0081

United States Department of Agriculture
Forest Service
Manti- La Sal National Forest
Supervisor's Office
599 West Price River Drive
Price UT 84501
Phone # (435) 637-2817
Fax # (435) 637-4940

File Code: 2820/2360
Date: December 1, 1999

Copy Hanson, Paul
#2 (2-sided)
OC-T/041/002

Mr. Max Evans
Utah Division of State History
300 Rio Grande
Salt Lake City, UT 84101

Atten: Mr. James Dykman

RE: (1) Cultural Resource Evaluation of a Proposed Mine Breakout Location and a Lease Modification Tract in the Box Canyon Locality of Sevier County, Utah by F. Hauck (AERC). Manti-La Sal National Forest CRM Report No. ML-99-888 (USHPO No. U-99-AF-315f); and (2) Continuation of Section 106 Consultation for the Pines Lease Tract, Emery and Sevier Counties, Utah.

Dear Mr. Evans:

The Manti-La Sal National Forest seeks the Utah State Historic Preservation Office' comments on two closely related, but separate actions. The first action consists of a 150 acre coal lease modification to Canyon Fuel Company, LLC (Canyon Fuel) existing Quitchupah Coal Lease Tract. The lease modification area was analyzed via an Environmental Impact Statement (EIS) for the adjoining Pines Coal Lease Tract. During that analysis, the Forest consulted with your staff and concurred that, based on available data, the exceptions to the unsuitability criteria for cultural resources could be applied and the tract (including the lease modification area) found suitable for leasing. Canyon Fuel's application for a lease modification was approved subsequent to this analysis. The second action consists of continuation of consultation regarding site treatment for anticipated adverse effects at historic properties within the Pines Lease Tract. Since our last Section 106 consultation on the Pines Tract, Canyon Fuel was the successful bidder and has been leased the Pines Tract (designated as Federal Coal Lease UTM-76195). A mine plan submitted by Canyon Fuel for adding the lease to their existing Quitchupah Mine Plan is being evaluated by the responsible agencies.

The Pines Lease Tract Lease Tract and the lease modification area is located in the vicinity of Box Canyon south of Muddy Creek in the southern Wasatch Plateau. The town of Emery, Utah is located approximately 12-15 miles northeast of the project area.

Since the lease modification and the Pines Tract have (1) been leased by the same lessor (Canyon Fuel), (2) are geographically adjoining, and (3) since mining operations will proceed on roughly similar schedules, we believe that it ***may*** be prudent to conduct Section 106 consultation simultaneously. More specifically, we believe that it ***may*** be feasible to develop comprehensive treatment plans and one programmatic agreement to guide implementation of those plans for all affected sites in the lease modification area and the Pines Lease Tract.

Quitchupah Lease Modification Area

First, I will discuss the 150 acre lease modification. In the Pines Tract EIS, JBR Environmental Consultants relied on sample survey data to assess and predict effects to historic properties. Prior to approving the lease modification, the Forest requested additional information on cultural resources from Canyon Fuel. In the summer of 1999, Archaeological-Environmental Research Cor- Corporation (AERC) completed an inventory of areas most likely to be affected by underground mining within lease modification area. Survey also included a proposed "breakout" for air circulation.

We have reviewed the above-mentioned report by AERC for the proposed breakout location and the lease modification to Canyon Fuel's existing Quitchupah Lease. Archaeological inventory by AERC identified four (4) prehistoric sites within the lease modification area; no sites were identified at the breakout location. The four sites are briefly described below. We also discuss the National Register evaluations, determinations of effect and treatment alternatives for one site potentially at risk from adverse effects.

Site 42SV2492 (ML-3582). This site consists of a small (8 meter x 15 meter) prehistoric rockshelter with buried cultural deposits. Site recorders observed chipped stone artifacts, burned/firecracked rock and organic bone material at the site; buried deposits are estimated to be 1 meter in depth or greater. A small trowel test along an erosional surface near the mouth of the shelter revealed buried cultural stratigraphy. The site appears to be undisturbed by illegal looting. No temporally diagnostic artifacts were observed; therefore, the age of the site cannot be determined at this time.

Site 42SV2492 is evaluated by AERC as eligible for the NRHP; we agree with this evaluation until such time as subsurface testing demonstrates otherwise. AERC's report (page 7) states that arched roof of the shelter is susceptible to surface subsidence. "However, the potential for secondary disruption due to vandalism is a greater threat to the site's integrity than is surface collapse through mining related subsidence" (see page 7 of AERC report). This potentially may be true; however, our following comments will focus on the proposed undertaking (a Forest Service decision to consent to mining that could cause subsidence in the lease modification) and our assessment of effects. We do not intend to dismiss AERC's comments regarding potential future vandalism; but the issue of vandalism is beyond the scope of the Section 106 undertaking currently being evaluated by the Forest Service. As a side note, the Forest is actively monitoring sites in this area for vandalism and other (non-mining related) impacts; Site 42SV2492 could potentially be included in our monitored sites.

Though the AERC report concluded that the shelter roof could potentially collapse, it did not suggest any further mitigative or protective actions. Following, we provide you with the agency's assessment of effects and alternatives for mitigating these effects.

Site 42SV2492 is located within the area of anticipated mining-induced subsidence. This area will be subjected to subsidence and compression/tension forces as underground mining progresses directly underground and below the site. Effects on the surface could include moderate surface cracking along structural planes in geologic rock structures and/or failure of unstable or arched rock structures in canyon locations. Forest geologists have conducted on-site examinations, have evaluated analyses/predictions for anticipated subsidence effects and have concluded that the rockshelter is at an approximate 30% risk of experiencing structural failure/collapse of its roof. This, in our estimation would constitute an adverse effect.

Potential alternatives to mitigate these effects include (1) conducting limited test excavations to determine the character, content and horizontal/vertical extent of buried cultural deposits and then, if those results confirm initial assessments of significant buried deposits; (2) conduct data recovery via controlled excavation, analysis and reporting and/or; (3) install structural supports within the shelter to support the shelter roof and protect against collapse of the roof (which could be located at test excavation locations and/or; (4) since, the potential for structural failure is not high, take no action. In the latter alternative, should testing indicate the presence of significant subsurface cultural deposits and should the shelter roof fail or collapse, the Forest would require the company to carefully remove the roof-fall debris and then to fund controlled data recovery.

We suggest that implementing controlled testing is a necessary first step to assess the nature of the archaeological deposits. This will aid us in the development of any treatment alternatives. However, in general, preservation in-place is our preferred protection for virtually all sites. Because Forest geologists have estimated the potential for structural failure at a low to moderately low risk, conducting limited test excavations, potentially installing a protective erosion protective fabric in place and monitoring for potential subsidence is our preferred alternative. Should strcutural failure occur, Canyon Fuel would be required to implement data recovery per requirements of a programmatic agreement. As we discuss at the end of this letter, we believe a programmatic agreement for implementing data recovery could and should address anticipated adverse effects to other sites within the adjacent Pines Coal Lease Tract due to similarities in the project proponent, geographic proximity, and closely related mining schedules.

Site 42SV2493 (ML-3583). This site consists of a prehistoric ceramic scatter of Emery Grayware and Ivie Creek Black-on-White ceramic sherds. The site is located on the rim of Box Canyon. The sherds appear to be from three separate vessels. No other artifacts were observed and there appears to be no buried cultural deposits. AERC evaluated the site to be eligible for the NRHP on the basis that the site has "artifactual integrity, marginal depth potential and limited research potential" (see page 7 of AERC's inventory report).

We disagree with the determination of eligibility. According to data provided in the site record, cultural deposits are estimated to be surficial and represented by the remains of three ceramic vessels. Other artifactual (chipped or groundstone artifacts, fire-cracked rock or bone tools) or ecofactual remains (e.g. butchered/processed bone) were not present on the site. Lacking buried deposits and representing the remains of three ceramic vessels, possibly disposed of during water collection and with AERC's evaluation of "marginal depth potential and limited research potential', we question the potential of this site to yield significant information on the prehistory of the area. The site appears to have no potential to provide further information on subsistence related activities and/or technological adaptations by Fremont peoples or to provide significant

insight of Fremont adaptations to upland elevations. We therefore recommend the site to be ineligible for the NRHP. The site is not located within the area of anticipated effects and will not be affected by subsidence related effects. No further work is believed necessary at this time.

Site 42SV2494 (ML-3854). This is a small (10 meters x 10 meters) prehistoric lithic scatter site located on the east rim of Box Canyon. The site contains approximately 10-25 pieces of debitage, all of the local Flagstaff Chert, one chopper, one biface blank, one projectile point base, one knife fragment and one scraper. Cultural materials are estimated to exist only in surface deposits. AERC suggests that the site functioned as game-kill butchering locus. AERC evaluated the site as ineligible for the NRHP on the basis that the site possessed no contextual integrity. Based on these findings, we agree with this finding. The site is not located within the area of anticipated effects and will not be affected by subsidence. No further work is believed necessary at this time.

Site 42SV2495 (ML-3585). This is a prehistoric rockshelter site located at the base of a north-facing ledge on the east rim of Box Canyon. Approximately 10 pieces of lithic debitage, fire-cracked rock, a mano, a hammerstone and a core were observed within or immediately in front of the shelter. AERC estimated buried deposits to be approximately 10-20cm deep within the 10 meter x 30 meter site area. AERC recommends that the site is eligible for listing in the NRHP. We agree with this evaluation. The site is not located within the area of subsidence effects and will not be affected. No further work is believed necessary at this time.

In conclusion, further assessment of effects for the lease modification area indicate that one National Register eligible site, Site 42SV2492 (ML-3582) could be adversely affected by proposed underground mining. We have explored potential alternatives including our recommended alternative. We welcome your consideration, comments and further discussion on proposed mitigation alternatives for the Quitchupah Coal Lease modification area.

Pines Lease Tract-Continuation of Section 106 Consultation

Now, I draw your attention to our previous consultation regarding the Pines Coal Lease Tract located adjacently cast, north and south of the Quitchupah Lease modification area. Analysis of effects to sites was conducted through the Pines Tract EIS and through application of coal leasing unsuitability criteria during which we have consulted with your staff, the Advisory Council on Historic Preservation and interested tribes.

Under the selected alternative, potential adverse effects are anticipated at two prehistoric National-Register eligible rockshelter sites. These include Sites 42SV2433, the Big Mac Shelter and Site 42SV2434, the Little Mac Shelter, both located on the east rim of Box Canyon. Further testing/data recovery has been recommended at these two sites. One other rockshelter site, 42SV2432 is planned to be fully supported by underground mining and should not be affected; we will review mine plans upon submission and notify you of any changes from planned mining which could affect this site. At other sites within or adjacent to the area of effect, anticipated effects are summarized below.

Site No.	Description	Anticipated Effects/Recommendations
42EM1628	Lithic Scatter	Low to none. No further work.
42SV1561	Lithic Scatter	Essentially same as 42EM 1 62 8, No further work.
42SV1562	Lithic Scatter	Same as 42SV 1 661 and 42EM 1 628. No further work.
42SV1567	Lithic Scatter	Same as 42EM1628. No further work.

Site No.	Description	Anticipated Effects/Recommendations
42SV2378	Rockshelter	Outside of proposed mining area, no effect. No further work.
42SV2388	Lithic Scatter	None. Within proposed lease amendment area. Amendment denied. No further work.
42SV2393	Rockshelter	Same as 42SV2388. No further work.
42SV2394	Rockshelter	Same as 42SV2388 and 42SV2393. No further work.
42SV2423	Rockshelter	None. Will be fully supported by underground mining. Monitor.
42SV2425	Lithic Scatter	Up to 2 feet subsidence, potential surface cracking. Monitor.
42SV2430	Rockshelter	Same as 42SV2423. Monitor.
42SV2432	Rockshelter	May be fully supported--contingent upon final mine plan. If so, monitor. If not, develop and implement test/data recovery plan.
42SV2433	Rockshelter	Test, implement approved data recovery plan, monitor.
42SV2434	Rockshelter	Same as 42SV2433.

Summary

In summary, the Manti-La Sal National Forest has reviewed cultural resource inventory, evaluation and effects analysis for two closely connected, yet separate actions and has determined that adverse effects are likely or may occur at three prehistoric rockshelter sites (42SV2433, 42SV2434 and 42SV2492) in the Box Canyon locality. A fourth rockshelter site (42SV2432) is planned to be fully supported by underground mining and should not be affected; however, we will be reviewing mine plans carefully to determine if effects will occur. We have recommended testing and monitoring at one of these sites (42SV2492) and data recovery measures at the two rockshelter sites (42SV2433, 42SV2434) and potentially one other rockshelter site (42SV2432). We believe that the data recovery and monitoring plans should be developed and implemented through a programmatic agreement between the Utah State Historic Preservation Office, the Forest Service and Canyon Fuels, Inc.

We also believe that it may be feasible to include sites in the lease modification area and the Pines Lease Tract in one comprehensive treatment plan and one programmatic agreement. However, in terms of anticipated mining schedules, we recognize that mitigation actions within the lease modification area would need to precede those within the Pines Tract. Thus, it is our goal to ensure that these priorities can be met. We would appreciate your assessment of potential impacts on or setbacks to project scheduling that the development and implementation of one

programmatic agreement versus two separate programmatic agreements (for the Quitchupah lease modification area and the Pines Tract).

We would appreciate your review of AERC's Cultural Resource inventory of the 150 acre lease modification area and your further comments on proposed plans for treatment and development of a comprehensive programmatic agreement for the two actions. If you have any questions, please contact Forest Heritage Program Leader Stan McDonald at (435) 637-2817. We look forward to hearing from you.

Sincerely,

JANETTE S. KAISER
Forest Supervisor

cc:
Daron Haddock, Utah Division of Oil, Gas and Mining
Office of Surface Mining
Wes Sorenson, Canyon Fuels
Manti-La Sal NF Minerals and Recreation, Heritage and Wilderness Staff Officers
District Ranger, Ferron-Price RD
S. McDonald, SO
C. Reed, SO