

Memorandum:

To: Howard Cleavinger - Assistant Field Office Manager
& Geophysical File

From: Stan Olmstead - Environmental Scientist

Date: September 19, 2001

Re: Inspection of completed Veritas Seismic operations (Sections 8 & 9, T12S, R22E).

Inspections were made within the seismic area each of three weeks. September 4th, the operation was just initiating on the ground with the start of buggy drilling on the east end of the line. I met with Mr. Dave Newman of Veritas. Operations appeared well with little impact to the land. September 11th, heliportables were being used on the west end of the line. Although impacts were not heavy the staging of the helicopter was done in an unauthorized area of vegetation. I communicated this to Mr. Newman. September 19th I made a complete inspection of the seismic work area including the seismic line and access route authorized in the environmental assessment for the operation. The following is a summary of this inspection.

Generally the seismic work was done well with little disturbance to the land area. Buggy drills, ATVs, and heliportables caused little soil disturbance. Shallow wheel ruts caused by the wide tires of the buggies and ATVs were expected and were present. Vegetation that was impacted was expected as analyzed in the EA with broken sage brush and a few small broken juniper trees. Soils should be normal appearance by next spring after rains, wind, and winter snows weather and naturalize the soils. Broken vegetation on the other hand may require two or three growing seasons before growth of plants naturalize the disturbed vegetation. In the area of the heliportable it was difficult to locate where work had been performed. Foot prints by workers and small areas (< 3' diameter) of subsurface soils where drilling occurred were all that was noticeable.

Less desirable impacts that were observed and should be communicated to Veritas follows. Workers did cause impacts to unauthorized surfaces. As mentioned above the helicopter crew staged in an unauthorized area. This site was located near the center of the line at the crossing of a surface gas line and an existing road. The helicopter and it's support crew parked in the vegetation just off the road damaging sage brush. Also buggy drills and ATVs traveled wide in a number of areas that were not analyzed as travel routes in the EA. If Veritas does future work on Vernal Field Office managed lands they should be aware that the analyzed surfaces are the only surfaces that can be used. Trash also was left along the route and along the road ways to the project area. This material consisted of predominately of orange ribbon. The operator failed to collect and dispose of much of the ribbon tied to vegetation and along the seismic route and the roadway to the project area used as markers to identify the way to the area for the workers. Also four 6" x 6" x 3' boards were left in a drainage along the access route where vehicles made crossings of the surface gas line. Additionally there were a few wires, paper and other items not

removed and disposed of in an approved manner. During the September 11th inspection Duane DePaepe observed a small area where fuels had spilled. This was not a large quantity and would most likely bioremediate in place without negative impacts to the environment. I did not see this site and Duane may be more prepared to explain any impacts to the environment. This may be something to consider for future operations Veritas may be planing on Vernal Field Office lands.

I will contact Veritas representative Mr. Dave Newman and require him to return to the project area to remove all orange ribbons that litter the roadway to the project area. Also; I will have him return to the access route to remove the boards that were left to cross the surface gas line. I will inform him that I collected the ribbon and other items left along the seismic route but would expect Veritas to remove them in the future. Unauthorized disturbances should be communicated to Veritas as unacceptable but without any actual damage to protected resources. This information should be used for any future projects Veritas may want to perform since the disturbance is more potential than actual. Reclamation is not necessary to naturalizing disturbed sites since it is expected to naturalize with normal weathering and vegetation regrowth and would not require the need for soil work or reseeding.