

# **SCOPING DOCUMENT**

United States Department of Agriculture East Northumberland Exploration Project

**Forest Service** 

Humboldt-Toiyabe National Forest Austin Ranger District

Nye County, Nevada

May 2014

#### **Comments Welcome**

The Austin Ranger District is initiating scoping and welcomes comments on the proposed East Northumberland Exploration Project (Project), which is located on National Forest System lands within the Humboldt-Toiyabe National Forest. The project proponent (National Oilwell Varco) proposes to conduct mineral exploration in the Toquima Range of Nye County.

The District has tentatively determined that this proposed activity may be categorically excluded from further analysis and documentation in an environmental assessment (EA) or environmental impact statement (EIS) [36 CFR 220]. A proposed action may be categorically excluded only if there are no extraordinary circumstances related to the proposed action and the proposed action is within a category listed in section 31.12 or 32.2 of Forest Service Handbook 1909.15. This proposed action falls within section 32.2(8) –

(8) Short-term (1 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 1 mile of low standard road, or use and minor repair of existing roads (36 CFR 220.6(e)(8)).

In developing the Project, the Forest Service encourages the participation of interested persons, businesses, state and local governments, and Native American tribes at this time and throughout the process prior to the decision by the Responsible Official. The Project Plan of Operations can be reviewed at the Austin Ranger District during normal business hours and on the project web page (see How to Comment).

## **Background**

The Austin Ranger District has received a Plan of Operations (POO #03-13-03) from National Oilwell Varco (NOV) proposing an exploration drilling project in the Northumberland Mining District. The Northumberland District is known for gold, barite, silver, zinc, and uranium (Tingley, 1988, Mining Districts of Nevada: NBMG Report 47). Silver was discovered in 1866 and mines operated intermittently until 1891. Gold was discovered in 1936 and an open pit mine operated from 1939 to 1942 (Kral, 1951, Mineral Resources of Nye County: Univ. of Nevada Bull., Geology and Mining Series No. 50). Additional open-pit mining of gold and silver occurred in the 1980s. Barite was discovered in 1967 and over 1 million tons were produced by 1978 (NBMG Open-File Report 80-2). Barite mining stopped with the collapse of the prices of oil and of barite (used in drilling mud) in the early 1980s.

### **Analysis Area**

The Project is located on the Austin Ranger District approximately 43 miles southeast of Austin, Nevada. Exploration activities could occur in sections 5, 6, 7, 8, and 9 of Township 12 North, Range 46 East (Mt. Diablo Meridian) and section 31 of Township 13 North, Range 46 East. Most of the drilling would occur in section 8. The Project extends across the east end of East Northumberland Canyon and includes the steep slopes and gentle ridges north and south of the canyon floor (see Figs. 1 and 2). Elevation of the Project area ranges from 7,100 to 8,800 feet. Eastern East Northumberland canyon and its tributaries are ephemeral although there is a spring on the canyon floor adjacent to the Project. Water leaks from broken pipes at several locations east of the spring. The canyon floor is alluvium at least a few tens of feet thick and the canyon walls are bedrock outcrops, rocky colluvium, and some talus, including waste rock from previous mining activity.

Pinyon-juniper woodland is the dominant vegetation type on the slopes and ridges with only scattered sagebrush and rare forbs and grasses. Sagebrush, greasewood, and lesser rabbitbrush cover the valley floor. Sparse sagebrush also covers parts of the north wall of the canyon.

Some Project activities would occur in what Nevada Division of Wildlife has mapped as greater sage grouse Habitat of Moderate Importance, or Preliminary General Habitat, but no nesting or breeding habitat occurs within 4 miles of the Project. During the biological survey, no evidence of greater sage grouse was found in the Habitat of Moderate Importance but scat was observed at one location in Low Value/Transitional Habitat, which covers the rest of the Project area.

The 6,563-acre Stagecoach Inventoried Roadless Area (IRA) overlaps the southeastern edge of the Project. NOV has proposed to drill at five sites on an existing road which loops up to 700 feet into the IRA and at three others outside the IRA but adjacent to the boundary. The maximum area of a single drill pad is 3,600 square feet so five pads could occupy 0.41 acres. New surface disturbance would not exceed 0.3 acres as the existing road would account for at least ½ of the area of each drill pad. Access to the boreholes next to the boundary would be by overland travel of up to about 300 feet through the IRA on a faint 2-track road. The 0.07-0.08 acres of the overland travel route plus the 0.3 acres of drill pad disturbance make up less than 0.06% of the Stagecoach IRA. Although no road construction or re-construction is proposed for this Project within the IRA, Title 36 CFR 294.12 (b)(3) allows for road construction activities

within IRAs where 'A road is needed pursuant to reserved or outstanding rights, or as provided for by statute or treaty'. Access for mineral exploration, development, and mining is granted under the General Mining Law of 1872.

# **Purpose and Need for Action**

The agency's need is to respond to the proponent's submittal of a Plan of Operations (POO) and to ensure operations will be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest surface resources (36 CFR 228.8, Subpart A). The purpose of this proposed action is to authorize mineral exploration activities consistent with the statutory right of the proponent to explore for and develop mineral resources on federally-administered lands under the General Mining Law of 1872 and with other laws and regulations. The decision for the Forest Service to make is whether to approve the POO as submitted or to approve it with additional measures to protect surface resources. The proponent's need is to determine if economically viable mineral deposits exist within the proposed project area, and to define the nature, extent, shape, and economic value of those deposits, if identified.

### **Proposed Action**

The proposed action is for the Forest Service to authorize National Oilwell Varco to conduct mineral exploration. The project is expected to start in 2014 and would have a duration of one year, except that final reclamation seeding may occur more than one year after project startup if necessary to maximize the chances of revegetation success.

Approval of the POO would authorize NOV to drill boreholes to collect subsurface samples for resource evaluation at up to 51 drill pads. More than one borehole may be drilled from the same pad. Up to 4 of all the project boreholes may be converted to water monitoring wells. A weather station would be installed and monitored quarterly for up to three years. Pad locations and the number of holes are still tentative but all drilling would occur adjacent to roads identified in the POO. The drill pads would be accessed by existing roads, approximately 2,200 feet of temporary new road, and by overland travel of approximately 1,770 feet. Minor repairs, such as clearing of brush and rocks, may be performed on up to 12,900 feet of existing roads. The total acreage for 51 drill pads (assuming 41 vertical and 10 inclined boreholes), new road construction, and overland travel routes is about 4 acres. Less than 13% of this acreage would be within the IRA (i.e., 0.22-0.49 acres depending on the number of inclined holes within the IRA). Drill pads and new roads would be reclaimed.

Reverse circulation or core methods would be used to drill boreholes up to 8 inches in diameter (less than 4 inches for core) to planned depths of up to about 500 feet. Drills would probably be operated continuously for 24 hours per day, seven days per week. It is likely that both a reverse-circulation and a core drill would be operating at the same time during part of the Project. Each would be attended by a pipe truck and water truck. Other large equipment that would be needed for road and drill pad construction include a Cat D7 (or equivalent) dozer, a Cat 325 (or equivalent) excavator, a Cat 140 (or equivalent) grader, and a backhoe.

Drill pads would use road ways to the extent feasible. Pads for vertical boreholes would be about 25 feet by 50 feet. For inclined boreholes, the pads may need to be 60 feet by 60 feet. NOV anticipates drilling up to 10 inclined boreholes. Each drill pad would be constructed to

provide an approximately level surface for the drill and associated equipment, and room for a 20'x12'x6' sump (mud pit). Fuel storage, portable toilets, and laydown/staging areas would be located to the east, on private land adjacent to the National Forest (orange in Fig. 1).

Upon completion of drilling, the boreholes would be plugged and abandoned so as to protect ground water. All abandonment material would be placed by tremie pipe (or drill string) from the bottom of the hole upward to fill the hole even if the bottom of the hole is above the water table. A cement surface seal of at least 20 feet would cap the set-up abandonment material (as required by Nevada Code NAC 534.420(6) or 534.4371(2)(b). Zones of lost circulation or of different water quality or hydraulic head would be sealed by neat cement in confining zones above and below to prevent the vertical movement of water. Boreholes would be plugged before the drill moves to the next hole.

For reclamation, new roads would be recontoured to the extent practicable although some fill on steep slopes may slip out of reach. Sumps would be allowed to dry and then would be backfilled with excavated material and covered with stockpiled soil, if available. For drill pads on existing roads, only new surface disturbances would be recontoured. Disturbed areas would be raked and seeded with a Forest Service-approved native seed mix. A portion of the reclamation bond would be held for at least three growing seasons to ensure successful revegetation and control of noxious weeds.

Specific measures designed to minimize adverse environmental impacts currently include, but are not limited to, the following:

- All equipment would be washed prior to entering the area to prevent the introduction of noxious weed seeds.
- Cultural resources identified during a survey of the project area would be avoided by Project activities.
- If undiscovered archaeological or cultural resources are encountered during Project work, activity in that area would cease immediately, the Forest Service would be notified, and the resources would be evaluated. The results of the evaluation would determine subsequent action.
- Ground disturbing activities from May 1st to July 15th would be avoided to protect nesting migratory birds or a nest survey would be conducted prior to disturbance and sites of nesting activity would be avoided.
- Water used for drilling would be obtained from a well in Monitor Valley; it meets
  national primary and secondary drinking water standards and has a total dissolved solids
  concentration of less than 200 mg/L.
- Sumps would have escape ramps for wildlife and livestock.
- No drilling or road construction would occur in pygmy rabbit habitat adjacent to the Project or in Toiyabe buckwheat habitat within the Project area.

Mineral exploration in the proposed project area conforms to the Toiyabe National Forest Land and Resource Management Plan of 1986, particularly the following Standards and Guidelines for Minerals:

- 1- Encourage exploration and development of mineral resources and minimizing possible adverse impacts to surface resource.
- 4 Require operating plans which minimize impacts to surface and cultural resources and provide for reclamation of disturbed areas. (p. IV-57)
- 23 Reasonable access for mineral exploration, development, and production is guaranteed under the mining laws. The type of access approved will be consistent with the logical development of mineral properties. (p. IV-59)

The proposed action also conforms to Direction for Management of Management Area 9 - Toquima:

Exploration and development of mineral resources will be conducted in a manner that minimizes adverse effects on range, wildlife, cultural resource, and recreation values. (p. IV-129)

#### **How to Comment**

Written comments, concerns, or suggestions for this Project should be mailed to Steve Williams, District Ranger, Austin District, P.O. Box 130, Austin, NV 89310; or sent by facsimile to (775) 964-1451; or hand delivered to 100 Midas Canyon Road, Austin, NV, during normal business hours of 8:00 am to 12:00 pm and 12:30 pm to 4:30 pm, Monday through Friday, excluding federal holidays. Oral comments should be provided during normal business hours via telephone (775-964-2671), in person, or at an official agency function (i.e. public meeting) that is designed to elicit public comments.

To provide electronic comments, copy the following web address into your browser's address bar: <a href="http://www.fs.usda.gov/goto/htnf/eastnorthumberland">http://www.fs.usda.gov/goto/htnf/eastnorthumberland</a> and click on "Comment on Project" in the list of links on the right side of the web page that opens. To submit electronic comments after the period of comment web form availability ends on June 27, 2014, you should email your comments to the project contact as given under "Request More Info" on the project web page. Please use the term "East Northumberland 03-13-03" in the subject line of your email.

Copies of all comments submitted, including names and addresses, may be made available to the public. Comments will typically be posted in the "Public Reading Room" on the project web page unless they contain offensive language or meet other criteria for exclusion.

To be most effective, comments should be received by the Forest Service no later than **June 27**, **2014**.

#### Contact Information

For further information on this Project, visit the project web page at <a href="http://www.fs.usda.gov/goto/htmf/eastnorthumberland/">http://www.fs.usda.gov/goto/htmf/eastnorthumberland/</a>, or contact George Langstaff (775-964-2671, gdlangstaff@fs.fed.us). The project web page can also be accessed by first going to the Forest's home page at <a href="http://www.fs.usda.gov/htmf/">http://www.fs.usda.gov/htmf/</a>, clicking on "NEPA Projects" in the Quick Links on the right side of the web page, and then scrolling down to the project link. We thank you for your interest in our National Forests.

8TEVEN WILLIAMS Austin District Ranger

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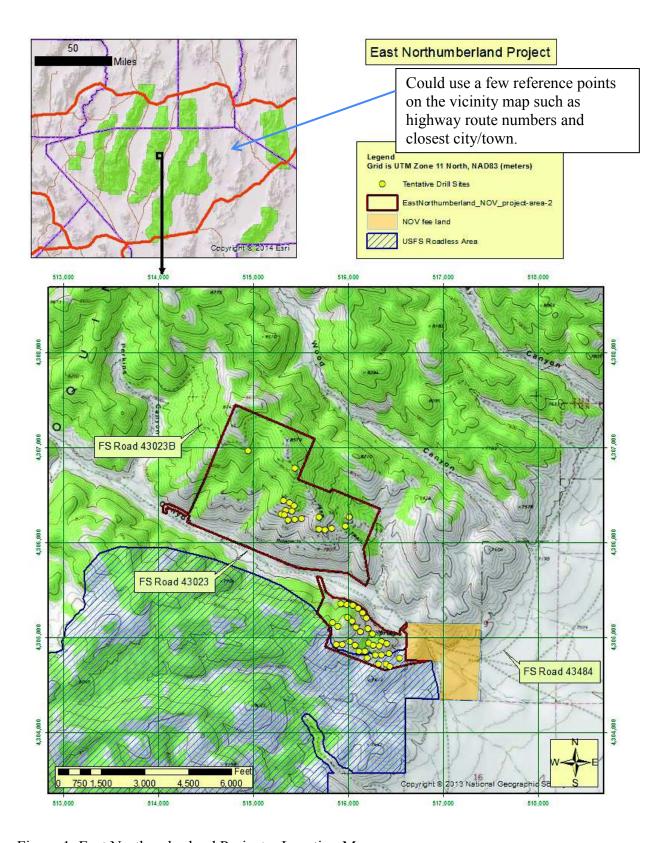


Figure 1. East Northumberland Project – Location Map

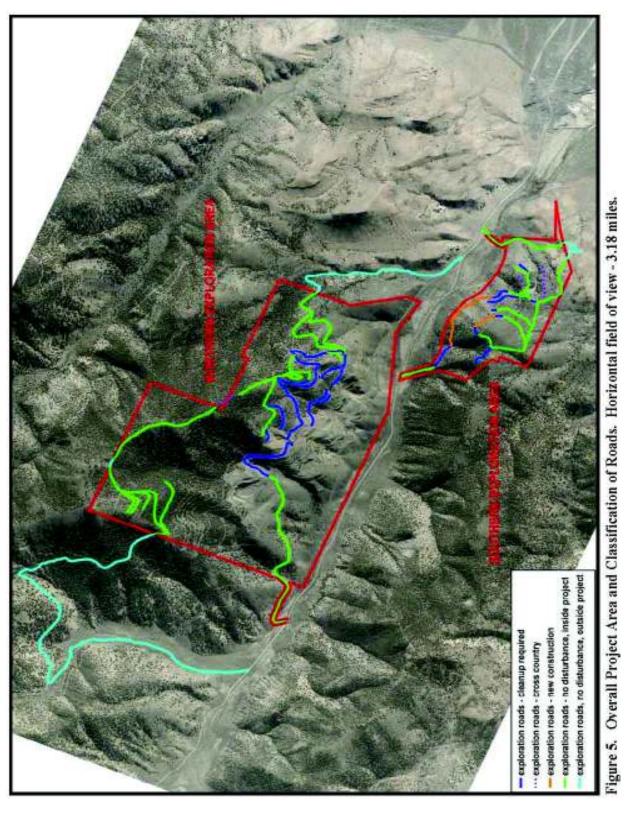


Figure 2. East Northumberland Project – Proposed Road Use. All drill sites will be on the roads shown, primarily those in orange and dark blue. This figure is from the Plan of Operations.