R645-301-400. LAND USE AND AIR QUALITY

R645-301-410. LAND USE

As the Mathis Tract and New Federal Summit Creek Lease boundary change is simply an extension of underground mine workings under roughly 2,600 to 3,000 feet of cover there will be absolutely no effect on land use.

R645-301-411. ENVIRONMENTAL DESCRIPTION

Due to the rugged topography and sparse rainfall, the land area is presently used only for grazing, wildlife habitat, and outdoor recreation. Historically, the land has also been used for coal mining.

R645-301-411.100. PREMINING LAND USE INFORMATION

The initial development of the Book Cliffs Coal Field was started in the early 1890's. By the early 1900's practically the entire field had been prospected. Mines in the lease area were not active until the 1920's because the cliffs were less accessible and the coal beds were thinner.

The Knight-Ideal mines, now held by Andalex Resources are located adjacent to the Hoffman Creek lease area. Initial prospecting took place at this location in 1906 and extensive mining began in 1948 and ceased in 1958. During this period, 1,680,000 tons of coal were produced from the Gilson seam. The Knight-Ideal Mine is contiguous to our Sunedco leases (U-05067) in Hoffman Creek. By mining this lease, Andalex will recover all minable coal between Centennial and Knight-Ideal.

Three mines on or adjacent to the lease area in Deadman Canyon were the Zion, Olsen, and Sutton (Blue Flame) mines. The Zion was located on the Zion's fee lease and the Olsen and Sutton were on SL-027304. The first two produced from the Gilson seam and the last produced from the Aberdeen or Castlegate "A" seam. Production figures are not reliable but it is estimated that between 216,000 tons and 720,000 tons may have been produced from the Sutton mines. The Olsen mines produced about 18,000 tons and the Zion mine around 240,000 tons, between 1924 and 1944.

There was also a prospect entry driven in the Lower Sunnyside Seam (the Hileman) on lease U-010581 from which production was insignificant, approximately 1,400 tons. Mining ceased in the area in 1964.

R645-301-411.110. USES OF THE LAND AT THE TIME OF FILING APPLICATION

The Deadman Canyon area as well as the Straight and Hoffman Canyons would fall into two land use categories: 1) Fish and
2) Fish and Wildlife habitat and recreation lands, and 3) Range Lands. County zoning regulations (1974) indicate all lands involved in the lease application area are within zone M and G1 which is for mining and grazing. Current land use consists of grazing and deer hunting. For recreational purposes the land is suitable for deer hunting. Other recreational uses for the permit area could include hiking, cross-country skiing, four wheeling, camping, and snowmobiling in winters with adequate snow cover. The lack of water prevents the establishment of a chukker/partridge population. Usually there are no elk in the area although an animal or two may occasionally wander onto the area.

There are no oil and gas wells or water wells other than those water wells drilled by Andalex for use in mining activities, on the lease area. Also, there are no oil and gas wells or water wells in adjacent areas.

The area is eight air miles from Price, but the unavailability of water precludes any development for residential or summer homes.

R645-301-411.120. LAND USE DESCRIPTION IN CONJUNCTION WITH OTHER ENVIRONMENTAL RESOURCES INFORMATION

Livestock grazing has been the most intense use of the lease area. However, due to the expansive cliff formations and the roughness of the canyon walls, grazing has been principally limited to the canyon bottoms and extreme tops to the north of the lease boundary.

Mule deer are found within the lease area as well as the usual small mammals, predators, and passerine and raptorial birds.

Outdoor recreation in the lease area is limited and usually related to enjoyment of the open space and associated scenic facilities and hunting for wild animals. The number of people using the area is small due to the rough terrain, poor roads, and lack of water.

The AEP Lease Area has the same land-use as that of the original permit area.

R645-301-411.130. EXISTING LAND USES AND LAND USE CLASSIFICATION

R645-301-411.140. CULTURAL AND HISTORIC RESOURCES INFORMATION

Most of the maps previously submitted as part of the Mining and
Reclamation Plan are applicable. Where necessary, original maps have been revised to indicate the newly acquired lease areas and these revisions are included with this submittal as figures or as plates in Volume II. An archaeological clearance for the Left Hand Fork fan installation can be found in Appendix C along with all other previously conducted archaeological surveys.

**R645-301-411.141.** CULTURAL AND HISTORIC RESOURCES MAPS

See Appendix C.

**R645-301-411.141.1** PUBLIC PARKS AND LOCATIONS OF ANY CULTURAL OR HISTORICAL RESOURCES

N/A

**R645-301-411.141.2** CEMETERIES

There are no cemeteries or burial grounds in or within 100 feet of the permit area.

**R645-301-411.141.3** NATIONAL SYSTEM OF TRAILS OR THE WILD AND SCENIC RIVERS SYSTEM

N/A

**R645-301-411.142.** COORDINATION WITH THE STATE HISTORIC PRESERVATION OFFICER (SHPO)

Appendix C.

**R645-301-411.142.1** PREVENTION OF ADVERSE IMPACTS

Appendix C.

**R645-301-411.142.2** VALID EXISTING RIGHTS OR JOINTS AGENCY APPROVAL

Appendix C.

**R645-301-411.143.** IMPORTANT HISTORIC AND ARCHAEOLOGICAL RESOURCES THAT MAY BE ELIGIBLE FOR LISTING ON THE NATIONAL REGISTER OF HISTORIC PLACES

Appendix C.
R645-301-411.143.1 COLLECTION OF ADDITIONAL INFORMATION
Appendix C.

R645-301-411.143.2 CONDUCTING FIELD INVESTIGATIONS
Appendix C.

R645-301-411.143.3 OTHER APPROPRIATE ANALYSES
Appendix C.

R645-301-411.144. APPROPRIATE MITIGATION AND TREATMENT MEASURES
Appendix C.

R645-301-411.145. EXCEPTIONS
Appendix C.

R645-301-411.200. PREVIOUS MINING ACTIVITY

Previous activity consisted of small "dog hole" punch mines used for domestic coal in the 1930's, 1940's and 1950's.

R645-301-411.210. TYPE OF MINING METHOD USED

Previous mining was using conventional sections.

R645-301-411.220. COAL SEAMS OR OTHER MINERAL STRATA MINED

The coal seams previously mined were Lower Sunnyside, Gilson and Aberdeen.

R645-301-411.230. EXTENT OF COAL OR OTHER MINERALS REMOVED

The extent of removed coal was not significant, roughly 2,000,000 tons over 30 years.

R645-301-411.240. APPROXIMATE DATES OF PAST MINING

Approximately 1930-1960.
USES OF LAND PRECEDING MINING

See R645-301-411.140.

RECLAMATION PLAN

See R645-301-240.

POSTMINING LAND USE PLAN

The post-mining land use will consist of livestock grazing with wildlife habitat and some recreation.

ACHIEVEMENT OF PROPOSED POSTMINING LAND USE

See R645-301-412.100.

RANGE OR GRAZING LAND USE

See R645-301-412.100.

ALTERNATE POSTMINING LAND USE

N/A

CONSISTENCY WITH SURFACE OWNER PLANS AND APPLICABLE UTAH AND LOCAL LAND USE PLANS

Socioeconomic Impacts

The proposed project is located in an area where coal mining is the major industry, therefore, the community is geared for coal operations. The labor supply is excellent, well-trained, and available. Most people in this area have a very favorable attitude towards the increased coal activity. They look forward to growth in the area which will increase population, home construction, and provide other facilities for community use.

The need for development of additional housing, school space, and changes in present community services would be among the greatest impacts, due to the increase in population. Positive effects of the project will be to increase the number of jobs, payroll, and taxes thus helping to build the community.

Land Use Changes

The nature of an underground mine of this type and size requires minimal surface disturbance. There will be no additional surface disturbance whatsoever with the addition of any new leases. There will be no change in land-use status from pre-mining to
USES OF LAND PRECEDING MINING

See R645-301-411.140.

RECLAMATION PLAN

See R645-301-240.

POSTMINING LAND USE PLAN

The post-mining land use will consist of livestock grazing with wildlife habitat and some recreation.

ACHIEVEMENT OF PROPOSED POSTMINING LAND USE

See R645-301-412.100.

RANGE OR GRAZING LAND USE

See R645-301-412.100.

ALTERNATE POSTMINING LAND USE

N/A

CONSISTENCY WITH SURFACE OWNER PLANS AND APPLICABLE UTAH AND LOCAL LAND USE PLANS

Socioeconomic Impacts

The proposed project is located in an area where coal mining is the major industry, therefore, the community is geared for coal operations. The labor supply is excellent, well-trained, and available. Most people in this area have a very favorable attitude towards the increased coal activity. They look forward to growth in the area which will increase population, home construction, and provide other facilities for community use.

The need for development of additional housing, school space, and changes in present community services would be among the greatest impacts, due to the increase in population. Positive effects of the project will be to increase the number of jobs, payroll, and taxes thus helping to build the community.

Land Use Changes

The nature of an underground mine of this type and size requires minimal surface disturbance. There will be no additional surface disturbance whatsoever with the addition of any new leases. There will be no change in land-use status from pre-mining to
post-mining use. The limited resources both physical and scenic will dictate no future change in land status. Considering the extent and nature of similar lands in the Book Cliffs, no uses other than those previously discussed can be forecast.

Deadman Canyon has been unsightly since the earliest mining began in the 1920's, the new mine surface facility and portal site will be in the same area as the old mine tipples and waste dumps. These waste dumps are numerous and located throughout the canyon bottom and consist of coal fines which were unmarketable during the earlier mining history. This coal waste has been recovered, reprocessed, and cleaned up during the new operation. This new operation will actually be a significant reclamation phase to the canyon area.

During and after completion of mining operations, the land will continue to be used for grazing and hunting. No future change is dictated in the land status. Please refer to Appendix R for surface owner comments. Existing surface owners did not feel any change in postmining land use was dictated. Surface disturbances will be very minimal and all disturbed land will be restored in a timely manner, according to the Reclamation Plan to conditions that are capable of supporting the uses they were capable of supporting before mining.

No grazing land has been impacted by Andalex's minesite or permit area as none exists within the disturbed area. As far as wildlife habitat is concerned, two things should be pointed out. First, Andalex has successfully provided new vegetation and food sources through revegatation within the deer winter range in acreages greatly exceeding the disturbed or "impacted" area. These areas include large acreages along the haul road and powerline corridor. Second, and perhaps more importantly, on Andalex's minesite, wildlife abounds. There are large numbers of small mammals of many varieties including, but not limited to, squirrels, chipmunks, mice and rabbits. There are large numbers of all types of birds, including large and small raptors hunting in the area. The DWR has indicated that our powerline has provided important hunting opportunities for large raptors. Deer are commonly observed within our disturbed area feeding on revegetated slopes. Revegatation within our disturbed area is mitigation in itself to the impacted area.

R645-301-412.200. LAND OWNER OR SURFACE MANAGER COMMENTS

Appendix R.

R645-301-413.300. SUITABILITY AND COMPATIBILITY

Appendix R.

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R645-301-413. PERFORMANCE STANDARDS

R645-301-413.100. POSTMINING LAND USE
See R645-301-412.100.

R645-301-413.110. CAPABILITY OF SUPPORTING POSTMINING LAND USE
See R645-301-412.100.

R645-301-413.120. HIGHER OR BETTER USES
See R645-301-412.100.

R645-301-413.200. DETERMINING PREMINING USES OF LAND
See R645-301-412.100.

R645-301-413.210. PREMINING USES OF LAND NOT PREVIOUSLY MINED
See R645-301-412.100.

R645-301-413.300. POSTMINING LAND USE FOR LAND THAT HAS BEEN PREVIOUSLY MINED AND NOT RECLAIMED
See R645-301-412.100.

R645-301-413.310. CRITERIA FOR ALTERNATIVE POSTMINING LAND USES
N/A

R645-301-413.320. LIKELIHOOD FOR ACHIEVEMENT LAND USE
Post-mining land use as proposed shall be achieved.

R645-301-413.330. HAZARDS TO PUBLIC HEALTH OR SAFETY, OR THREAT OF WATER DIMINUTION OR POLLUTION

This section deleted as instructed in the Technical Analysis.

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R645-301-413.330. PROHIBITED LAND USES
N/A

R645-301-413.331. IMPrACTICAL OR UNREASONABLE
N/A

R645-301-413.332. INCONSISTENT WITH APPLICABLE LAND USE POLICIES
N/A

R645-301-413.333. UNREASONABLE DELAY IN IMPLEMENTATION
N/A

R645-301-413.334. VIOLATION OF FEDERAL, UTAH OR LOCAL LAW
N/A

R645-301-414. PERMIT REVISIONS REQUESTING APPROVAL OF ALTERNATE POSTMINING LAND USE
N/A

R645-301-414.100. FILING DEADLINES
N/A

R645-301-414.200. SIGNIFICANT ALTERATION FROM MINING OPERATIONS IN THE ORIGINAL PERMIT
N/A

R645-301-414.300. OTHER REQUIREMENTS
N/A

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4-8
R645-301-420. AIR QUALITY

As the "Mathis" incidental boundary change is simply an extension of underground mine workings under roughly 2,600 to 3,000 feet of cover there will be absolutely no effect on air quality.

Air Pollution Control Plan and Compliance with Air Quality Laws

Existing Environment

The permit area is located in a Class II air quality area.

Air Quality Impact Analysis

Please see the following section, section 3 re Emission Estimates.

Emission Estimates

Emission estimates are included as Appendix F in the form of an emission inventory. This inventory has been reviewed and approved by the Utah Bureau of Air Quality and the E.P.A. It has been re-approved to increase our production restriction on the basis the haul road has been paved by Carbon County. Air quality permit in appendix F.

Proposed Controls

Since this is an underground operation, no air quality problems are anticipated. The only changes in air quality will be attributable to minor road dust and exhaust mine dust. Methods of control are spray systems, chemical treatment, enclosures, pavement, and other fugitive dust control practices outlined in 30 CFR 817.95.

There will be no additional fugitive emissions or air pollution associated with the newly acquired AEP Lease.

PSD Permit and Compliance with Air Quality Laws

The Environmental Protection Agency has determined that this project does not need a PSD air quality permit. This is based on our fugitive and non fugitive dust emissions inventory which assumes facilities necessary for 1.5 mm tons per year production. Further, the mine is not subject to the PSD regulations because of the new definition of a major source. (Refer to letter dated March 21, 1980 in Appendix J). All applicable air quality laws will be complied with and fugitive dust control practices, as required under 30 CFR 817.95, will be followed.

Andalex has been issued a new approval order for the mines and the Wildcat Loadout for 1.5 million tons per year. These were inspected and met compliance during the summers of 1989-1992.
R645-301-421. CLEAN AIR ACT AND OTHER APPLICABLE LAWS

See R645-301-420.

R645-301-422. UTAH BUREAU OF AIR QUALITY

See R645-301-420.

R645-301-423. SURFACE COAL MINING AND RECLAMATION ACTIVITIES EXCEEDING 1,000,000 TONS PER YEAR

See R645-301-420.

R645-301-423.100. COMPLIANCE WITH FEDERAL AND UTAH AIR QUALITY STANDARDS

See R645-301-420.

R645-301-423.200. FUGITIVE DUST CONTROL PLAN

See also Appendix F

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