

file 681/015/009 L. Braxton

United States  
Department of  
Agriculture

Forest  
Service

Manti-LaSal  
National Forest

599 West Price River Dr.  
Price, Utah 84501

Reply to: 2820

Date: July, 6, 1988

11-04-10-0000

**RECEIVED**  
JUL 11 1988

**DIVISION OF  
OIL, GAS & MINING**

Mr. Gene Nodine  
BLM - Moab District  
P.O. Box 970  
Moab, Utah 84532

Dear Mr. Nodine:

Enclosed is a copy of the Manti-LaSal National Forest Finding of No Significant Impact/Decision Notice (FONSI/DN) which covers Beaver Creek Coal Company's proposal to add Coal Exploration Hole TM-DH-4 to their 1988 coal exploration program (Amendment 1).

The FONSI/DN references the Manti-LaSal National Forest Environmental Assessment for Arch of Utah Inc. Trail Mountain Mine 1987 Coal Drilling Project, July 13, 1987. This EA covered holes TM-DH-1, TM-DH-2 and TM-DH-3 approved in 1987 and was sent to your office on July 13, 1987, with a FONSI/DN, as Forest Service consent for approval of the three-hole drilling project.

As discussed in the enclosed FONSI/DN, the referenced EA adequately covers the addition of the supplemental hole to the already approved coal drilling project. Forest Service consent to the addition of hole TM-DH-4 is subject to mitigations 1-38 discussed in the EA and one additional stipulation as discussed in the FONSI/DN.

Since Arch of Utah, Inc. did not drill the 3 holes in 1987 and Beaver Creek Coal Co. intends to drill them in 1988, the required Forest Service Road-Use and Special-Use Permits have been transferred to Beaver Creek Coal Co.

If you have any questions, please contact the Forest Supervisor's Office in Price, Utah, or the Ferron Ranger District Office in Ferron, Utah.

Sincerely,

/s/ Ted V. Fitzgerald

for  
GEORGE A. MORRIS  
Forest Supervisor

Enclosure

cc:  
L. Braxton, Div. of Oil, Gas & Mining  
D-2  
C. Reed

United States  
Department of  
Agriculture

Forest  
Service

Manti-LaSal  
National Forest

599 West Price River Dr.  
Price, Utah 84501

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Reply to: 2820

Date: August 3, 1988

11-04-10-0000

Gene Nodine  
BLM - Moab District  
P.O. Box 970  
Moab, Utah 84532

**SR/PR Rec'd AUG 26 1988**

Dear Mr. Nodine:

Enclosed are an Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI/DN) prepared by the Manti-LaSal National Forest for Beaver Creek Coal Company's Coal Exploration License Application U-64233.

The FONSI/DN and EA document Forest Service consent to approval of the Coal Exploration License. Forest Service consent is subject to inclusion of mitigations 1-42, listed on pages 5-10 of the EA, into the approved Coal Exploration License. The remaining stipulations will be incorporated into the Forest Service Road-Use Permit.

The minimum reclamation bond required for reclaiming the project roads and drill pads is \$7,100.00.

If you have any questions, please contact the Forest Supervisor's Office in Price, Utah, or the Ferron Ranger District Office in Ferron, Utah.

Sincerely,



for  
GEORGE A. MORRIS  
Forest Supervisor

Enclosures

cc: SRRA (8/8/88)

DECISION NOTICE  
AND  
FINDING OF NO SIGNIFICANT IMPACT

BEAVER CREEK COAL COMPANY  
TRAIL MOUNTAIN MINE  
1988 COAL EXPLORATION DRILLING PROJECT  
COAL EXPLORATION LICENSE U-64233

An Environmental Assessment that discusses a proposal by Beaver Creek Coal Company, Trail Mountain Mine, to drill nine coal exploration wells on the Manti-LaSal National Forest has been prepared. This analysis is consistent with the Manti-LaSal National Forest Land and Resource Management Plan.

Leasing and development activities are conducted under the authority of the following authorizing actions: The Mineral Leasing Act of February 25, 1920 as amended; the Federal Land Policy Management Act (FLPMA) of 1976; the Surface Mining Control and Reclamation Act (SMCRA) of 1977; the Multiple Minerals Development Act of August 13, 1954; the National Environmental Operations Act of August 4, 1977; the National Environmental Policy Act (NEPA) of 1969; the Federal Coal Leasing Amendments Act of 1976, as amended; the Act of October 30, 1978 that further amended the Mineral Leasing Act of 1920; 43 CFR 3400, 43 CFR 2800, 30 CFR 700; and the Manti-LaSal National Forest Land and Resource Management Plan, November 5, 1986.

The proposed drilling is located on Trail Mountain on the Ferron Ranger District. This proposal will provide coal quality and quantity data prior to the tract being offered for lease. In accordance with the National Environmental Policy Act a scoping process has been completed and an Interdisciplinary Team has reviewed the proposal and made an analysis which is summarized in the Assessment. Page 4, of the Assessment, discusses the Issues, Concerns and Opportunities that were considered in making this decision. Copies of the Assessment can be found at the Forest Supervisor's Office in Price, Utah, and at the Ferron Ranger District Office in Ferron, Utah.

Alternatives considered, as discussed on pages 5-10 of the Assessment, are: (1) Do Not Consent to the Drilling Program (No Action) and (2) Proposed Action with Forest Service Mitigation.

Based on the analysis, authorizing actions, and evaluation described in the Environmental Assessment, it is my decision to select Alternative 2. This alternative would allow the drilling of nine coal exploration wells with Forest Service mitigation. The selected alternative permits the construction of access roads and drill pads and drilling the nine proposed wells. This is consistent with the Multiple-Use Sustained Yield Act and other authorizing actions.

Page 11 of the Assessment describes the public involvement. Notification of the proposal was published in the local newspapers, and a letter was sent to Forest planning contacts. Few comments were received concerning this proposal and no new issues were identified.

Through the Environmental Assessment, it was determined that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not needed. This determination was made based on the following: (a) there are no significant irreversible or irretievable commitment of resources; (b) there are no apparent adverse cummulative or secondary effects; (c) no known threatened or endangered species will be impacted; (d) floodplains will not be negatively affected; (e) there are no alluvail valley floors, prime or unique rangeland, timberland, farmland, known cultural or paleontological values, or wilderness that will be disturbed by this project; and (f) all identified issues and concerns have been evaluated and can be effectively mitigated.

This decision is subject to appeal under Secretary of Agriculture Regulation 36 CFR 211.18. A written notice of appeal must be filed with this office within 45 days from the date of decision.

Operations may begin when the operator has received a Forest Service road-use permit for access to the project area and has received approval from the BLM to commence drilling activities. In addition, road and pad construction may not begin until the pre-work meeting (stipulation 1) has been conducted.

The Bureau of Land Management is the lead agency in permitting the proposal and in conducting compliance inspections for drilling activities within the Exploration License area. The Forest Service has direct authority for permitting and compliance regarding activities outside of the Exploration License area and for Forest Development Roads (within and outside of the Exploration License area). The Forest Service will conduct independent compliance inspections. For operations authorized directly by the Coal Exploration License, the Forest Service will work with BLM and the company as appropriate.

*George A. Morris*

Date 8-1-88

GEORGE MORRIS  
Forest Supervisor

ENVIRONMENTAL ASSESSMENT

FOR

BEAVER CREEK COAL COMPANY  
TRAIL MOUNTAIN MINE  
1988 COAL EXPLORATION DRILLING PROJECT  
COAL EXPLORATION LICENSE U-64233

USDA FOREST SERVICE, MANTI-LASAL NATIONAL FOREST  
FERRON RANGER DISTRICT

Responsible Official:

George Morris  
Forest Supervisor  
599 W. Price River Road  
Price, Utah 84501  
801-637-2817

For Further Information Contact:

District Ranger  
Ferron Ranger District  
P.O. Box 310  
Ferron, Utah 84523  
801-384-2372

## I. INTRODUCTION

### A. Purpose and Need

On May 18, 1988 the Manti-LaSal National Forest received Coal Exploration License Application U-64233 from the Bureau of Land Management. The application was filed by Beaver Creek Coal Co. and involves the drilling of nine coal exploration holes on the unleased Trail Mountain Federal Lease Tract which is located on the south end of Trail Mountain (See Map 1). The purpose of the project is to acquire additional data on the extent and quality of the coal on the tract. The drill holes are located in Sections 26, 27, 34 and 35, T.17 S., R.6 E., and Sections 1 and 2, T.18 S., R.6 E., SLM, Emery County, Utah (Maps 1 and 2). A maximum of 11 acres will be disturbed.

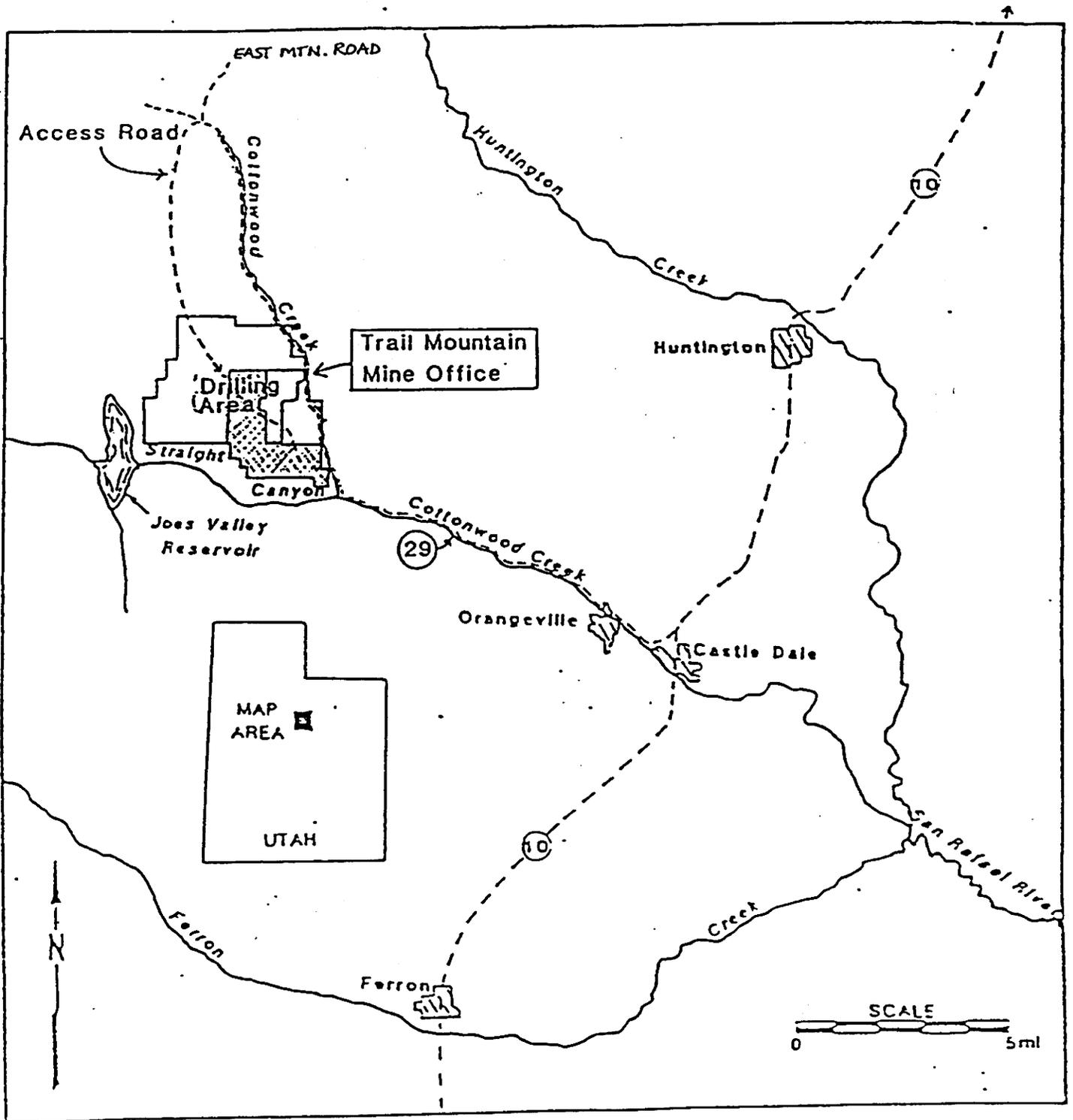
Rotary drilling and coring will be done by rubber tired truck mounted drilling rig. Exact drill site locations are identified on Map 2. Support equipment will consist of a water truck, support truck and 4X4 pick-up trucks. When drilling and coring have been completed, a truck mounted logging unit will be used.

Site preparation will consist of constructing temporary access roads (project roads) and drill pads. Topsoil will be stripped and stockpiled from drill sites and project roads prior to construction to aid in post drilling reclamation. A mud pit will be constructed at each location to facilitate drilling activities and contain drilling fluids on site. Air and biodegradable foam are the anticipated drilling mediums to be used for this project. Holes will average 2,800 feet deep.

Mud pits will be fenced at the conclusion of drilling activities to prevent accidental entry by livestock and wildlife. All drilling, coring, logging and reclamation activities will be completed prior to the onset of winter.

Reclamation will consist of allowing the mud pits to dry then selectively backfilling and compacting excavated materials. The drill pads will be returned to approximate original contour and scarified. Topsoil will then be redistributed. Seeding will be with a seed mix specified by the Forest Service.

All temporary access roads will be closed to vehicular traffic and the natural drainage patterns will be restored. Where appropriate, the access roads will be recontoured to the approximate original contour, waterbarred, scarified and seeded.



Map 1. Location of Proposed Exploration Area.

## B. Authorizing Actions

Leasing and development are under the authority of the following authorizing actions: The Mineral Leasing Act of February 25, 1920 as amended; the Federal Land Policy Management Act (FLMPA) of 1976; the Surface Mining Control and Reclamation Act (SMCRA) of 1977; the Multiple Minerals Development Act of August 13, 1954; the National Environmental Operations Act of August 4, 1977; the National Environmental Policy Act (NEPA) of 1969; the Federal Coal Leasing Amendments Act of 1976, as amended; the Act of October 30, 1978 that further amended the Mineral Leasing Act of 1920; Federal Regulations 43 CFR 3400, 43 CFR 2800, 30 CFR 700; and the Manti-LaSal National Forest Land and Resource Management Plan, November 5, 1986. This proposal is in compliance with the Forest Plan.

## C. Issues and Concerns

On June 28, 1988 an Interdisciplinary (ID) Team from the Ferron District met and conducted a field review for the proposed drill sites. During the ID Team meeting the following issues and concerns were discussed:

1. There is potential for damaging the transportation system.
2. There is potential for conflict with other users of the transportation system; this includes Meridian Oil Co., Utah Power and Light Co., other Forest users, and the Forest Service.
3. Some watershed improvement structures will be damaged.
4. Big-game animals could be disturbed and stressed while on key big game winter range.

Additional concerns were expressed by Utah Division of Wildlife Resources concerning drilling activities during the elk and deer hunting seasons. The Emery County Economic Development Council expressed concerns for the disturbance which would occur. They wanted the temporary roads closed and sites reclaimed at the end of the project. They were also interested in knowing of any water found during the drilling program. All the above concerns have been considered and can be mitigated by the required stipulations.

#### D. Opportunities

This proposal will assist the operator and Federal Government in determining the coal reserves and coal quality on the unleased coal tract. It should provide the necessary information for Beaver Creek Coal Co. to determine if they will file an application for leasing the tract and for the Federal Government to evaluate the lease and determine the fair market value of the coal.

#### E. Negative Declaration

The ID Team determined that this action after mitigation, would not cause impacts to the following: prime or unique rangeland, timberland or farmland; floodplains; cultural (see Appendix A) or paleontology resources; wetlands; alluvial valley floors; known threatened, endangered or sensitive plant or animal species.

The ID Team determined that this proposal would not affect riparian areas. Thus, a RPN Management Unit was not defined.

## II. ALTERNATIVES

#### A. Alternative 1 - Do Not Consent to the Drilling Program (No Action)

The Council of Environmental Quality guidelines requires the consideration of the "No Action" Alternative. This alternative would deny the drilling of the nine proposed wells in the proposed locations. The operator would have to propose alternate coal exploration plans to meet their needs to determine coal quantity and quality for this area.

#### B. Alternative 2 - Proposed Action with Forest Service Mitigation

Approve the proposed action with Forest Service mitigation. This alternative would permit the construction of access roads, drill locations and drilling of nine exploration wells with the following management requirements, constraints and mitigations:

Stipulations to be Included in the Coal Exploration License

1. A pre-work meeting including the responsible company representative(s), contractors, and the Forest Service must be conducted at the project location prior to commencement of operations. Site-specific Forest Service requirements will be discussed at this time.

2. A road-use permit must be obtained from the Forest Service before equipment is transported onto National Forest System lands.
3. All surface disturbing activities including reclamation must be supervised by a responsible representative of the permittee who is aware of the terms and conditions of the project permits. A copy of the appropriate permits must be available for review at the project site.
4. The Forest must be notified 48 hours in advance that heavy equipment will be moved onto National Forest lands and that surface disturbing activities will commence.
5. Establishment of campsites and staging areas on National Forest System lands in support of this project is subject to Forest Service approval.
6. The Forest Service must be notified of any proposed alterations to the plan of operations. Any changes to the existing plan are subject to Forest Service review and concurrence.
7. Fire suppression equipment must be available to all personnel working at the project site. Equipment must include at least one hand tool per crew member consisting of shovels and pulaskis and one properly rated fire extinguisher per vehicle and/or internal combustion engine.
8. All gasoline, diesel, and steam-powered equipment must be equipped with effective spark arresters and mufflers. Spark arresters must meet Forest Service specifications discussed in the USDA Forest Service Spark Arrester Guide, June 1981. In addition, all electrical equipment must be properly insulated to prevent sparks.
9. The permittee will be held responsible for damage and suppression cost for fires started as a result of operations. Fires must be reported to the Forest Service as soon as possible.
10. The Forest Service reserves the right to suspend operations during periods of high fire potential.
11. Water needed in support of operations must be properly and legally obtained according to state water laws. The location of diversion, if on National Forest System lands, is subject to Forest Service review and approval.
12. Unauthorized off-road vehicular travel is prohibited.

- 13. Section corners or other survey markers, including claim corners, in the project area must be located and flagged for preservation prior to commencement of surface disturbing activities. The removal, displacement, or disturbance of markers must be approved by the proper authority.
- 14. If cultural or paleontological resources are discovered during operations, all operations which may result in disturbance to the resources must cease and the Forest Service must be notified of the discovery.
- 15. Gates must be closed after entry unless otherwise notified.
- 16. The licensee will be held responsible for all damages to fences, cattleguards, resource improvements, roads, and other structures on National Forest System lands which result from operations. The Forest Service must be notified of damages as soon as possible.
- 17. All trees and brush must be cleared as the first step for new access and site construction. Topsoil must be stripped and stockpiled at a location where loss and contamination is minimized.
- 18. Disturbed areas must be reclaimed by the end of the field season. Exceptions require Forest Service approval.
- 19. Contaminated soil and gravel must be stripped and placed in the mud pit prior to site reclamation.
- 20. Mud pits must be allowed to dry before they are backfilled and reclaimed. They must be enclosed by a 4-strand barbed wire fence while they are left to dry.
- 21. When dry, mud pits must be reclaimed by selectively backfilling excavated materials, topsoil last, such that the disturbed area is replaced to approximate original contour. The disturbed area must be seeded with the following seed mix after the topsoil is replaced:

<u>Species</u>	<u>Pounds/acre</u>
Intermediate Wheatgrass	3
Slender Wheatgrass	2
Smooth Brome	1
Orchard Grass	2
Yellow Sweet Clover	.5
Ladak Alfalfa	.5
Fairway Crested Wheatgrass	2
Ephraim Crested Wheatgrass	2
Lewis Flax	.5
Small Burnet	.5
Mountain Big Sagebrush	.25
Bitterbrush	1
*Curlleaf Mahogany	.25
*Birchleaf Mahogany	.25
Total	15.75 lbs

\* If available

This seed mixture must be 99 percent pure live seed and applied at the rate of 15.75 pounds per acre.

22. The operator will control noxious weed invasion of disturbed sites associated with this project.
23. Roads to be obliterated must be reclaimed by ripping the surface, replacing the disturbed area to the approximate original contour, replacing stockpiled topsoil, and seeding with the specified seed mix. Seeding must take place when topsoil is replaced. Water diversions structures, if needed, must be constructed as specified by the Forest Service.
24. All disturbed drainages must be replaced to their approximate original configuration when the project area is reclaimed.
25. All significant water encountered during drilling must be reported to the Forest Service, including the depth and formation in which it was encountered, and an estimate of flow.
26. The operator must clean up and remove all drilling equipment, trash, garbage, flagging, vehicles, and other such materials from National Forest System lands.
27. All trash, garbage, and other refuse must be properly contained on the project site prior to disposal off the Forest.
28. All drill holes must be plugged in accordance with Federal and State regulations.
29. Operations must be coordinated with grazing permittees to prevent conflicts.
30. Harrassment of wildlife and livestock is prohibited.
31. All drilling fluids, mud, cuttings and water produced must be contained on site in mud pits or portable containers. Fluids must not be allowed to flow out over the ground or into drainages. The pits must not be used for disposal of garbage, trash, or other refuse.
32. Outside berms will not be constructed on any roads.
33. Two culverts installations will be required at the small springs which cross FDR 50034. This is located in the southwest quarter of section 35, T17S, R6E. (see Map 2 for location) The culverts will have rock energy dissapators constructed at the outlet end of the pipe. These culverts will be left in place at the conclusion of the project.

34. All newly constructed temporary roads will be closed as specified in stipulation #24. In addition, temporary roads for drill sites TMX 1, 3-9 cross watershed treatment structures that need to be repaired when the roads are no longer needed.
35. Stipulations for Lands of the National Forest System under jurisdiction of the Department of Agriculture.

The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights and regulations must be complied with for (1) all use and occupancy of the NFS prior approval of a permit/operation plan by the Secretary of the Interior, (2) uses of all existing improvements, such as Forest Development Roads, within and outside the area licensed, permitted or leased by the Secretary of the Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor  
Manti-LaSal National Forest  
599 West Price River Drive  
Price, Utah 84501

Telephone No. 801-637-2817

who is the authorized representative of the Secretary of Agriculture.

36. Permission must be obtained from Utah State Division of Lands to cross state land in section 36, T17S, R6E.
37. When it is necessary to fill in a watershed treatment furrow, the soil needs to be pushed into it from the downhill side.
38. There is a watershed trend study located adjacent to the access road in section 35. The post and stakes for this study will be flagged and must not be disturbed. (see Map 2)
39. All temporary access roads will be closed and blocked or reclaimed at the conclusion of the drilling season.
40. A culvert will be placed in the drainage leading to TMX-8. It will be removed after access to the hole is no longer needed.
41. Any damaged watershed treatment structures must be reconstructed and seeded with the seed mix listed in Stipulation #22.

42. To prevent disturbance of deer and elk on winter range, there will be no activity associated with this proposal between October 31 and May 15 unless these dates are modified by prevailing conditions with approval of the Forest Service.

Stipulations to be Included in the Forest Service Road-Use Permit

43. Roads must not be used when they are wet and susceptible to damage. Extensive use of Forest Development Roads beyond October 1st. will require road surface upgrading.
44. The permittee is responsible for repair of any damages to roads which are caused by his operators.
45. All traffic must maintain safe speeds commensurate with existing conditions.
46. Roads must be watered if dust becomes a problem or if excessive loss of road material occurs.
47. Heavy equipment may not be moved on Forest Development Roads on the following dates: July 23-25, September 3-5, and October 4-10, 15-16, and 21-24, 1988. If the project continues into 1989 restricted dates will be determined at that time.

III. DESCRIPTION OF AFFECTED ENVIRONMENT - AFFECTED ENVIRONMENT

A. Transportation System

To access this project the operator will use Forest Development Road (FDR) 50040, Cottonwood Canyon Road and FDR 50034, Trail Mountain Road to section 34, T17S, R6E.

Cottonwood Canyon Road is a gravel surface road from the Trail Mountain Mine to East Mountain Federal No. 13-35 gas well in Section 35, T.16 S., R.7 E. The road surface from this well to the existing project access road on Trail Mountain is native material.

Cottonwood Canyon Road will be used by Meridian Oil Co., Utah Power and Light Co., other Forest users, and the Forest Service during the 1988 field season.

Approximately 4.2 miles of temporary access roads (project roads) will be needed for this project. Approximately 1.7 miles will be new construction and 2.5 will be reopening old roads which have been previously closed. All temporary access roads cross through sagebrush-grass community consisting of sagebrush, serviceberry, rabbitbrush, hardgrass, poas, smooth brome, festuca and numerous forbs. Approximately 0.8 miles of the 4.2 mile temporary access road crosses state land. See Appendix E for a more detailed description of each drill site and access road.

Considering the operations of Beaver Creek Coal Co. and Utah Power and Light Co. for coal exploration and development and Meridian Oil, Inc. for oil and gas development, the traffic on the Cottonwood Road (between Trail Mountain Mine and the Trail Mountain Road) is expected to remain near the five year average of 1981-1986. Traffic conflicts between commercial and other uses will be resolved by restricting concentrated movement of truck traffic by the commercial (mineral) users during the opening weekends of the big-game season.

Traffic is expected to be approximately 60 vehicle trips per day seasonally adjusted. Truck traffic is expected to make up 25 percent of the use. Dispersed recreation is expected to be concentrated in late September or early October when coal drilling traffic has ceased or is curtailed. Truck use outside of the dry season would require reinforcement of the running surface to prevent damage to the road bed and allow for adequate traffic movement.

#### B. Watershed Improvement Structures

During the mid 1960's and in 1986 and 1987, watershed improvement structures (contour trenches and furrows) were constructed on much of the area within this drilling proposal. Some of the roads and pads will be constructed over these structures. Damage to the structures could result in increased soil loss and erosion.

#### C. Key Big-Game Winter Range

Approximately 300 elk and a fair size deer herd winter within the project area. Winter range is the limiting factor to deer and elk populations. Increased stress on these animals during this time of the year could be fatal to the animals or cause the females to abort their young.

#### IV. ENVIRONMENTAL CONSEQUENCES - ENVIRONMENTAL IMPACTS

##### A. Alternative 1 - Do Not Consent to the Drilling Program (No Action)

###### Short-term residual impacts

Selection of Alternative 1 would mean that the proponent would not be allowed to drill. There would be no impacts to the transportation system or other resources and naturally occurring trends will continue until affected by other influences.

###### Short-term and long-term productivity

Selection of Alternative 1 would deny the proponent the opportunity to gather geologic information and coal quality data needed to determine potential for further federal coal leasing.

###### Irreversible and irretrievable commitments

The selection of Alternative 1 would mean that the proponent and the government would not be able to accurately determine the quality or quantity of coal for future leasing. It could mean leasing this area with no data which would most likely reduce the amount of money the Federal Government would receive for this resource in the leasing process.

##### B. Alternative 2 - Proposed Action with Forest Service Mitigation

###### Short-term residual impacts

Selection of Alternative 2 would create some short-term impacts to Forest resources. Some vegetation will be removed from the temporary access roads and drill sites. This loss of vegetation will continue until the disturbed areas are reclaimed and vegetation has re-established itself. Some temporary damage will occur to watershed improvement structures. There are no known residual impacts.

###### Short-term and long-term productivity

The construction of the temporary access road and drill sites will disturb a maximum of 11 acres. This will remove less than 4 AUM (Animal Unit Month) of forage production until the site is reclaimed. With proper reclamation disturbed sites will equal or exceed predisturbance production.

A very small amount of big-game feed will be temporarily removed. The seed mix is designed for wildlife. After the area is reclaimed there should be more wildlife feed than presently exists.

During the short period a hole will be drilled, some watershed structures will have reduced effectiveness. When they are reconstructed at the conclusion of drilling a hole, they will again be functional and effective.

#### **Irreversible and irretrievable commitments**

Approval of this alternative will not create any unanticipated or significant irreversible or irretrievable commitments of Forest resources. The removal of vegetation will be relatively minor. Reclamation should restore the area to a state similar to it's original condition.

### **V. CUMULATIVE EFFECTS**

This proposal is located in key big-game winter range. Also in this area there is livestock grazing and watershed improvement structures. Impact to these resources are temporary. The small amount of livestock and wildlife feed that is lost can be obtained from adjacent areas until the disturbed areas are fully recovered which will take 2 to 3 years.

As coal exploration proceeds on Trail Mountain, there will be additional surface disturbing activities. These activities should be similar in nature to this proposal. It is anticipated that well spacing for future coal exploration on Trail Mountain will range from 2000 to 3000 feet. When exploration and reclamation is completed, disturbed areas will be returned to production. Wildlife will start using the affected areas relatively soon after activities have ceased and forage production will improve over a few years until new vegetation has been completely established.

### **VI. PERSONAL AND PUBLIC INVOLVEMENT**

#### **A. Interdisciplinary Team**

The ID Team consisted of the following Forest Service personnel:

John Niebergall	District Ranger	Team Leader
Billy J. Dye	Forester	Watershed
John Healy	Range Conservationist	Range & Wildlife

The following were Forest Service consultants to the ID Team:

Robert Thompson	T & E Plant Specialist
Brent Barney	Engineer - Transportation - Input given to earlier drilling program which utilized the same system roads.

**B. Public Contacts**

The following agencies, groups, and individuals have been contacted in connection with this project:

**Newspaper Notification**

A notice was published in the Emery County Progress on March 22, 1988 requesting comments from any interested parties. No comments, positive or negative were received. A copy of the newspaper article is found in Appendix B.

**Forest Planning Contacts**

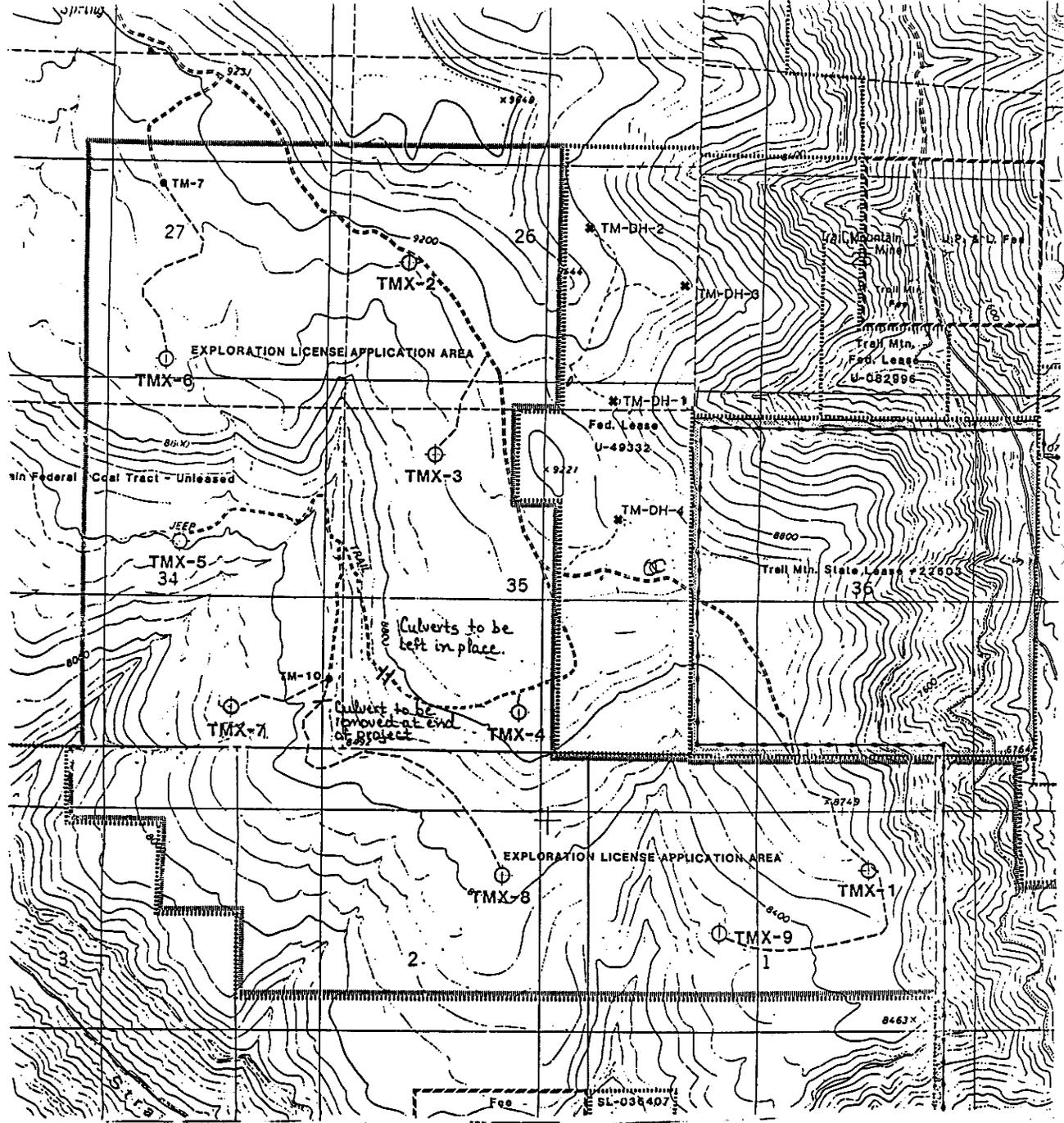
A list of individuals, groups, and organizations that wanted to be kept informed of activities occurring on the Ferron District were identified during the Forest planning process. A letter briefly describing the drilling proposal and the anticipated effects was sent requesting their comments. A copy of this list and the letter can be found in Appendix C.

**C. Intensity of Public Interest**

Few comments were received concerning this proposal and no new issues or concerns were identified. Letters received pertaining to this proposal from the Forest Planning Contacts can be seen in Appendix D.

VII. APPENDIX

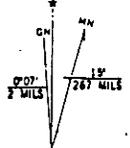
- Appendix A Cultural Resource Survey
- Appendix B Newspaper Article
- Appendix C Forest Planning Contacts
- Appendix D Letters Received from Publics
- Appendix E Discription of Sites and Access Roads



Map 2 - Project Map

Legend

-  Federal Coal Lease
-  State Coal Lease
-  Fee Coal
-  U.S. Forest Service Boundary
-  EXPLORATION LICENSE APPLICATION AREA
-  PROPOSED EXPLORATION DRILL HOLES  
TMX-1
-  PROPOSED ACCESS ROADS TO BE CONSTRUCTED AND RECLAIMED
-  On - Lease Drill Holes and Access Roads Permitted for 1988  
TM-DH-1
-  TM-7 ● Previously Drilled Exploration Holes
-  Existing Access Roads



UTM GRID AND 1979 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 80 FEET  
 DOTTED LINES REPRESENT 40-FOOT CONTOURS  
 NATIONAL GRIDETIC VERTICAL DATUM OF 1929

3.5 in = 1 mile

APPENDIX A

CULTURAL RESOURCE SURVEY



# ARCHEOLOGICAL - ENVIRONMENTAL RESEARCH CORPORATION

P.O. Box 853 Bountiful, Utah 84010

Tel: (801) 292-7061, 292-9668

July 8, 1988

**Subject:** CULTURAL RESOURCE EVALUATION OF NINE  
EXPLOATORY WELL LOCATIONS AND ACCESS ROUTES  
IN THE TRAIL MOUNTAIN LOCALITY OF EMERY  
COUNTY, UTAH

**Project:** Beaver Creek Coal Company - 1988-89  
Exploration on Trail Mountain

**Project No.:** BCCC-88-2

**Permit No.:** Department of Interior -- Ut-88-54937  
Utah State Project No. -- Ut-88-AF-322f

**To:** Beaver Creek Coal Company, Attention Mr. Kenneth S.  
Fleck, P.O. Box 1378, Price, Utah 84501

✓ Mr. John Niebergall, District Ranger, Manti  
LaSal National Forest, Ferron Ranger District,  
Ferron, Utah 84532

Mr. Les Wikle, Forest Archaeologist, Manti-LaSal  
National Forest, Monticello Ranger District,  
P.O. Box 820, Monticello, Utah 84535

Mr. H. G. Wylie, Region 4 Archaeologist, U.S.  
Forest Service, 324 - 25th Street, Ogden, Utah  
84401

**Info:** Antiquities Section, Division of State History,  
300 Rio Grande, Salt Lake City, Utah 84101

Mr. John Whitehead, Utah State Division of Oil,  
Gas & Mining, 3 Triad Center, Suite 350, Salt  
Lake City, Utah 84180-1203

GENERAL INFORMATION:

On July 6, 1988, F.R. Hauck of AERC conducted a cultural resource reconnaissance evaluation of nine proposed exploratory well locations and associated access routes. These locations include TMX-1 through TMX-9. This project was initiated for Beaver Creek Coal Company of Price, Utah. The project area is situated on the southern portion of Trail Mountain in Emery County, Utah (see attached map).

A special use permit was obtained from the Ferron District of the Manti-LaSal National Forest by Beaver Creek Coal Company for conducting this study.

The exploratory wells are situated in Sections 26, 27, 34, and 35, Township 17 South, Range 6 East, and in Sections 1 and 2 of Township 18 South, Range 6 East, Salt Lake Base & Meridian. The variety of access routes leading into various locations are shown on the attached map. About 2.6 miles of access route were situated on undisturbed surfaces and therefore, were evaluated for cultural material.

The project area is situated below the Flagstaff formation in the 8250 to 9200 foot elevation. Residual soils containing limestone fragments are common to the locality.

FILE SEARCH:

A records search of the site files and maps at the Antiquities Section of the State Historic Preservation Office was conducted on July 8, 1988. The National Register of Historic Places has been consulted and no registered historic or prehistoric properties will be affected by the proposed development.

AERC has conducted a variety of projects in this locality. In 1983, a similar project for Natomas Coal Company was completed (see Cultural Resource Evaluations of Three Proposed Exploratory Drilling Locations in the Trail Mountain Locality of Emery County, Utah" NCC-83-1). A more recent AERC survey on Trail Mountain was initiated in 1987 (see "Cultural Resource Examination of Three Proposed Coal Exploratory Well Locations in the Trail Mountain Locality of Emery County, Utah" TMCC-87-1). In June of this year, a single well location and its access route was evaluated for Beaver Creek Coal Company (see "Cultural Resource Evaluation of a Proposed Exploratory Well -- TM-DH-4-- in the Trail Mountain Locality of Emery County, Utah" BCCC-88-1). No other studies have been conducted in the immediate vicinity of this present project. Significant prehistoric, cultural sites have been identified and recorded on Trail Mountain.

#### FIELD METHODOLOGY:

To accomplish an intensive examination of TMX-1 through 9, the archaeologist walked a series of 10 to 15 meter wide concentric transects within a 35 to 50 meter radius from the flagged center of the locations. The access routes were examined by walking a 15 meter wide transect down the flagged center line.

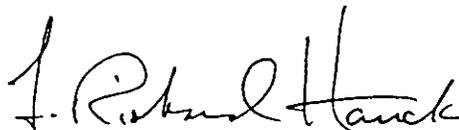
#### RESULTS:

No cultural resource activity loci of any historic or prehistoric period were identified or recorded during the evaluation. The distal fragment of an obsidian atl-atl projectile point was observed in the vicinity of TMX-6. This point fragment was not diagnostic, nor was it collected. An isolated primary flake was observed during the evaluations of the access route into TMX-8.

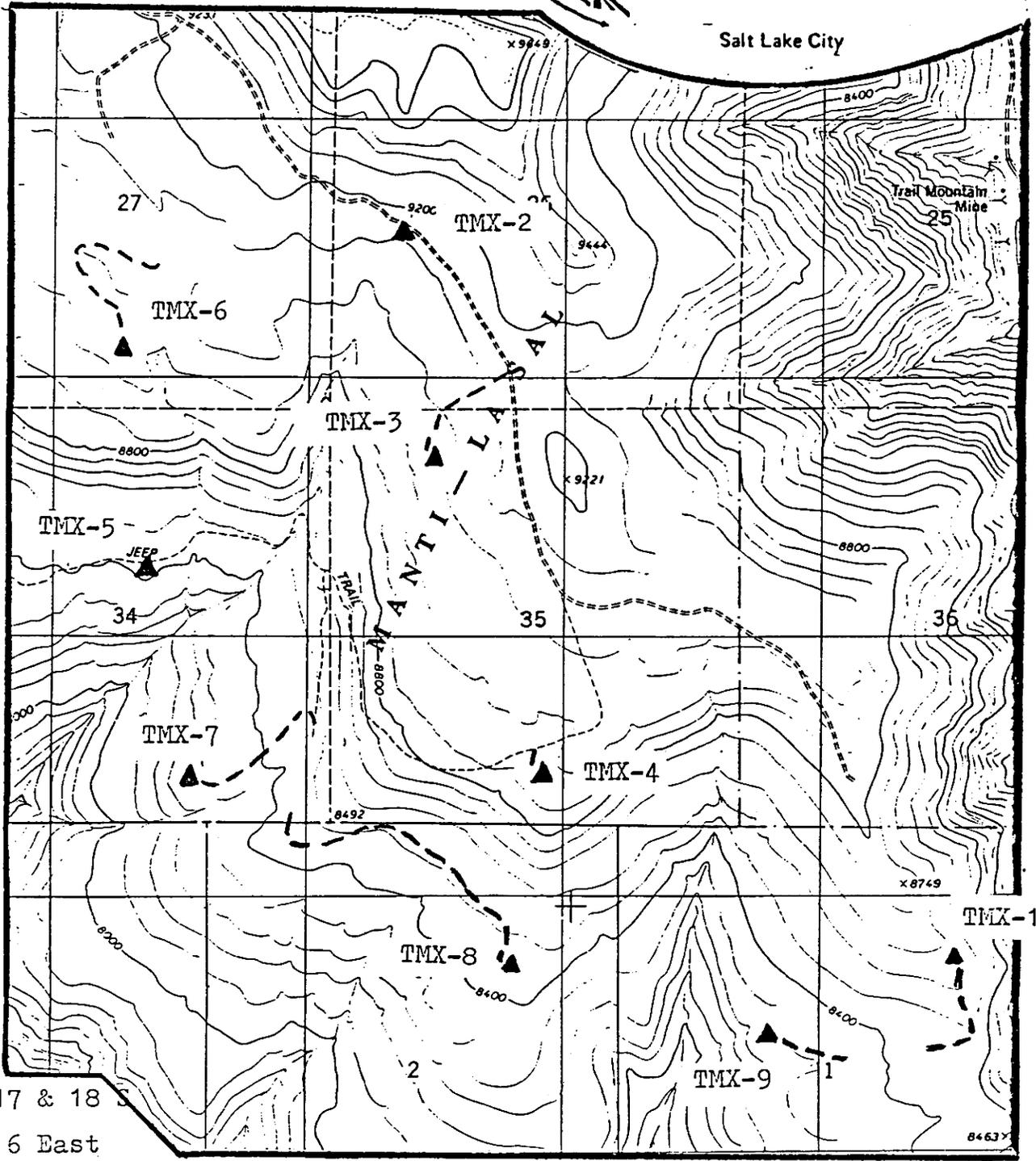
#### CONCLUSION AND RECOMMENDATIONS:

AERC recommends that a cultural resource clearance be granted to Beaver Creek Coal Company relative to this project based upon adherence to the following stipulations:

1. All vehicular traffic, personnel movement, and construction should be confined to the location examined as referenced in this report, and to the existing roadway and/or evaluated access route;
2. all personnel should refrain from collecting artifacts and from disturbing any cultural resources in the area; and
3. the District Ranger should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the construction area.



F. Richard Hauck, Ph.D.  
President and Principal  
Investigator

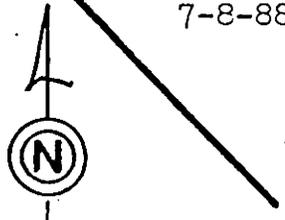


T. 17 & 18 S  
R. 6 East  
Meridian: Salt Lake B. & M.

Quad: Mahogany Point, Utah  
7.5 minute-USGS

**Project:** BCCC-88-2  
**Series:** Central Utah  
**Date:** 7-8-88  
Cultural Resource Survey of Nine Proposed Coal Exploratory Drill Areas on Trail Mountain in Emery County, Utah

**Legend:**  
Well Location ▲  
Access Route - - -



2.64" = 1 mile

APPENDIX B

NEWSPAPER ARTICLE

## National Forest <sup>3/22</sup> plans project

The Ferron Ranger District, Manti-LaSal National Forest, will be preparing a number of environmental assessments this year for proposed projects. The purpose of these assessments is to determine the impact the various projects will have on the environment.

The public may contact John Niebergall, district ranger, to make comments and express concerns on the proposed projects. All public comments below:

Beaver Creek Coal Company, Trail Mountain Mine, plans to drill an additional 6-8 coal holes

on Trail Mountain. June 15, 1988.

Potential development of a placer claim for the removal of organic material adjacent to Lowry Water. April 15, 1988.

Prepare an allotment management plan for Ridley Ridge and Reeder Ridge allotments. April 15, 1988.

Develop and install trough at Olsen Bench Spring. April 15, 1988.

Treat 25 acres of noxious weeds with herbicides. These acres are scattered in small plots over the entire district. April 15, 1988.

Install a bird guzzler on the East Rim. April 1, 1988.

APPENDIX C  
FOREST PLANNING CONTACTS

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United States  
Department of      Forest      Manti-LaSal National Forest      P.O. Box 310  
Agriculture      Service      Ferron Ranger District      Ferron, Utah 84523

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Reply to: 2820

Date: June 10, 1988

The Ferron Ranger District, Manti LaSal National Forest has received a coal drilling proposal which may interest you.

Beaver Creek Coal Company has applied for a coal exploration license to drill 9 holes on the south end of Trail Mountain. The holes are located in sections 26, 27, 34 and 35 T17S, R6E and sections 1 and 2 T18S, R6E. (See Attached Map) Access will be up the Cottonwood Creek Road and out the Trail Mountain Road to the project area.

Exploration will be accomplished by means of surface drilling using a truck mounted rotary drill rig. Drilling will be done during the summer of 1988 and 1989.

A small amount of pinyon-juniper and some sagebrush and grass will be removed by this proposal.

Approximately four miles of temporary road will be needed for the project. Half will be new construction and half reopening roads which have been previously closed. When the work is completed, Beaver Creek Coal Company will reclaim all disturbed areas and all temporary roads will be closed at the conclusion of the project. The drill pads and temporary roads will disturb approximately 9 acres.

If you have any questions or comments please contact me by June 30, 1988.

Sincerely,

/s/

JOHN NIEBERGALL  
District Ranger

enclosures:

Mailing List

CITY OF ORANGEVILLE  
Attn: Tom Humphrey, Mayor  
P.O. Box 667  
Orangeville, Utah 84537

EMERY COUNTY ECONOMIC DEVELOPMENT  
Attn: D. Scott Truman  
P.O. Box 297  
Castle Dale, Utah 84513

SOUTHEASTERN UTAH ASSOCIATION OF  
LOCAL GOVERNMENTS  
Attn: Bill Howell  
P.O. Box 1106  
Price, Utah 84501

MAUGHAN GUYMON  
P.O. Box 552  
Huntington, Utah 84528

CLYDE J. MAGNUSON  
P.O. Box 394  
Castle Dale, Utah 84513

LEE McELPRANG  
P.O. Box 448  
Huntington, Utah 84528

ARVA M. SMITH  
Deseret News Correspondent  
876 North 400 East  
Price, Utah 84501

BOUNTIFUL CITY LIGHT AND POWER  
Attn: Kevin Garlick  
198 South 200 West  
Bountiful, Utah 84010

COTTONWOOD CREEK LIVESTOCK ASSOCIATION  
Attn: Albert C. Hyatt  
P.O. Box 80  
Clawson, Utah 84516

COASTAL STATES ENERGY COMPANY  
175 East 400 South #800  
Salt Lake City, Utah 84111-2301

Meridian Oil  
Attn: William C. Mitchell  
5613 D.T.C. Parkway  
Englewood, CO 80111

Meridian Oil  
Attn: Charlie Byerly  
P.O. Box 1855  
Billings, MT 59103

EAST CARBON WILDLIFE FEDERATION  
Attn: Shefton Gordon  
331 Carson Box 904  
East Carbon, Utah 84520

EAST CARBON WILDLIFE FEDERATION  
Attn: Kent Hintze  
P.O. Box 523  
East Carbon, Utah 84520

EMERY WATER CONSERVANCY DISTRICT  
Attn: Oral Eugene Johansen  
290 East Main Street  
Box 856  
Castle Dale, Utah 84513

THE NATURE CONSERVANCY  
Attn: Joel S. Tuhy  
2225 South Highway 89-91  
Wellsville, Utah 84339

UTAH WILDERNESS ASSOCIATION  
ATTN: Dick Carter  
455 East 400 South B-40  
Salt Lake City, Utah 84111

DEPARTMENT OF NATURAL RESOURCES

Attn: Milo A. Barney  
1636 West North Temple  
Salt Lake City, Utah 84116

UTAH BUREAU OF WATER POLLUTION CONTROL

Attn: Roy D. Gunnell  
288 North 1460 West  
P.O. Box 16690  
Salt Lake City, Utah 84116

UTAH DIVISION OF WILDLIFE RESOURCES

Attn: Larry B. Dalton  
455 West Railroad Avenue  
Price, Utah 84501

Roger Curtis  
Orangeville, Utah 84537

APPENDIX D

LETTERS RECEIVED FROM PUBLICS

# EMERY COUNTY ECONOMIC DEVELOPMENT COUNCIL

P.O. Box 297, Castle Dale, Utah 84513  
 Telephone: (801) 381-5576

June 16, 1988

John Niebergall  
 Manti-LaSal National Forest  
 Ferron Ranger District  
 P.O. Box 310  
 Ferron, Utah 84523

Dear Mr. Niebergall:

The Emery County Economic Development Council has had opportunity to review your announcement concerning the Beaver Creek Coal Company coal drilling proposal on Trail Mountain.

Given the information provided by your office, through discussions with those who have interests in the described area and with our interests in seeing the resources in Emery County developed and utilized we would encourage the granting of the coal exploration license to Beaver Creek Coal Company.

Our endorsement of this proposal is, however; contingent upon the inclusion of adequate commitment for reclamation of disturbed areas in the drilling plan proposal. The consensus of those with whom I have had opportunity to speak has been one of support with the stipulation that the roads be closed and the disturbed land be reclaimed.

A further request would be that the livestock and fish and wildlife interests be informed if water is found through any of the drilling efforts and that they be given an opportunity to develop any water for livestock and wildlife range enhancement.

We appreciate being included the Manti-LaSal Forest planning process and being able to comment and give input.

Sincerely,

  
 Scott Truman  
 Executive Director

FOREST SERVICE MANTI-LASAL NATIONAL FOREST FERRON RANGER DISTRICT		
ACTION	TO	INFO
	LEADER	<i>jm</i>
	RANGE	
	WILDLIFE	
	RANGE TECH.	
	FORESTER	
	FOREST TECH.	
	MINERALS	
	CLERK	
Promise Card For		



APPENDIX E

DISCRIPTION OF SITES AND ACCESS ROADS

Discription of Each Site and Needed

Access Roads

- TMX-1** The site is flat. Contains a sparce stand of hardgrass and sagebrush with pinyon - juniper trees around the edge. Access will use an existing non system road which has been in place many years and used in 1987 for access to the Battleground Watershed treatment area. Most of the road has an 8-10% grade with short pitches to 16%. The road was closed in 1987 after the watershed project was completed. No new road construction.
- TMX-9** Site is on a 7% slope to the west. Located in a furrowed area. Vegetation involves hardgrass, sagebrush and rabbitbrush. The access road proceeds beyond TMX-1 with grades 6-10% with short pitches to 16%. The road will cross furrows, there will be .5 miles of new road.
- TMX-8** Site is on a 3-5% slope to the south, very little vegetation. Basically a bare flat with only scattered hardgrass. Access will follow the road used for the watershed project. Most is on a contour with short pitches of 8-10%. Approximately 0.2 of a mile of new road will be constructed at a 6-10% grade. Will be crossing furrows.
- TMX-7** Site is on a 4-8% slope in a scattered stand of limber pine and douglas fir. No trees will need to be removed. Area also contains sgebrush and wheatgrass. .4 of a mile of new road will be constructed with a grade of 6-10%.
- TMX-5** A flat site located adjacent to the existing road, some furrows will need to be leveled. site contains sagebrush, bromegrass, wheatgrass and numerous forbes. No access road needed.
- TMX-4** This site is on a 0-5% slope to the west. Sparce vegetation with furrows on the site. Vegetation consists of scattered hardgrass and fescue. 300 feet of new access road will be needed.
- TMX-3** The site is located in a grass opening between two aspen stands. Site is on an 8-10% slope to the southwest. Vegetation is brome, fescue and hardgrass. Access will involve .3 of a mile of new construction through a sage-grass opening at 10% grade.
- TMX-2** Site is on a 0-12% slope adjacent to the Trail Mountain Road. Vegetation consists of a few decadent aspen trees, snowberry, fescue, yarrow and vetch. No new access road needed.
- TMX-6** Site is flat with very sparce vegetation. Surface is mostly pavement, some scattered smooth brome. Access will use an existing two track road. .4 of a mile of new road will need to be constructed with grades of 9% or less.