outlined in the LRMP to encourage environmentally sound energy development (LRMP, page II-61), and to authorize geophysical operations on unclassified lands with terms and conditions to prevent or control adverse impacts on surface resources and uses (LRMP, page III-54).

Floodplains, wetlands, prime lands, federally threatened and endangered species, regional sensitive species, and heritage resources have been considered and these resources will not be adversely affected.

Implementation Date

This project will be implemented on or after August 11, 2008.

Administrative Review or Appeal Opportunities

This decision is subject to administrative review (appeal). Parties who have participated in the analysis process by commenting on the DEIS are eligible to appeal pursuant to appeal regulations at 36 CFR Part 215. In accordance with 36 CFR 215.11(d), the operators may appeal this decision, pursuant to appeal regulations at 36 CFR 215 or appeal regulations at 36 CFR 251 Subpart C, but not both.

The appeal must be filed (regular mail, fax, e-mail, hand-delivery, or express delivery) with the Appeal Deciding Officer at:

For delivery services to a physical street address	For U.S. Postal Service delivery
Appeals Deciding Officer	Appeals Deciding Officer

U.S.D.A. Forest Service Rocky Mountain Region 740 Simms Street Golden, CO 80401	Forest Service Region 2, Regional Office 740 Simms Street Golden, Colorado 80401
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The office business hours for those submitting hand-delivered appeals are 8:00 AM to 4:30 PM Monday through Friday, excluding federal holidays. Electronic appeals must be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), or MSWord (.doc) to appeals-rocky-mountain-regional-office@fs.fed.us. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Appeals, including attachments, must be filed within 45 days from the publication date of this notice in the *Grand Junction Daily Sentinel*. Attachments received after the 45 day appeal period will not be considered. The publication date in the *Grand Junction Daily Sentinel* is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

Individuals or organizations who expressed interest during the comment period specified at 36 CFR 215.6 may appeal this decision. The notice of appeal must meet the appeal content requirements at 36 CFR 215.14.

Contact Person

For additional information concerning this decision contact:
Warren Young – South Zone Minerals Administration
Ouray Ranger District
2505 South Townsend Ave.
Montrose, CO 81401.

/Tom Condos/
for
2008

June 19,

—
Kendall Clark
Deputy Forest Supervisor

Date

Exhibit A-Map (intentionally left blank)

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Conditions of Approval

Exhibit B

Administrative

1. The Operator will notify the FS Authorized Officer and/or their Representative (AO/Rep) at least 3 business days in advance of the start of operations. A pre-work conference will be required.
2. Access to Federal Lands which requires crossing private lands is not guaranteed by the Government. Permission to enter or cross private lands must be by obtained by the Operator from the landowner(s).
3. The Operator shall file the Notice of Completion FS-2800-16a within 60 days of project completion with the AO/Rep.
4. The FS may suspend operations for instances of non-compliance when reasonable and necessary.
5. Location of any staging areas on public land will be approved by the AO/Rep prior to use.
6. All personnel (contractors, subcontractors) working in the field with the seismic operator will be familiar with and follow all the terms and conditions of approval.

Travel Management and Roads

7. Motorized cross country travel or off route travel is prohibited. Motorized travel is authorized only on designated routes and according to the applicable vehicle types and seasonal restrictions identified in the 2002 Uncompahgre Travel Plan.
8. Operating season will begin no earlier than May 1 and will end no later than November 15. Requests for operations outside May 1 and November 15 must be made at least 3 business days in advance. Operations outside the normal use period will not occur without prior approval of the AO/Rep.
9. Appropriate warning signs or devices regarding hazardous conditions associated with the operations shall be deployed, and promptly removed when not needed. Signs shall be placed as per MUTCD work zone safety guidelines. Signs shall be erected prior to any work activity and approved by the AO/Rep.
10. Support vehicles and drilling equipment shall be parked in a location not to impede traffic. Vehicles may be parked within vehicle width of the shoulder of the roadway.
11. The operator shall be liable/responsible for damage to roads and trails caused by the operations. Any such damage will be repaired by the operator to Forest Service

Standards (Federal Highway Administration FP-03 specifications); and will be done under the supervision of the Forest Service Engineer, who will be notified in writing of the damage, dates of repair, and the persons performing the work.

12. Before drilling operations begin, a satisfactory proof of financial surety in the amount of \$5,000 will be given to the AO/Rep, to provide assurance in the event of un-repaired road damage (bond, proof of insurance, letter of credit, etc.). The surety will be retained until the Notice of Completion FS-2800-16a is submitted.
13. No source holes will be drilled within 100 feet of stream crossing bridges or culverts, inside ditch relief culverts, cattle guards, or other structures without approval of the AO/Rep
14. Operations on Forest Roads which have a running surface of 6 inches or less of total structural aggregate (gravel) will be suspended during wet road conditions if any rutting, pumping, or plastic deformation of the running surface occurs.

On native-surface roads this will occur when there is field evidence of surface rilling or channel development or at the point of plastic deformation over a distance of 10 feet or more.

These limitations apply to any Forest Service Road even if not included in the project area.

Cultural Resource Protection

15. Total avoidance of all cultural properties will be required. All eligible sites identified in the Class I inventory report will be avoided by a minimum of 100 feet.
16. All employees of the operator and any subcontractors must be informed by the operator before commencement of operations that any disturbance to, defacement of, or removal of archaeological, historical, or sacred material will not be permitted and violation of the laws that protect these resources will be treated as law enforcement/administrative issues.
17. If subsurface cultural resources are discovered during operations, all work in the vicinity will cease and the AO/Rep notified immediately. The operator shall take any additional measures requested by the USFS to protect discoveries until they can be adequately evaluated by a permitted archaeologist.

Invasive and Nonnative Species

18. The operator will clean all vehicles and equipment (trailers, ATVs, etc.) to remove plant material and soil (may contain seed) prior to entering the public lands within the project area in order to avoid spreading of invasive weed species.

19. Sections 8 and 9 in T48N R14W NMPM (which have current invasive weed infestations) will not be used for any staging areas and will occur last in the drilling sequence in order to avoid spreading of weed species.
20. All infestations of invasive weeds, resulting from surface disturbance caused by the operator, will be controlled by the operator before spreading occurs into the surrounding area. Control methods will be reviewed by the AO/Rep prior to treatment.

Watershed and Vegetation

21. The survey crew will not use permanent spray paint on any rocks, trees or other natural features.
22. Drilling operations will utilize only buggy drills or heli-portable drills.
23. Drilling will occur in existing road prisms and any unavoidable surface disturbance will be minimized.
24. All drilling related activities, including the dispersal of cuttings, will avoid all drainage channels (perennial, intermittent, and ephemeral), and areas supporting riparian/wetland vegetation unless approved by the AO/Rep.
25. All drill holes will be filled in and plugged in a safe manner in accordance with State and/or USFS regulations. Cuttings must be put back down the hole or scattered so that they blend in with the surrounding soil. Scattered cuttings shall not exceed a thickness of one inch and shall be blended into the natural soil.
26. The number of times that vehicles pass over source hole routes will be minimized.
27. The operator will provide GPS locations and the approximate flow rate of any artesian flows encountered. Similarly, the location and depth to groundwater will be reported for shot holes that encounter static groundwater. This information is due to the AO/Rep within 60 days of project completion.
28. Areas of surface disturbances in excess of 100 sq ft will be re-seeded within 30 days of the termination of seismic work with the seed mix specified by the USFS (attached). The seed mixture used must be *certified* weed free. There shall be NO primary or secondary noxious weeds in the seed mixture. Seed labels from each bag shall be available for inspection while seeding is being accomplished.

Wildlife and Special Status Species

29. In order to maintain existing goshawk populations, no activities are allowed within one quarter mile of any active goshawk nest from March 1 to July 1 that would cause nesting failure or abandonment.
30. Drilling and helicopter activities in portions of the project within Colorado Division of Wildlife Game Unit 61 (west and south of FS road 402) will be scheduled to minimize disruption during big game hunting seasons that begins on August 31, 2008.

Livestock and Range

31. All gates within the project area will be left as they are found; i.e., open gates will be left open, closed gates will be closed.
32. Any damage to existing fences, gates, cattle guards or natural barriers to livestock movement occurs as a result of the operations must be reported immediately to the AO/Rep.
33. Removal or alteration of existing range improvements is prohibited without the prior written approval of the AO/Rep.

Hazardous and Solid Waste

34. All areas involved in the seismic operation will be kept free of litter and debris. All flagging, stakes, pin flags, shot wire, etc. will be removed from USFS lands at the end of operations.
35. All equipment oil and hydraulic leaks will be repaired before use on the project.
36. Any potential for oil or fuel release, whether during fueling operations or during work operations, will require that operators and machines have necessary materials readily available to contain or absorb any fuel or oils spills.
37. No oil or lubricants shall be drained onto the ground surface. Any accidental oil, diesel, or hydraulic fluid spills will be cleaned up and removed, including any contaminated soils. All spill-related materials will be removed from USFS lands.
38. The operator and/or their sub-contractors will be responsible for containment and remediation of any spills of fuel, oil, and other hazardous materials. All releases will be reported immediately to the AO/Rep.

Public Health, Safety and Lands & Realty

39. Activities of the operator shall not prevent, obstruct, or unduly interfere with any activities of authorized users of the public lands.

40. The operator will prepare a Safety Plan for personnel injuries that includes telephone numbers, clinic or hospital locations, County Sheriff numbers for notices of accidents, Emergency Response for explosive storage, non-detonation and charge recovery, and a system for local public notice of detonation activity.
41. Drilling, explosives handling and detonation procedures for seismic shot holes will be conducted utilizing strict guidelines set forth by the Bureau of Alcohol, Tobacco, and Firearms (ATF), State, and local guidelines. Drilling contractors will have a valid blasting license or permit for the jurisdiction in which they are working. Explosives storage will be conducted in compliance with Bureau of ATF requirements. Storage will be off USFS lands, except for “day of work” needs which may be stored in a portable magazine on site.
42. Source point placement operations (explosives) will adhere to Colorado Oil and Gas Conservation Commission regulations with respect to setbacks [COGCC Regulation 333.c(2)]. Source point placement shall be kept a safe distance from occupied buildings, water wells or springs, unless by special written permission of the surface owner or lessee.
43. Source point (explosives) placement will be setback a minimum of 100 feet from irrigation ditches or earthen reservoirs.
44. Standard safety procedures and applicable federal, State, and local regulations will be followed during shot detonation.
45. Shot detonation will be conducted only if animals or people are not within the line of sight of the shot hole.
46. The Montrose Interagency Fire Center (249-1010) must be notified immediately upon the occurrence of any wildfire caused by the operation.
47. The operator will be held responsible for damage and suppression costs for fires started as a result of operations to the extent permitted by law.
48. Shot wires shall be cut off six inches below natural ground level.
49. For all charges that fail to detonate, the seismic operator will put iron/rebar or other substances in the hole to prevent any future drilling into the hole. The GPS locations of the non-detonated shots will be provided to the AO/Rep.

USFS RECOMMENDED SEED MIXTURE

The following seed mixture is approved for use within the vegetation zones in the project area. Rates are expressed as pounds of “Pure Live Seed” (PLS) per acre, not bulk rates. If a specified species is unavailable, substitution must be approved by the AO/Rep.

Common name	Scientific Name	variety	% of mix
<i>Ponderosa Pine/Gambel oak zone</i>			
15 POUNDS PLS PER ACRE			
Slender wheatgrass	<i>Elymus trachycaulus ssp. trachycaulus</i>	San Luis	35
Mountain brome	<i>Bromus marginatus</i>	Bromar	35
Bottlebrush squirreltail	<i>Elymus elymoides</i>	Sand Hollow	20
Rocky Mountain penstemon	<i>Penstemon strictus</i>	Bandera	10
<i>Pinyon-juniper zone</i>			
20 POUNDS PLS PER ACRE			
Slender wheatgrass	<i>Elymus trachycaulus ssp. trachycaulus</i>	Pryor	35
western wheatgrass	<i>Pascopyrum smithii</i>	Arriba	35
Indian ricegrass	<i>Achnatherum hymenoides</i>	Paloma	10
Blue grama	<i>Bouteloua gracilis</i>	Hachita	10
Galleta	<i>Hilaria jamesii</i>	Viva	10
16 POUNDS PLS PER ACRE			
<i>Aspen and Spruce-fir zones</i>			
Slender wheatgrass	<i>Elymus trachycaulus ssp. trachycaulus</i>	San Luis	15
blue wildrye	<i>Elymus glaucus</i>		25
Canby bluegrass	<i>Poa canbyi</i>	Canbar	13
Mountain brome	<i>Bromus marginatus</i>	Bromar	35
Thickspike wheatgrass	<i>Agropyron dasytachyum</i>	Critana	10
Parry's oatgrass	<i>Danthonia parryi</i>	Bromar	2

Seed should be hand broadcasted at the specified application rate.

Revegetation efforts on the disturbed areas will be considered satisfactory when:

- Soil erosion resulting from the operation has been stabilized; and
- A vegetative cover at least equal to that present prior to the disturbance and a plant species composition at least as desirable as that present prior to the disturbance has been established.

The seed mixture used must be *certified* weed free. There shall be NO Colorado State primary or secondary noxious weeds in the seed mixture. Seed labels from each bag shall be available for inspection while seeding is being accomplished. The seed labels from each bag used will be provided to the AO/Rep.