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State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
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Division Director

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July 7, 1994

Mr. Richard Dawes, Chief
Division of Federal Programs
Office of Surface Mining
1999 Broadway, Suite 3320
Denver, Colorado 80202-5733

Dear Mr. Dawes:

Re: State Final Findings and Supporting Documentation, Aberdeen Seam in the AEP Lease Addition, Andalex Resources Inc., Centennial Project, ACT/007/019-94B, Folder No. 2, Carbon County, Utah

Enclosed please find Utah's Final Findings and Supporting Decision Documentation for Andalex Resources' addition of the Aberdeen Seam to the AEP lease for the Centennial Project mine permit.

If you have any questions, please call me or Pamela Grubaugh-Littig.

Very truly yours,

A handwritten signature in black ink, appearing to read 'James W. Carter', written over a large, stylized circular flourish.

James W. Carter
Director

Enclosures

cc: M. Glasson, Andalex Resources
L. Braxton
P. Grubaugh-Littig



UTAH DIVISION OF OIL, GAS AND MINING
STATE DECISION DOCUMENT

Andalex Resources, Inc.
Centennial Project
Aberdeen Seam- AEP Lease Addition
ACT/007/019
Carbon County, Utah

July 7, 1994

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 - Bureau of Land Management, May 9, 1994
 - U. S. Fish and Wildlife Service, July 6, 1994
 - Division of State History, March 5, 1993 and July 7, 1994
 - Memo from James D. Smith, CHIA, April 20, 1993 and July 7, 1994
 - Determination of Completeness, dated May 24, 1994*
 - Affidavit of Publication, May 31, 1994
 - Memo from Joseph C. Helfrich -- Section 510(c) finding
- * Bond

ADMINISTRATIVE OVERVIEW

Andalex Resources, Inc.
Centennial Project
Aberdeen Seam - AEP Lease Addition
ACT/007/019
Carbon County, Utah

July 7, 1994

PROPOSAL

Andalex Resources, Inc. (ARI) is proposing to add mining of the Aberdeen seam (approximately 1.9 million tons of coal) to Federal Lease UTU-69600, (approximately 801.48 acres which is already included in the currently approved mine permit area). Mining of the Centennial seam of Federal Lease UTU-69600 was approved July 2, 1993 by the Secretary.

BACKGROUND

The Mining and Reclamation Plan (MRP) for the Centennial Project was approved by the Office of Surface Mining in November of 1981 and by the Division of Oil, Gas and Mining (DOG M) in January of 1982. The originally approved MRP consisted of 2,240 acres of private and federal coal leases. On May 20, 1986, ARI was issued a permit by DOGM for a 120-acre federal emergency lease. On March 2, 1987, a new five-year permanent program permit was issued incorporating the emergency lease, for a total permitted acreage of 2,360 acres.

In October of 1981, Federal lease numbers U-010581, SL-063058 and SL-027304 were modified by the Bureau of Land Management to include an additional 436 acres. In March of 1988, ARI requested that these three lease modifications be incorporated into the permitted area. In August of 1988, ARI requested that one additional 320 acre federal lease (U-05067) and one 240 acre fee lease be added to the permitted area. The permit was revised to include these leases on May 4, 1989, which brought the total permitted acreage to 3,358 acres. Again on April 8, 1991, a permit revision was approved which incorporated Federal Lease UTU-66060 also known as the Graves Lease into the permit area. The addition of this 933 acre lease brought the total lease holdings to 4,291 acres. This total combined with a 10 acre BLM right-of-way brought the total permit acreage to 4,301. The Centennial Seam of the AEP lease (UTU-69600), which consisted of 801.48 acres, was approved and added to the permit area on July 2, 1993. Total permitted acreage is currently 5,102.48 acres.

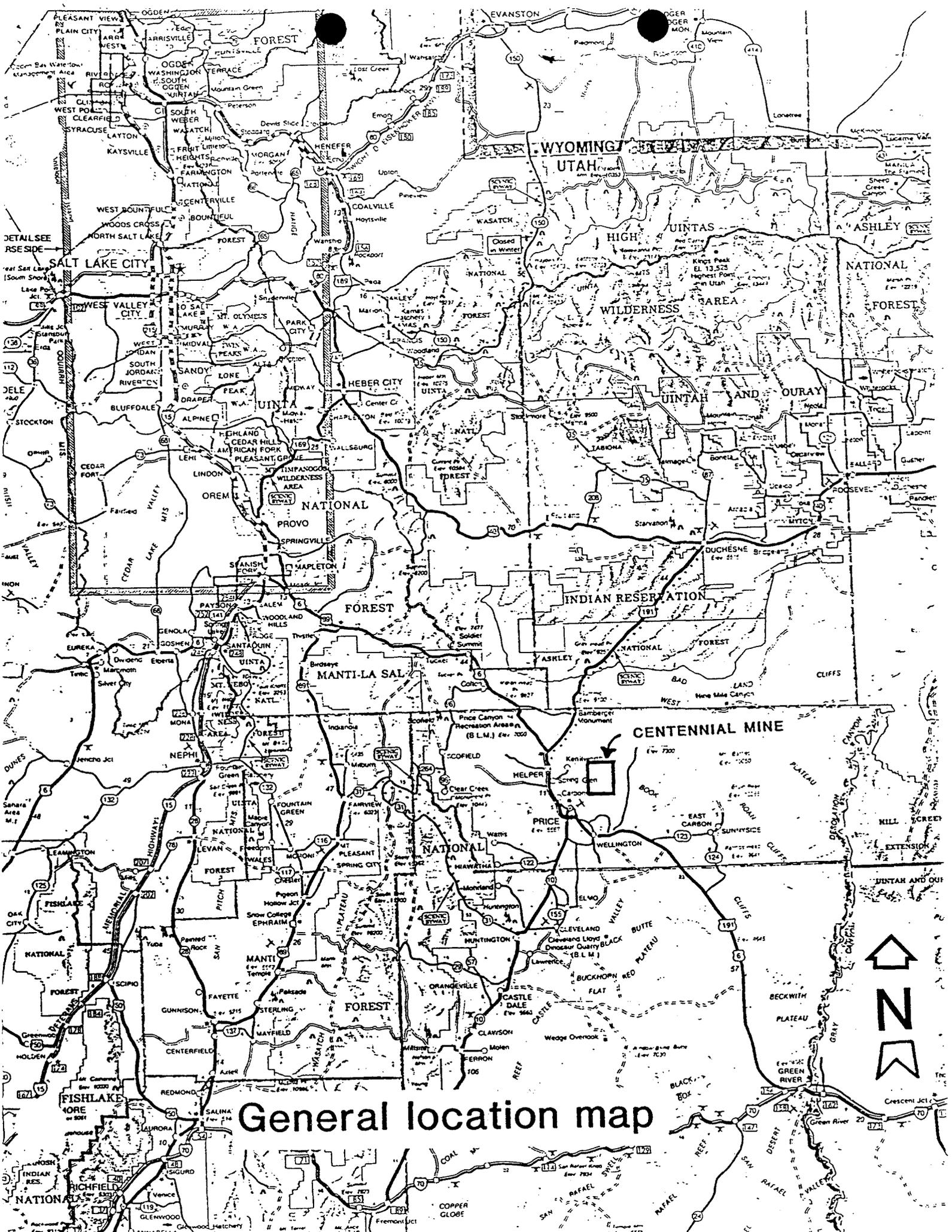
Currently ARI operates three mines, the Pinnacle, Apex and Aberdeen, in the Gilson, Lower Sunnyside and Aberdeen seams respectively. A fourth seam, the Centennial, is accessed through the Pinnacle Mine by driving rock slopes from the Gilson seam. The AEP lease involves mining in the Centennial seam and the proposed Aberdeen seam.

ANALYSIS

No additional surface disturbance is proposed with the addition of the Aberdeen seam in the AEP lease. All mining will be done as an extension of current underground mining in the Aberdeen seam. Therefore, it is DOGM's opinion that the mining and reclamation practices and procedures which were approved in the five-year permit renewal are adequate to address any effects related to the underground mining of the AEP lease. An Environmental Assessment has been prepared which indicates that mining in the AEP lease will have no significant impact to the environment or the public.

RECOMMENDATION

ARI has demonstrated that mining of the AEP lease can be done in conformance with the Surface Mining Control and Reclamation Act, and the corresponding Utah Act and performance standards. The Bureau of Land Management has approved the AEP federal lease and concurs with the decision to allow mining at this time. It is, therefore, recommended that approval of mining in the Aberdeen seam of the AEP lease be approved.



General location map

PERMITTING CHRONOLOGY

Andalex Resources, Inc.
Centennial Project
AEP Lease Addition
ACT/007/019
Carbon County, Utah

- 3/14/94 ARI submitted plans for including mining of the Aberdeen seam in Federal Lease UTU-69600 into the permit for the Centennial Project.
- 3/15/94 Copies of the application are distributed to other reviewing agencies.
- 5/6/94 Upon receipt of the BLM Lease Document on May 6, 1994, Daron Haddock, Permit Supervisor at the Division, authorized ARI to begin publication.
- 5/10/94 ARI publishes the public notice in the Price Sun Advocate to add mining of the Aberdeen seam to the AEP lease in the currently approved permit area.
- 5/24/94 The Division determines application package to be administratively complete.
- 6/8/94 DOGM transmits deficiency review of the addition of the Aberdeen Seam in the AEP Lease.
- 6/21/94 ARI submits additional information to correct deficiencies determined in DOGM's technical review of plan.
- 7/6/94 DOGM forwards State Decision Document to Office of Surface Mining Reclamation and Enforcement for concurrence and Secretarial signature.

MINE PLAN INFORMATION

Mine Name: Centennial Project State ID: ACT/007/019
 Operator: Andalex Resources, Inc. County: Carbon

Contact Person(s): Mike Glasson Position: Senior Geologist
 Telephone: (801) 637-5383

New/Existing: Both Mining Method: Longwall/Room and Pillar
New Federal Lease No(s): UTU-69600 (Aberdeen and Centennial seams)

Legal Description(s): T. 13S., R. 10 E., SLM
Section 1: SW1/4
Section 12: lots 2-11, W1/2W1/2, NE1/4SW1/4

Current Permit Area Legal Description:

T. 13S., R. 11 E., SLBM
Section 4: S1/2
Section 5: All
Section 6: All
Section 7: All
Section 8: All
Section 9: All but SE 1/4 SE 1/4
Section 17: N 1/2, NE 1/4 SE 1/4, N 1/2 NW 1/4 SE 1/4,
N 1/2 NE 1/4 SW 1/4, NE 1/4 NW 1/4 SW 1/4,
W 1/2 NW 1/4 SW 1/4
Section 18: N 1/2 N 1/2, SW 1/4 NE 1/4, NW 1/4 SE 1/4 E 1/4,
E 1/2 SE 1/4 NE 1/4, E 1/2 NE 1/4 SE 1/4

T. 13S., R. 10 E., SLM, Utah
Section 1: lots 1-8, S1/2 N1/2
Section 12, lot 1.

T. 12S., R. 11 E., SLM, Utah
Section 31: lots 3-6, and 13-22.

Ownership Data:

<u>Surface Resources (acres)</u>	<u>Existing Permit Area</u>	<u>Proposed Permit Area</u>	<u>Total Life Of Mine Area</u>
Federal	<u>3861</u>	<u>801.48</u>	<u>4662.48</u>
State			
Private	<u>440</u>		<u>440</u>
Other			
TOTAL	<u>4301</u>	<u>801.48</u>	<u>5102.48</u>

Coal Ownership (acres):

Federal	<u>3851</u>	<u>801.48</u>	<u>3652.48</u>
State			
Private	<u>440</u>		<u>440</u>
Other			
TOTAL	<u>4291</u>	<u>801.48</u>	<u>5092.48</u>

<u>Coal Resource Data</u>	<u>Total Recoverable Reserves</u>
Federal	_____
State	_____
Private	_____
Other	_____
TOTAL	<u>23 Million Tons</u>

<u>Recoverable Reserve Data</u>	<u>Name</u>	<u>Thickness</u>	<u>Depth</u>
Seam	<u>Lower Sunnyside</u>	<u>4-6 ft.</u>	<u>0-1800 ft.</u>
Seam	<u>Centennial</u>	<u>5-7 ft.</u>	<u>800-2000 ft.</u>
Seam	<u>Gilson</u>	<u>4-8 ft.</u>	<u>0-2000 ft.</u>
Seam	<u>Aberdeen</u>	<u>4-13 ft.</u>	<u>0-2800 ft.</u>
Seam	_____	_____	_____
Seam	_____	_____	_____

Mine Life: 28 years

Average Annual Production: 1.2 increasing to 1.5 Million Percent Recovery: 68%

Date Projected Annual Rate Reached: 1995 to reach 1.5 million

Date Production Begins: 1980 Date Production Ends: 2008

Reserves Recoverable By: (1) Surface Mining: _____
(2) Underground Mining: X

Reserves Lost Through Management Decisions: Unknown

Coal Market: Unknown

U.S. DEPARTMENT OF THE INTERIOR
OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT
FINDING OF NO SIGNIFICANT IMPACT
FOR
Centennial Mine
Federal Lease U-69600
Mining Plan Decision Document

A. Introduction

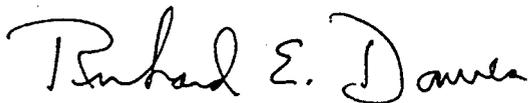
Andalex Resources, Inc. submitted a permit application package (PAP) for a permit revision for the Centennial Mine to the Utah Division of Oil, Gas and Mining (DOG M) under the Utah State program (30 CFR Part 944). The PAP proposes extending underground mining operations into the 802-acre Federal lease U-69600. The proposed mining plan would cause no new surface disturbance except for potential mining-induced subsidence.

Under the Mineral Leasing Act of 1920, the Assistant Secretary, Land and Minerals Management, must approve, approve with conditions, or disapprove the mining plan for Federal lease U-69600. Pursuant to 30 CFR Part 746, the Office of Surface Mining Reclamation and Enforcement (OSM) is recommending approval of this mining plan.

B. Statement of Environmental Significance of the Proposed Action

The undersigned person has determined that the approval of the mining plan would not have a significant impact on the quality of the human environment under section 102(2)(C) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4332(2)(C), and therefore, an environmental impact statement is not required.

This finding of no significant impact is based on the attached environmental assessment jointly prepared by Utah Division of Oil, Gas and Mining and OSM in May 1993. The environmental assessment has been independently evaluated by OSM and determined to assess the environmental impacts of the proposed action adequately and accurately and to provide sufficient evidence and analysis for this finding of no significant impact. OSM takes full responsibility for the accuracy, scope, and content of the attached environmental assessment.



Chief, Federal Programs Division
Western Support Center

6/29/93

Date

ENVIRONMENTAL ASSESSMENT

**Centennial Mine
Mining Plan Approval for Lease UTU-69600
Carbon County, Utah
May 1993**

Jointly Prepared
by
Utah Division of Oil, Gas, and Mining
and
United States Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Western Support Center

In Cooperation With
United States Department of the Interior
Bureau of Land Management
Price Coal Office

CHAPTER I INTRODUCTION

A. Purpose and Need for a Federal Action

The Utah Division of Oil, Gas and Mining (DOGGM) received a Permit Application Package (PAP) for the mining of leased federal coal within Lease UTU-69600 known as the AEP lease tract at the Andalex Resource's Centennial Mine on February 2, 1993. The application is for adding approximately 802 acres of Federally leased coal to the current permit area of the Centennial Mine.

Pursuant to the Mineral Leasing Act of 1920, as amended, Section 523 of the Surface Mining Control and Reclamation Act of 1977(SMCRA), and 30 CFR 746.14, the Assistant Secretary, Land and Minerals Management must approve, disapprove, or conditionally approve the Mining Plan for the AEP lease. This document assesses the effects the proposed mining and reclamation operations would have on the human environment.

In addition, the Authorized Officer for the Bureau of Land Management, as the mineral management agency, must determine if the proposal achieves "Maximum Economic Recovery" of the Federal coal resource and must make a recommendation on the Mining Plan Action.

B. Project Background/General Information

The Centennial underground coal mine project is located in Carbon County, Utah, approximately 10 miles north-northeast of Price, Utah. The Mining and Reclamation Plan (MRP) for the existing Centennial Mine was approved by the Office of Surface Mining in November of 1981 and by the Division of Oil, Gas and Mining (DOGGM) in January of 1982.

Andalex Resources Incorporated (ARI) operates three mines within the Centennial Project; the Pinnacle which mines the Gilson coal seam, the Apex which mines the Lower Sunnyside coal seam, and the Aberdeen which mines the Aberdeen coal seam. A fourth seam, the Centennial was approved for mining on April 8, 1991. It is accessed through the Pinnacle mine by rock slopes driven from the Gilson seam. Leases comprise approximately 4,291 acres. About two hundred acres are fee surface and coal leased from the Zion Security Corporation. Another 240 acres are fee surface and coal and are leased from the Sunedco Coal Company. The remaining 3,851 acres within the permit area are Federal leases consisting of SL-027304 (236

acres), SL-063058 (400 acres), U-010581 (1,842 acres), U-05067 (320 acres), U-53241 (120 acres), and UTU-66060 (933 acres).

The mining method being employed is pillar development utilizing continuous miners with final pillar extraction being conducted when lease boundaries are encountered. Longwall mining is not anticipated. The leases contain approximately 50 million tons of coal reserves with an estimated 30 million tons recoverable.

The mine currently produces approximately 1.2 million tons of coal per year and is expected to increase production to 1.5 million tons of coal per year by 1995. Production would then continue at that rate for the remaining 12-15 year life of the mine.

Currently, Andalex Resources Incorporated employs 116 persons of which 102 are full time employees and 14 are part time employees. Approximately 90% of the employees live in Carbon County, with 8% and 2% living in Emery and Utah counties respectively.

Existing surface facilities are accessed by an existing paved county road which is also used for transporting coal from the mine by truck. Facilities at the site consist of mine offices and shop buildings, bath houses, storage areas for mining equipment and coal, conveyors and truck loading equipment. The total disturbed surface area is about 32 acres.

D. Previous Environmental Studies

Environmental studies prepared for the Centennial Mine and surrounding general area include:

1990, BLM, Environmental Assessment, Centennial Project Mine, Federal Lease UTU-66060.

1990, Utah DOGM, State Decision Document and Cumulative Hydrologic Impact Assessment, Graves Lease, Centennial Project Mine.

1983, BLM, Environmental Assessment, Federal Lease U-52341.

1981, BLM, Environmental Assessment, Federal Lease Nos. SL-27304, SL-063058, and U-010581.

CHAPTER II DESCRIPTION OF THE ALTERNATIVES

A. Primary Alternatives Under Analysis

1. Approval of the Proposed Mining Plan Without Special Federal Conditions.

Under this alternative the Assistant Secretary would approve the mining plan for the AEP lease at the Centennial Mine in accordance with the recommendation of DOGM. This is the preferred alternative.

Description of the Current Proposal

Andalex Resources Incorporated (ARI) has proposed to add Federal lease UTU-69600 to the permit area for the underground Centennial Mine. The lease, consisting of 802 acres, would be mined as an extension of the mine's current room and pillar operations. Only the Centennial seam would be mined by extending the existing mine workings to the west within the AEP lease as long as the seam is economically minable (greater than 5 feet thick). It is unknown at this time exactly how far to the west the seam may be mined. The seam may pinch out before reaching the lease boundary, however, it is estimated that the lease contains approximately 250,000 tons of recoverable coal. Under the proposal, the annual projected production would not be altered from the current rate of 1.2 million tons per year increasing to 1.5 million tons per year by 1995. The life of mine would be extended an additional 4-5 months. The legal description of the lease is as follows:

T. 13 S., R. 10 E., SLM, Utah

Sec. 1: SW1/4;

Sec. 12: Lots 2-11, W1/2W1/2, NE1/4SW1/4.

Only the coal in the Centennial seam is included in this lease.

No additional surface construction or facilities are planned with this proposal. There would be no change in employment anticipated with this lease addition. Coal reserves, as a result of adding this lease, would be increased by approximately 250,000 tons. See Exhibits A and B for the project location.

2. Disapproval

The Assistant Secretary may disapprove the mining plan which would have the same effect as taking no action.

B. Alternatives Considered but not Analyzed Further

1. No Action

Under 30 CFR 746.14, mining plans must be approved, approved with conditions, or disapproved by the Assistant Secretary. The Assistant Secretary must act on the proposed mining plan; therefore, the No Action alternative is not discussed further in this document. However, taking no action would have the same effect as disapproval.

2. Approval with Special Federal Conditions

The Assistant Secretary may approve the mining plan with special Federal conditions in addition to any attached to Utah Permit ACT/007/019 by DOGM. The analysis of Alternative 1, Approval Without Special Federal Conditions, did not result in the identification of any impacts that could or should be mitigated beyond that mitigation proposed in the application. Therefore, this alternative is not analyzed further.

3. Alternative uses of the Available Resources

The proposed project does not involve any unresolved conflicts concerning alternative uses of the available resources. Therefore, consideration of alternative pursuant to Section 102(2) (E) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2), is not required.

CHAPTER III THE AFFECTED ENVIRONMENT

A. General Setting

The Centennial Project is located within the Book Cliffs coal field approximately 10 miles north-northeast of Price, Utah. The Book Cliffs form a rugged, southerly facing escarpment that delineates the Uintah Basin to the North from the San Rafael Swell to the south. Elevations along the Book Cliffs range from 5,000 ft. to 9,000 ft.

Outcropping rocks of the Book Cliffs range from Upper Cretaceous to Quaternary in age. The rock record reflects an overall fluctuating regressive

sequence from marine (Mancos Shale) through littoral and lagoonal (Blackhawk Formation) to fluvial (Castlegate Sandstone, Price River and North Horn Formations) and lacustrine (Flagstaff Formation) depositional environments. Oscillating depositional environments within the overall regressive trend are represented by members of the Blackhawk Formation. The major coal bearing unit within the Book Cliffs coal field is the Blackhawk Formation.

The Centennial coal seam, which would be the coal seam to be mined in the proposed AEP Lease addition, occurs as the uppermost minable coal seam in the area of the lease. The Lower Sunnyside seam has been pinched out in this area and other coal seams within the lease are not proposed for mining as the lease for them is not owned by Andalex Resources. Overburden in the area of the lease ranges from a few hundred feet to over 2000 feet.

Precipitation varies from 20 inches at higher elevations to 5 inches at lower elevations. The Book Cliffs area may be classified as mid latitude steppe to desert.

B. Critical Elements

1. Cultural, paleontological, or historic resource values

Southeastern Utah and particularly the Book Cliffs area contains numerous sites of importance with respect to the Fremont and Anazasi Indian cultures. The majority of those located in the Book Cliffs are east of the proposed permit area. No sites within the AEP lease were identified by the State Historic Preservation office.

2. Water quality/supply values

The ground water regime is dependent upon geologic and climatic parameters that establish systems of recharge, movement and discharge.

Snowmelt at higher elevations provides most of the ground water recharge. Vertical migration of ground water occurs based on permeability and fracturing of the rock strata. Lateral migration may occur when ground water encounters impermeable layers. Based on information from existing mine workings it is anticipated that the regional water table lies at some elevation deeper than the coal seams being mined. Very little water has been encountered during the mining process, usually minor drippers or some seepage, however an occasional exception to this rule has occurred when the mine has encountered old workings. In 1981, the mine cut into some old works releasing a surge of water that had to be discharged from the mine. Again in 1983 the mine encountered groundwater in an area of burned coal. These instances indicate that water may accumulate in areas of high permeability, but these areas are

generally highly localized and have limited storage capacity.

Very little water has been encountered in the Pinnacle Mine. Water that has been encountered has been in the form of small roof leaks that dry up within a few days or weeks after mining progresses downdrift.

The entire Centennial Project area is drained by ephemeral drainages primarily heading in a southerly direction and are tributary to the Price River. The proposed lease addition area is located in drainage which would only flow in direct response to snowmelt or direct precipitation. An inventory of seeps and springs conducted by Andalex personnel in May 1992, indicated that there are no surface water sources on the AEP lease.

Surface runoff from the Book Cliffs area flows into the Price River drainage basin of east-central Utah. The Price River originates near Scofield Reservoir and flows southeasterly into the Green River, north of the community of Green River, Utah. Water quality is good in the mountainous headwater tributaries, but deteriorates rapidly as flow traverses the Mancos Shale. The shale lithology typically has low permeability, is easily eroded and contains large quantities of soluble salts that are a major contributor to poor water quality. Depending upon the duration of contact, water quality degrades downstream to where total dissolved solids (TDS) levels of 3,000 milligrams per liter are common. The predominant ion leached from the Mancos Shale is sulfate (SO_4) with values over 1,000 mg/l common in the lower reaches of the Price River.

Seeps or springs in the area of the lease were not found during a recent inventory of the area. No water rights or surface facilities indicating water use were identified during the recent survey.

3. Wetland values

The AEP lease is located on high mountain desert terrain. No surface water sources were identified in a recent seep and spring survey.

4. Floodplain/unstable geology concerns

Rock overlaying the Centennial seam is anticipated to be over 500 feet thick. Based on past history of subsidence effects at mines in the Wasatch coal field and Book Cliffs coal fields, including the Centennial Mine itself, there is little likelihood of surface expression as a result of mining this lease. The BLM has completed a R2P2 for this lease and determined that maximum economic recovery can be achieved without non-coal resources being impacted.

5. Threatened or endangered plant/ animal species

Vegetation varies from the sagebrush/grass community type at lower elevations to the Douglas fir/aspen community at higher elevations. Other vegetative communities include mountain brush pinyon-juniper, pinyon-juniper/sagebrush and riparian. These communities are primarily used for wildlife habitat and livestock grazing.

The proposed permit area consists of a variety of habitat types and wildlife. Economically important and high interest species include elk, mule deer, black bear, coyote, mountain lion, mountain cottontail, and several furbearing species. Bird species of interest that may be present in the area include the golden eagle, blue grouse, ruffed grouse, western bluebird, and Grace's warbler.

No Threatened or Endangered (T&E) plant or animal species have been found to inhabit the proposed lease area, although certain raptors may migrate through the area. No fisheries exist within the Centennial Mine project area.

6. Migratory birds of high Federal interest

Although golden eagles frequent this area, an inventory conducted in conjunction with the Utah Division of Wildlife Resources failed to identify any active raptor nests on the lease area.

7. Renewable resource/ unique agricultural values

Grazing and hunting are both done within the lease area. There are also stands of Pinyon and Juniper which have some value as firewood or fencing material. No other use or resource has been identified. There are no prime farmlands present.

8. Recreational resource values

The land comprising the lease area has been historically used for deer hunting. Other recreational uses for the permit area could include hiking, cross-country skiing, four wheeling, camping, and snowmobiling. There are no existing or proposed wilderness areas or areas of environmental concern or wild and scenic rivers.

9. Social and economic values

Coal mining is one of the major industries in the Carbon County area. The economy of the area is reflected in the viability of the mines.

10. Conformance with Federal, State, Regional, and/or local land use plans, programs, and policies

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.

CHARTER IV IMPACT ANALYSIS

Impacts of Alternative 1, Approval without special federal conditions.

Mining operations within the proposed AEP lease would not encompass additional surface disturbance. Thus, only mining-induced subsidence would potentially impact surface resources.

1. Cultural, paleontological, or historic resource values

No surface disturbance is planned, therefore no cultural or historic sites would be affected.

2. Water quality/supply values

Mining in the lease area may produce subsidence which may result in the extension and expansion of the existing fracture system and the upward propagation of new fractures. Ground water may be intercepted by these new fractures. Dewatering of localized aquifers is possible during the life of mine operations.

Currently the Centennial Mine discharges approximately 100,000 gallons of water per day from mine inflow. This volume is not anticipated to increase since previous mining in the AEP lease found conditions to be completely dry.

Mining operations in the lease would not encompass additional surface disturbance and therefore would not impact surface waters.

All surface drainages in the area of the AEP lease are ephemeral in nature, responding only to rain or snowfall events. Effects of subsidence, if any, should be limited to shallow surface cracks in surface tensile zones that would quickly fill with sediments during runoff events and produce no impact to ephemeral stream flow.

3. Wetland values

No wetlands were identified in the proposed lease area. Mining would be an extension of underground operations with no additional surface disturbance.

4. Floodplain/unstable geology concerns

Additional surface disturbance would not occur as a result of the lease addition. Surface expression of subsidence could be possible, but not likely. No surface impacts are anticipated.

5. Threatened or endangered plant/animal species

No T&E species would be affected by the addition of the AEP lease.

6. Migratory birds of high Federal Interest

The lease will be mined from existing underground workings. No surface impacts are anticipated.

7. Renewable resource/unique agricultural values

No surface impacts are anticipated.

8. Recreational resource values

The ability of the lease area to support the recreational activities presently conducted will not change.

9. Social and economic values

No changes in employment are anticipated as a result of the proposed lease addition.

Effects to coal reserves as a result of the lease addition would be a net increase of approximately 250,000 tons of recoverable coal.

10. Conformance with Federal, State, regional, and/or local land use plans, programs, and policies

No changes in the land use for this area would occur as a result of the lease addition.

Impacts of Alternative 2, Disapproval

If the mining plan for the AEP lease addition is disapproved, the impacts described for Alternative 1, Approval Without Special Federal Conditions, would not occur on the AEP acreage. The impacts identified in Alternative 1 would continue on surrounding lands. The Centennial Mine would continue to operate under the terms and conditions of the currently approved mining plan. Coal reserves in the Centennial seam would remain unmined and maximum economic recovery would not be achieved.

Since coal in the Centennial seam is an isolated pod, if mining in the AEP lease is not done at this time there would be the probability that the Centennial seam in this lease would never be recovered.

Cumulative Impacts

None identified.

**CHAPTER V
CONSULTATION AND COORDINATION**

A. Preparer:

This Environmental Assessment was prepared by:

Daron R. Haddock, Permit Supervisor, Utah Division of Oil, Gas and Mining
Richard Holbrook, Senior Project Manager, OSM
Floyd McMullen, Environmental Project Manager OSM

B. Consultation:

The following individuals were consulted in the preparation of this EA:

Steve Falk, BLM
Barry Grosely, Engineer, BLM
Ken Phippen, UDWR
Sue Linner, USFWS
Paul Baker, UDOGM
James Smith, UDOGM

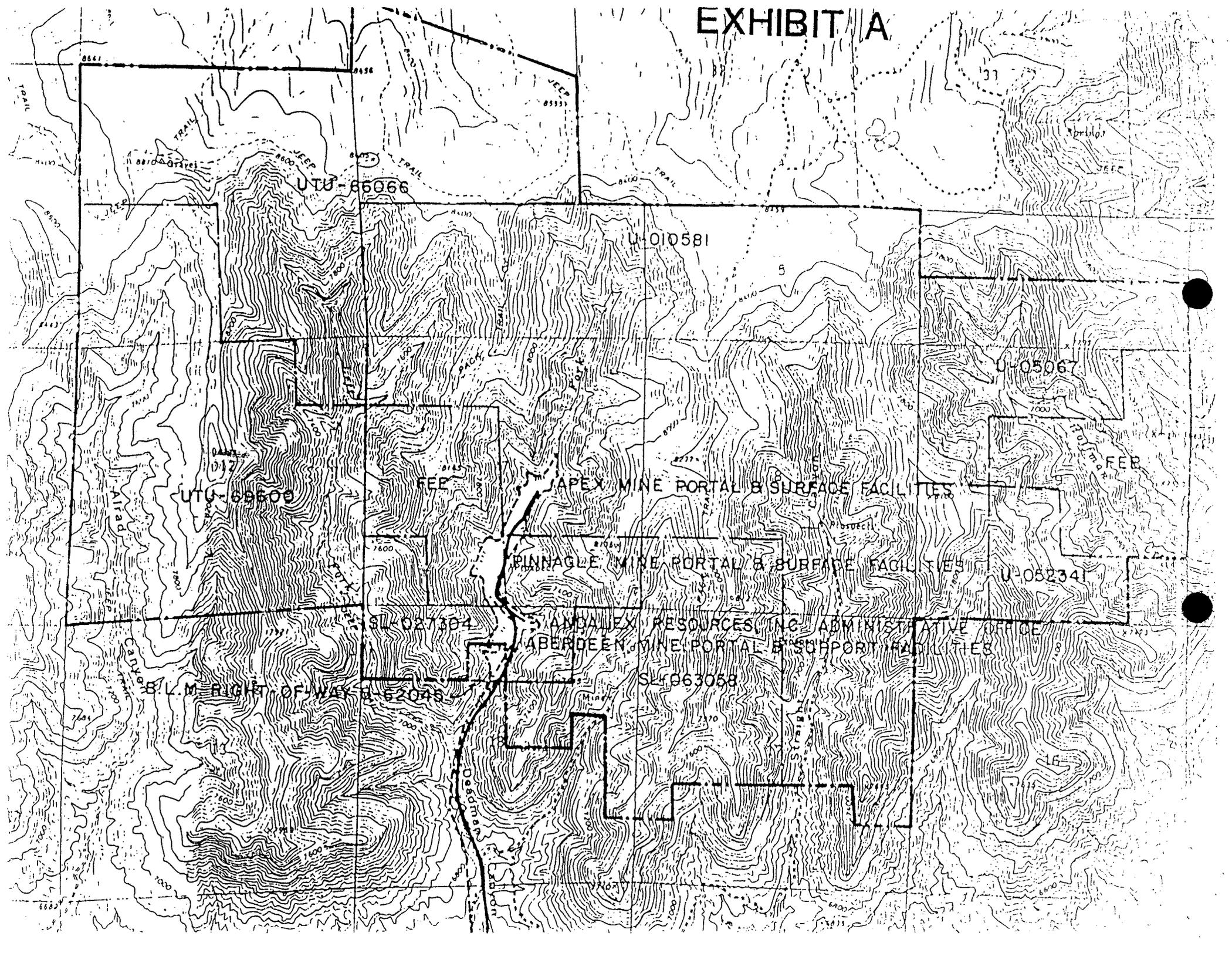
Page 12
Centennial Mine
Environmental Assessment
ACT/007/019
May 1993

**CHAPTER VI
APPENDIX**

Exhibit A	Area Map
Exhibit B	Lease Map
Exhibit C	BLM recommendation for approval
Exhibit D	SCS Negative Prime farmland determination
Exhibit E	SHPO correspondence
Exhibit F	USFWS correspondence

AEPLEAS.EA

EXHIBIT A





United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 11350
Salt Lake City, Utah 84147

March 26, 1993

Michael W. Glasson
Senior Geologist
ANDALEX Resources Inc.
P.O. Box 902
Price, Utah 84501

Dear Mr. Glasson:

In response to your letter of February 24, 1993, we are furnishing you information concerning Important Farmlands in the area marked on the map furnished by your office. This area covers the SW1/4 Section 1 and all of Section 12, T.13S., R.10E., Carbon County, Utah.

There are no Important Farmlands in the designated site. The reasons are as follows:

- (1) Slope K (Erodibility Factor) X percent slope is greater than 2.
- (2) Rock Fragments coarser than 3 inches cover more than 10 percent of the soil surface.
- (3) Much of the area has a mean summer temperature less than 59 degrees F.
- (4) Irrigation water is not available.

The completed Form AD-1006 is enclosed. If we can be of further assistance, please call on us.

Sincerely,

FERRIS P. ALLGOOD
State Soil Scientist

Enclosure

EXHIBIT D

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

A. <i>(To be completed by Federal Agency)</i> Name Of Project: Federal Coal Lease UTU-69600 Proposed Land Use: _____	Date Of Land Evaluation Request: 3/24/93 Federal Agency Involved: _____ County And State: Carbon County, Utah Date Request Received By SCS: _____
---	--

ART II (To be completed by SCS)

Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Acres Irrigated: _____	Average Farm Size: _____
Major Crops: _____	Farmable Land In Govt. Jurisdiction Acres: _____ %		Amount Of Farmland As Defined in FPPA Acres: _____ %	
Name Of Land Evaluation System Used Soil Survey	Name Of Local Site Assessment System: _____		Date Land Evaluation Returned By SCS: _____	

	Alternative Site Rating			
	Site A	Site B	Site C	Site D
ART III (To be completed by Federal Agency)				
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
ART IV (To be completed by SCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by SCS) Land Evaluation Criterion
 Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)

	Maximum Points			
PART VI (To be completed by Federal Agency)				
Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))				
1. Area In Nonurban Use				
2. Perimeter In Nonurban Use				
3. Percent Of Site Being Farmed				
4. Protection Provided By State And Local Government				
5. Distance From Urban Builtup Area				
6. Distance To Urban Support Services				
7. Size Of Present Farm Unit Compared To Average				
8. Creation Of Nonfarmable Farmland				
9. Availability Of Farm Support Services				
10. On-Farm Investments				
11. Effects Of Conversion On Farm Support Services				
12. Compatibility With Existing Agricultural Use				
TOTAL SITE ASSESSMENT POINTS	160			

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100			
Total Site Assessment (From Part VI above or a local site assessment)	160			
TOTAL POINTS (Total of above 2 lines)	260			

Site Selected: _____	Date Of Selection: _____	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>
Reason For Selection: _____		



State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF WILDLIFE RESOURCES

Michael O. Leavitt
 Governor
 Ted Stewart
 Executive Director
 Timothy H. Provan
 Division Director

1596 West North Temple
 Salt Lake City, Utah 84116-3195
 801-538-4700
 801-538-4709 (Fax)

007/019
 VIK
 41-14988

RECEIVED

APR 13 1993

DIVISION OF
 OIL GAS & MINING

*Daram fzi
 reut t feb*

April 7, 1993

Mr. James Carter
 Director
 Division of Oil, Gas and Mining
 355 West North Temple
 3 Triad Center, Suite 350
 Salt Lake City, Utah 84180-1203

Subject: AEP Lease Addition, Andalex Resources, Inc., Centennial Mine, ACT/007/019-92E

Dear Mr. Carter:

The Division of Wildlife Resources has reviewed this proposed lease addition by Andalex Resources, Inc., and has the following comments.

Based on the Bureau of Land Management's conclusions that there would be no surface disturbance, the DWR recommends this lease addition be approved. Past mining activities in this area have not impacted surface resources and this proposed plan should not impact wildlife resources.

Thank you for the opportunity to comment. If there are any questions, contact Ken Phippen, Regional Habitat Manager, at 637-3310.

Sincerely,

Timothy H. Provan
 Timothy H. Provan
 Director

ENVIRONMENTAL ASSESSMENT

**Centennial Mine
Mining Plan Approval for Lease UTU-69600
Carbon County, Utah
May 1993**

**Jointly Prepared
by
Utah Division of Oil, Gas, and Mining
and
United States Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Western Support Center**

**In Cooperation With
United States Department of the Interior
Bureau of Land Management
Price Coal Office**

CHAPTER I INTRODUCTION

A. Purpose and Need for a Federal Action

The Utah Division of Oil, Gas and Mining (DOGGM) received a Permit Application Package (PAP) for the mining of leased federal coal within Lease UTU-69600 known as the AEP lease tract at the Andalex Resource's Centennial Mine on February 2, 1993. The application is for adding approximately 802 acres of Federally leased coal to the current permit area of the Centennial Mine.

Pursuant to the Mineral Leasing Act of 1920, as amended, Section 523 of the Surface Mining Control and Reclamation Act of 1977(SMCRA), and 30 CFR 746.14, the Assistant Secretary, Land and Minerals Management must approve, disapprove, or conditionally approve the Mining Plan for the AEP lease. This document assesses the effects the proposed mining and reclamation operations would have on the human environment.

In addition, the Authorized Officer for the Bureau of Land Management, as the mineral management agency, must determine if the proposal achieves "Maximum Economic Recovery" of the Federal coal resource and must make a recommendation on the Mining Plan Action.

B. Project Background/General Information

The Centennial underground coal mine project is located in Carbon County, Utah, approximately 10 miles north-northeast of Price, Utah. The Mining and Reclamation Plan (MRP) for the existing Centennial Mine was approved by the Office of Surface Mining in November of 1981 and by the Division of Oil, Gas and Mining (DOGGM) in January of 1982.

Andalex Resources Incorporated (ARI) operates three mines within the Centennial Project; the Pinnacle which mines the Gilson coal seam, the Apex which mines the Lower Sunnyside coal seam, and the Aberdeen which mines the Aberdeen coal seam. A fourth seam, the Centennial was approved for mining on April 8, 1991. It is accessed through the Pinnacle mine by rock slopes driven from the Gilson seam. Leases comprise approximately 4,291 acres. About two hundred acres are fee surface and coal leased from the Zion Security Corporation. Another 240 acres are fee surface and coal and are leased from the Sunedco Coal Company. The remaining 3,851 acres within the permit area are Federal leases consisting of SL-027304 (236

acres), SL-063058 (400 acres), U-010581 (1,842 acres), U-05067 (320 acres), U-53241 (120 acres), and UTU-66060 (933 acres).

The mining method being employed is pillar development utilizing continuous miners with final pillar extraction being conducted when lease boundaries are encountered. Longwall mining is not anticipated. The leases contain approximately 50 million tons of coal reserves with an estimated 30 million tons recoverable.

The mine currently produces approximately 1.2 million tons of coal per year and is expected to increase production to 1.5 million tons of coal per year by 1995. Production would then continue at that rate for the remaining 12-15 year life of the mine.

Currently, Andalex Resources Incorporated employs 116 persons of which 102 are full time employees and 14 are part time employees. Approximately 90% of the employees live in Carbon County, with 8% and 2% living in Emery and Utah counties respectively.

Existing surface facilities are accessed by an existing paved county road which is also used for transporting coal from the mine by truck. Facilities at the site consist of mine offices and shop buildings, bath houses, storage areas for mining equipment and coal, conveyors and truck loading equipment. The total disturbed surface area is about 32 acres.

D. Previous Environmental Studies

Environmental studies prepared for the Centennial Mine and surrounding general area include:

1990, BLM, Environmental Assessment, Centennial Project Mine, Federal Lease UTU-66060.

1990, Utah DOGM, State Decision Document and Cumulative Hydrologic Impact Assessment, Graves Lease, Centennial Project Mine.

1983, BLM, Environmental Assessment, Federal Lease U-52341.

1981, BLM, Environmental Assessment, Federal Lease Nos. SL-27304, SL-063058, and U-010581.

CHAPTER II DESCRIPTION OF THE ALTERNATIVES

A. Primary Alternatives Under Analysis

1. Approval of the Proposed Mining Plan Without Special Federal Conditions.

Under this alternative the Assistant Secretary would approve the mining plan for the AEP lease at the Centennial Mine in accordance with the recommendation of DOGM. This is the preferred alternative.

Description of the Current Proposal

Andalex Resources Incorporated (ARI) has proposed to add Federal lease UTU-69600 to the permit area for the underground Centennial Mine. The lease, consisting of 802 acres, would be mined as an extension of the mine's current room and pillar operations. Only the Centennial seam would be mined by extending the existing mine workings to the west within the AEP lease as long as the seam is economically minable (greater than 5 feet thick). It is unknown at this time exactly how far to the west the seam may be mined. The seam may pinch out before reaching the lease boundary, however, it is estimated that the lease contains approximately 250,000 tons of recoverable coal. Under the proposal, the annual projected production would not be altered from the current rate of 1.2 million tons per year increasing to 1.5 million tons per year by 1995. The life of mine would be extended an additional 4-5 months. The legal description of the lease is as follows:

T. 13 S., R. 10 E., SLM, Utah

Sec. 1: SW1/4;

Sec. 12: Lots 2-11, W1/2W1/2, NE1/4SW1/4.

Only the coal in the Centennial seam is included in this lease.

No additional surface construction or facilities are planned with this proposal. There would be no change in employment anticipated with this lease addition. Coal reserves, as a result of adding this lease, would be increased by approximately 250,000 tons. See Exhibits A and B for the project location.

2. Disapproval

The Assistant Secretary may disapprove the mining plan which would have the same effect as taking no action.

B. Alternatives Considered but not Analyzed Further

1. No Action

Under 30 CFR 746.14, mining plans must be approved, approved with conditions, or disapproved by the Assistant Secretary. The Assistant Secretary must act on the proposed mining plan; therefore, the No Action alternative is not discussed further in this document. However, taking no action would have the same effect as disapproval.

2. Approval with Special Federal Conditions

The Assistant Secretary may approve the mining plan with special Federal conditions in addition to any attached to Utah Permit ACT/007/019 by DOGM. The analysis of Alternative 1, Approval Without Special Federal Conditions, did not result in the identification of any impacts that could or should be mitigated beyond that mitigation proposed in the application. Therefore, this alternative is not analyzed further.

3. Alternative uses of the Available Resources

The proposed project does not involve any unresolved conflicts concerning alternative uses of the available resources. Therefore, consideration of alternative pursuant to Section 102(2) (E) of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4332(2), is not required.

CHAPTER III THE AFFECTED ENVIRONMENT

A. General Setting

The Centennial Project is located within the Book Cliffs coal field approximately 10 miles north-northeast of Price, Utah. The Book Cliffs form a rugged, southerly facing escarpment that delineates the Uintah Basin to the North from the San Rafael Swell to the south. Elevations along the Book Cliffs range from 5,000 ft. to 9,000 ft.

Outcropping rocks of the Book Cliffs range from Upper Cretaceous to Quaternary in age. The rock record reflects an overall fluctuating regressive

sequence from marine (Mancos Shale) through littoral and lagoonal (Blackhawk Formation) to fluvial (Castlegate Sandstone, Price River and North Horn Formations) and lacustrine (Flagstaff Formation) depositional environments. Oscillating depositional environments within the overall regressive trend are represented by members of the Blackhawk Formation. The major coal bearing unit within the Book Cliffs coal field is the Blackhawk Formation.

The Centennial coal seam, which would be the coal seam to be mined in the proposed AEP Lease addition, occurs as the uppermost minable coal seam in the area of the lease. The Lower Sunnyside seam has been pinched out in this area and other coal seams within the lease are not proposed for mining as the lease for them is not owned by Andalex Resources. Overburden in the area of the lease ranges from a few hundred feet to over 2000 feet.

Precipitation varies from 20 inches at higher elevations to 5 inches at lower elevations. The Book Cliffs area may be classified as mid latitude steppe to desert.

B. Critical Elements

1. Cultural, paleontological, or historic resource values

Southeastern Utah and particularly the Book Cliffs area contains numerous sites of importance with respect to the Fremont and Anazasi Indian cultures. The majority of those located in the Book Cliffs are east of the proposed permit area. No sites within the AEP lease were identified by the State Historic Preservation office.

2. Water quality/supply values

The ground water regime is dependent upon geologic and climatic parameters that establish systems of recharge, movement and discharge.

Snowmelt at higher elevations provides most of the ground water recharge. Vertical migration of ground water occurs based on permeability and fracturing of the rock strata. Lateral migration may occur when ground water encounters impermeable layers. Based on information from existing mine workings it is anticipated that the regional water table lies at some elevation deeper than the coal seams being mined. Very little water has been encountered during the mining process, usually minor drippers or some seepage; however an occasional exception to this rule has occurred when the mine has encountered old workings. In 1981, the mine cut into some old works releasing a surge of water that had to be discharged from the mine. Again in 1983 the mine encountered groundwater in an area of burned coal. These instances indicate that water may accumulate in areas of high permeability, but these areas are

generally highly localized and have limited storage capacity.

Very little water has been encountered in the Pinnacle Mine. Water that has been encountered has been in the form of small roof leaks that dry up within a few days or weeks after mining progresses downdrift.

The entire Centennial Project area is drained by ephemeral drainages primarily heading in a southerly direction and are tributary to the Price River. The proposed lease addition area is located in drainage which would only flow in direct response to snowmelt or direct precipitation. An inventory of seeps and springs conducted by Andalex personnel in May 1992, indicated that there are no surface water sources on the AEP lease.

Surface runoff from the Book Cliffs area flows into the Price River drainage basin of east-central Utah. The Price River originates near Scofield Reservoir and flows southeasterly into the Green River, north of the community of Green River, Utah. Water quality is good in the mountainous headwater tributaries, but deteriorates rapidly as flow traverses the Mancos Shale. The shale lithology typically has low permeability, is easily eroded and contains large quantities of soluble salts that are a major contributor to poor water quality. Depending upon the duration of contact, water quality degrades downstream to where total dissolved solids (TDS) levels of 3,000 milligrams per liter are common. The predominant ion leached from the Mancos Shale is sulfate (SO_4) with values over 1,000 mg/l common in the lower reaches of the Price River.

Seeps or springs in the area of the lease were not found during a recent inventory of the area. No water rights or surface facilities indicating water use were identified during the recent survey.

3. Wetland values

The AEP lease is located on high mountain desert terrain. No surface water sources were identified in a recent seep and spring survey.

4. Floodplain/unstable geology concerns

Rock overlaying the Centennial seam is anticipated to be over 500 feet thick. Based on past history of subsidence effects at mines in the Wasatch coal field and Book Cliffs coal fields, including the Centennial Mine itself, there is little likelihood of surface expression as a result of mining this lease. The BLM has completed a R2P2 for this lease and determined that maximum economic recovery can be achieved without non-coal resources being impacted.

5. Threatened or endangered plant/ animal species

Vegetation varies from the sagebrush/grass community type at lower elevations to the Douglas fir/aspen community at higher elevations. Other vegetative communities include mountain brush pinyon-juniper, pinyon-juniper/sagebrush and riparian. These communities are primarily used for wildlife habitat and livestock grazing.

The proposed permit area consists of a variety of habitat types and wildlife. Economically important and high interest species include elk, mule deer, black bear, coyote, mountain lion, mountain cottontail, and several furbearing species. Bird species of interest that may be present in the area include the golden eagle, blue grouse, ruffed grouse, western bluebird, and Grace's warbler.

No Threatened or Endangered (T&E) plant or animal species have been found to inhabit the proposed lease area, although certain raptors may migrate through the area. No fisheries exist within the Centennial Mine project area.

6. Migratory birds of high Federal interest

Although golden eagles frequent this area, an inventory conducted in conjunction with the Utah Division of Wildlife Resources failed to identify any active raptor nests on the lease area.

7. Renewable resource/ unique agricultural values

Grazing and hunting are both done within the lease area. There are also stands of Pinyon and Juniper which have some value as firewood or fencing material. No other use or resource has been identified. There are no prime farmlands present.

8. Recreational resource values

The land comprising the lease area has been historically used for deer hunting. Other recreational uses for the permit area could include hiking, cross-country skiing, four wheeling, camping, and snowmobiling. There are no existing or proposed wilderness areas or areas of environmental concern or wild and scenic rivers.

9. Social and economic values

Coal mining is one of the major industries in the Carbon County area. The economy of the area is reflected in the viability of the mines.

10. Conformance with Federal, State, Regional, and/or local land use plans, programs, and policies

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.

**CHARTER IV
IMPACT ANALYSIS**

Impacts of Alternative 1, Approval without special federal conditions.

Mining operations within the proposed AEP lease would not encompass additional surface disturbance. Thus, only mining-induced subsidence would potentially impact surface resources.

1. Cultural, paleontological, or historic resource values

No surface disturbance is planned, therefore no cultural or historic sites would be affected.

2. Water quality/supply values

Mining in the lease area may produce subsidence which may result in the extension and expansion of the existing fracture system and the upward propagation of new fractures. Ground water may be intercepted by these new fractures. Dewatering of localized aquifers is possible during the life of mine operations.

Currently the Centennial Mine discharges approximately 100,000 gallons of water per day from mine inflow. This volume is not anticipated to increase since previous mining in the AEP lease found conditions to be completely dry.

Mining operations in the lease would not encompass additional surface disturbance and therefore would not impact surface waters.

All surface drainages in the area of the AEP lease are ephemeral in nature, responding only to rain or snowfall events. Effects of subsidence, if any, should be limited to shallow surface cracks in surface tensile zones that would quickly fill with sediments during runoff events and produce no impact to ephemeral stream flow.

3. Wetland values

No wetlands were identified in the proposed lease area. Mining would be an extension of underground operations with no additional surface disturbance.

4. Floodplain/unstable geology concerns

Additional surface disturbance would not occur as a result of the lease addition. Surface expression of subsidence could be possible, but not likely. No surface impacts are anticipated.

5. Threatened or endangered plant/animal species

No T&E species would be affected by the addition of the AEP lease.

6. Migratory birds of high Federal Interest

The lease will be mined from existing underground workings. No surface impacts are anticipated.

7. Renewable resource/unique agricultural values

No surface impacts are anticipated.

8. Recreational resource values

The ability of the lease area to support the recreational activities presently conducted will not change.

9. Social and economic values

No changes in employment are anticipated as a result of the proposed lease addition.

Effects to coal reserves as a result of the lease addition would be a net increase of approximately 250,000 tons of recoverable coal.

10. Conformance with Federal, State, regional, and/or local land use plans, programs, and policies

No changes in the land use for this area would occur as a result of the lease addition.

Impacts of Alternative 2, Disapproval

If the mining plan for the AEP lease addition is disapproved, the impacts described for Alternative 1, Approval Without Special Federal Conditions, would not occur on the AEP acreage. The impacts identified in Alternative 1 would continue on surrounding lands. The Centennial Mine would continue to operate under the terms and conditions of the currently approved mining plan. Coal reserves in the Centennial seam would remain unmined and maximum economic recovery would not be achieved.

Since coal in the Centennial seam is an isolated pod, if mining in the AEP lease is not done at this time there would be the probability that the Centennial seam in this lease would never be recovered.

Cumulative Impacts

None identified.

CHAPTER V CONSULTATION AND COORDINATION

A. Preparer:

This Environmental Assessment was prepared by:

Daron R. Haddock, Permit Supervisor, Utah Division of Oil, Gas and Mining
Richard Holbrook, Senior Project Manager, OSM
Floyd McMullen, Environmental Project Manager OSM

B. Consultation:

The following individuals were consulted in the preparation of this EA:

Steve Falk, BLM
Barry Grosely, Engineer, BLM
Ken Phippen, UDWR
Sue Linner, USFWS
Paul Baker, UDOGM
James Smith, UDOGM

Page 12
Centennial Mine
Environmental Assessment
ACT/007/019
May 1993

**CHAPTER VI
APPENDIX**

Exhibit A	Area Map
Exhibit B	Lease Map
Exhibit C	BLM recommendation for approval
Exhibit D	SCS Negative Prime farmland determination
Exhibit E	SHPO correspondence
Exhibit F	USFWS correspondence

AEPLEAS.EA

FINDINGS

Andalex Resources, Inc.
Centennial Project
Federal Lease UTU-69600
Aberdeen Seam-AEP Lease
ACT/007/019
Carbon County, Utah

July 7, 1994

1. The revised plan and the permit application are accurate and complete and all requirements of the Surface Mining Control and Reclamation Act, and the approved Utah State Program (the "Act") are in compliance. (R645-300-133.100)
2. No additional surface reclamation is required since the additional permit area will be mined as an underground extension of the existing mine. There will be no new surface facilities. (R645-300-133.710)
3. The assessment of the probable cumulative impacts of all anticipated coal mining and reclamation activities in the general area on the hydrologic balance has been conducted by the regulatory authority and no significant impacts were identified. The Mining and Reclamation Plan (MRP) proposed under the application has been designed to prevent damage to the hydrologic balance in the permit area and in associated off-site areas. See December 4, 1990 Cumulative Hydrologic Impact Analysis [CHIA] and April 20, 1993 and July 7, 1994 supplemental report to CHIA by James D. Smith. (R645-300-133.400 and UCA 40-10-11 {2}{c})
4. The proposed lands to be included within the permit area are:
 - a. not included within an area designated unsuitable for underground coal mining operations (R645-300-133.220) ;
 - b. not within an area under study for designated lands unsuitable for underground coal mining operations (R645-300-133.210) ;
 - c. not on any lands subject to the prohibitions or limitations of 30 CFR 761.11 {a} (national parks, etc.), 761.11 {f} (public buildings, etc.) and 761.11 {g} (cemeteries);
 - d. not within 100 feet of the outside right-of-way of a public road (R645-300-133.220);
 - e. not within 300 feet of any occupied dwelling (R645-300-133-220).

Findings

Andalex Resources Inc.

Addition of Aberdeen Seam to AEP Lease

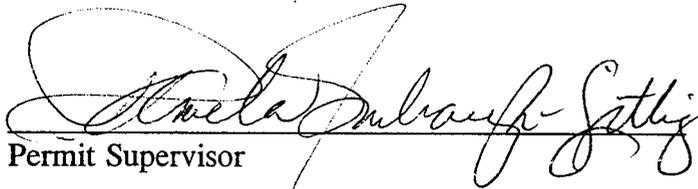
ACT/007/019

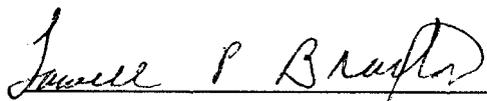
July 7, 1994

5. The regulatory authority's issuance of a permit is in compliance with the National Historic Preservation Act and implementing regulations (36 CFR 800). The geographical area for mining of the AEP Lease in the Aberdeen seam is identical to the Centennial seam, i.e. the Centennial seam overlies the Aberdeen seam. See letter from State Historic Preservation Officer (SHPO) dated September 18, 1992 and March 5, 1993 and July 7, 1994. (R645-300-133.600).
6. The applicant has the legal right to enter and complete mining activities through a federal coal lease issued by the Bureau of Land Management. See lease document UTU-69600, effective July 1, 1994, and the Record of Title Assignment, dated May 9, 1994. (R645-300-133.300)
7. A 510(c) report has been run on the Applicant Violator System (AVS), which shows that: prior violations of applicable laws and regulations have been corrected; neither Andalex Resources Inc., or any affiliated company, are delinquent in payment of fees for the Abandoned Mine Reclamation Fund; and the applicant does not control and has not controlled mining operations with demonstrated pattern of willful violations of the Act of such nature, duration, and with such resulting irreparable damage to the environment as to indicate an intent not to comply with the provisions of the Act. See memo from Joe Helfrich dated July 7, 1994. (R645-300-133.730)
8. Underground mining operations to be performed under the permit will not be inconsistent with other operations anticipated to be performed in areas adjacent to the proposed permit area. The closest operating mine is the Soldier Canyon Mine.
9. The applicant has posted a surety bond for the Centennial Project in the amount of \$1,080,839.00. No additional surety will be required, since there is no additional surface disturbance proposed. (R645-300-134)
10. No lands designated as prime farmlands or alluvial valley floors occur in the permit area. (R645-302-313.100) (R645-302-321.100)
11. The proposed postmining land-use of the permit area is the same as the pre-mining land use and has been approved by the regulatory authority and the surface land management agency.
12. The regulatory authority has made all specific approvals required by the Act, the Cooperative Agreement, and the Federal Lands Program.

Findings
Andalex Resources Inc.
Addition of Aberdeen Seam to AEP Lease
ACT/007/019
July 7, 1994

13. The proposed operation will not affect the continued existence of any threatened or endangered species or result in the destruction or adverse modification of their critical habitats. See letter from U. S. Fish and Wildlife Service dated July 6, 1994. (R645-300-133.500)
14. All procedures for public participation required by the Act, and the approved Utah State Program have been complied with (R645-300-120).
15. No existing structures will be used in conjunction with mining of the underground lease addition other than those constructed in compliance with the performance standards of R645-301 and R645-302. (R645-300-133.720)


Permit Supervisor


Associate Director, Mining


Director



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

May 24, 1994

Mr. Mike Glasson
Andalex Resources, Inc.
P.O. Box 902
Price, UT 84501

Re: Determination of Administrative Completeness, AEP Lease
Aberdeen Seam Addition, Andalex Resources Inc., Centennial
Project, ACT/007/019, Folder #3, Carbon County, Utah

Dear Mr. Glasson:

The Division has conducted an Initial Completeness Review on the information received through March 3, 1993 for your application to add the Aberdeen seam of the AEP Lease to your permit area. The information has been found to be adequate to determine the Permit Application Package (PAP) administratively complete.

A technical review of the plan will now be initiated. Technical deficiencies will be forwarded to you as individual reviews are completed. The Division will coordinate with other agencies and incorporate their comments into our review process. Issues raised will need to be resolved prior to permit issuance.

At this time, you should publish a Notice of Application for a Mine Permit as required by R645-300-121. A copy of the publication notice should be sent to the Division as soon as it is available. you should also insure that a copy of the complete application is on file at the Carbon County courthouse. The division will notify all other interested agencies and allow for their comment prior to making a final decision to approve or disapprove the permit application.

Please call if you have any questions.

Sincerely,

Daron R. Haddock
Permit Supervisor

cc: L. Braxton



AFFIDAVIT OF PUBLICATION

STATE OF UTAH)

ss.

County of Carbon,)

I, Kevin Ashby, on oath. say that I am the Publisher of the Sun Advocate, a twice-weekly newspaper of general circulation, published at Price, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue of such newspaper for 4 (Four) consecutive issues, and that the first publication was on the 10th day of May, 1994 and that the last publication of such notice was in the issue of such newspaper dated the 31st day of May, 1994.



Kevin Ashby - Publisher

Subscribed and sworn to before me this 31st day of May, 1994



Notary Public My commission expires January 10, 1995 Residing at Price, Utah

Publication fee, \$145.60

**NOTICE OF PERMIT
APPLICATION ACT 007/019**

Notice is hereby given that a complete Mining and Reclamation Plan has been submitted to the Division of Oil, Gas and Mining for the underground extension of its existing coal mining facility onto a lease acquired by Andalex Resources, Inc. Coal mining in this lease will be accomplished through existing surface facilities. This lease is already included in Andalex's approved MRP in one coal seam; additional coal is being added to the same lease. The name of the existing operation is the Andalex Resources, Inc., Tower Division, and the person representing the company is Michael W. Glasson, PO Box 902, Price, Utah 84501.

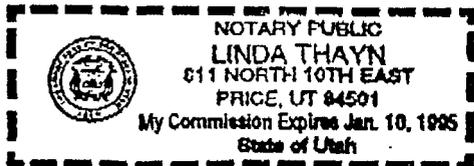
The following legal description can be found on the U.S. Geological Survey "Deadman Canyon" and "Helper" 7.5' Quadrangle Maps:
Township 13 South, Range 10 East, SLM

Section 1: SW¼

Section 12: Lots 2-11, W¼ W¼, NE¼ SW¼

A copy of the Coal Mining and Reclamation Plan submitted by Andalex Resources is available for public inspection at the Office of the County Clerk of Carbon County, Carbon County Courthouse, Price, Utah. Any person aggrieved by this Mining and Reclamation Plan is requested to submit written comments, objections, or requests for informal conferences on said application within thirty (30) days from the last date of this publication to the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180-1203.

Published in the Sun Advocate May 10, 17, 24 and 31, 1994.





State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

July 7, 1994

TO: Pamela Grubaugh-Littig
FROM: Joseph C. Helfrich 
RE: Andalex Resources, Centennial Mine, ACT/007/019, AVS
Evaluation

Wednesday, July 6, 1994, Colleen Carlson from the AVS office in Lexington, Kentucky advised me that the outstanding AML fees for the first quarter of 1994 for Andalex Resources, Inc. had been paid. However, the data base had not been updated to reflect that information. Colleen and I concurred that the lack of updating information in the data base would not constitute a permit block for the permitting action.

DATE: 06 JUL 94

APPLICANT VIOLATOR SYSTEM
APPLICATION EVALUATION REPORT

TIME: 15:14:51

STATE: UT APPNO: ACT007019 SEQNO: 0 PAGE: 1
APPLICANT'S ENTITY ID: 123355
APPLICANT'S NAME : ANDALEX RESOURCES INC / TOWER DIVISION

SYSTEM RECOMMENDATION IS BASED ON ENTITY OFT

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*
* SYSTEM RECOMMENDATION            :            DENY            *
* PREVIOUS SYSTEM RECOMMENDATION:            ISSUE(930519)       *
* OSMRE RECOMMENDATION            :            ISSUE(930520)       *
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F2/PROCEED F3/QUIT F4/MAIN F6/REPORT F9/VIEW VIOL F10/VIEW OFT

■ usgs A

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13:17

ACT 607/019

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES AND ENERGY
DIVISION OF OIL, GAS AND MINING
4241 State Office Building
Salt Lake City, Utah 84114

3/16/83

Received

JUN 09 1983

THE MINED LANDS RECLAMATION ACT

Tower Resources Inc.

BOND

The undersigned Tower Resources, Inc.
as principal, and Utica Mutual Insurance Company as
surety, hereby jointly and severally bind ourselves, our heirs, administrators,
executors, successors and assigns unto the State of Utah, Division of Oil, Gas
and Mining, and the U. S. Department of the Interior, Office of Surface Mining
in the penal sum of Three Hundred Eighty-One Thousand Eight Hundred Thirty-Nine
dollars (\$381,839.00). Such sum shall be payable to
one, but not both, of the above-named agencies.

The principal estimated in a "Notice of Intention to Commence Mining
Operations and a Mining and Reclamation Plan," filed with the Division of Oil,
Gas and Mining on the 19th day of January,
19 81, that 30.7 acres of land will be affected by this mining
operation in the State of Utah. A description of the affected land is attached
hereto as Exhibit "A."

If the principal shall satisfactorily reclaim the above-mentioned lands
affected by mining by the said principal in accordance with the Mining and
Reclamation Plan and shall faithfully perform all requirements of the Mined
Land Reclamation Act, and comply with the Rules and Regulations adopted in
accordance therewith, then this obligation shall be void; otherwise it shall
remain in full force and effect until the reclamation is completed as outlined
in the approved Mining and Reclamation Plan.

If the approved plan provides for reclamation of the land affected on a
piecemeal or cyclic basis, and the land is reclaimed in accordance with such
plan, then this bond may be reduced periodically.

In the converse, if the plan provides for a gradual increase in the area
of the land affected or increased reclamation work, then this bond may
accordingly be increased with the written approval of the surety company.

NOTE: Where one signs by virtue of Power of Attorney for a surety company, such Power of Attorney must be filed with this bond. If the principal is a corporation, the bond shall be executed by its duly authorized officers with the seal of the corporation affixed.

Tower Resources, Inc.
Principal (Company)
By [Signature] Controller
Company Official - Position

Date: May 17, 1983

Utica Mutual Insurance Company
Surety (Company)
By Patricia S. Lee
Official of Surety - Position
Patricia S. Lee, Attorney-in-Fact

DATE: 5/16/83

UTICA MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

No. 137 - _____

POWER OF ATTORNEY

Know all men by these Presents, the **UTICA MUTUAL INSURANCE COMPANY**, a New York Corporation, having its principal office in the Town of New Hartford, County of Oneida, State of New York, does hereby make, constitute and appoint **Bruce L. Ferguson, Jean Young, Bruce W. Ferguson, Gary A. Mongilutz and Patricia S. Lee**

Louisville, Kentucky its true and lawful Attorney(s)-in-fact in their separate capacity if more than one is named above to make, execute, sign, seal and deliver for and on its behalf as surety and as its act and deed (without power of redelegation) any and all bonds and undertakings and other writings obligatory in the nature thereof (except bonds guaranteeing the payment of principal and interest of notes, mortgage bonds and mortgages) provided the amount of no one bond or undertaking exceeds FIVE HUNDRED THOUSAND AND 00/100 Dollars (\$ 500,000.00).

The execution of such bonds and undertakings shall be as binding upon said **UTICA MUTUAL INSURANCE COMPANY** as fully and to all intents and purposes as if the same had been duly executed and acknowledged by its regularly elected officers at its Home Office in New Hartford, New York.

This Power of Attorney is granted under and by authority of the following resolution adopted by the Directors of the **UTICA MUTUAL INSURANCE COMPANY** on the 27th day of November, 1961.

"Resolved, that the President or any Vice-President, in conjunction with the Secretary or any Assistant Secretary, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly acknowledged by the regularly elected Officers of the Company in their own proper persons."

Now Therefore, the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney by a facsimile, and any such Power of Attorney bearing such facsimile signatures or seal shall be valid and binding upon the Company.

In Witness Whereof, the **UTICA MUTUAL INSURANCE COMPANY** has caused these presents to be signed by its Authorized Officers, this 23rd day of August, 1976.

UTICA MUTUAL INSURANCE COMPANY

[Signature]
Secretary pro tem



[Signature]
President

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

On this 23rd day of August, 1976, before me, a Notary Public in and for the State of New York, personally came **J. B. RIFFLE** and **GEORGE L. RUTHERFORD** to me known, who acknowledged execution of the preceding instrument and, being by me duly sworn, do depose and say, that they are *President* and *Secretary pro tem* respectively of **UTICA MUTUAL INSURANCE COMPANY**; that the seal affixed to said instrument is the corporate seal of **UTICA MUTUAL INSURANCE COMPANY**; that said corporate seal is affixed and their signatures subscribed to said instrument by authority and order of the Board of Directors of said Corporation.

In Testimony Whereof, I have hereunto set my hand and affixed my Official Seal at New Hartford, New York, the day and year first above written.



[Signature]
Notary Public

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

I, Richard G. Rust Assistant Secretary of the **UTICA MUTUAL INSURANCE COMPANY** do hereby certify that the foregoing is a true and correct copy of a Power of Attorney, executed by said **UTICA MUTUAL INSURANCE COMPANY**, which is still in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the Seal of the said Corporation at New Hartford, New York, this 16th day of May, 1983.

[Signature]
Assistant Secretary

CHANGE OF NAME RIDER

1209140011014
FILE 1

To be attached to and form part of Bond No. SU 34593,
issued by the UTICA MUTUAL INSURANCE COMPANY OF UTICA, NEW YORK,

in favor of Utah Department of Natural Resources and Energy

effective as of May 16, 1983.

In consideration of the premium charged for the attached bond, it is agreed that:

1. The Surety hereby gives its consent to the change of the name of the Principal from

Tower Resources, Inc.

to

Andalex Resources, Inc.

PROVIDED, however, that the attached bond as changed by this rider shall be subject to all its agreements, limitations and conditions, and that the liability of the Surety under the attached bond and under the attached bond as changed by this rider shall not be cumulative.

2. This rider shall become effective as of the 22nd day of September, 1986.

Signed, sealed and dated this 22nd day of September, 1986.

UTICA MUTUAL INSURANCE COMPANY

By Thomas R. Koller

Thomas R. Koller Attorney-in-fact

RECEIVED
OCT 02 1986

DIVISION OF
OIL, GAS & MINING

UTICA MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

No. 137 —

POWER OF ATTORNEY

Know all men by these Presents, the UTICA MUTUAL INSURANCE COMPANY, a New York Corporation, having its principal office in the Town of New Hartford, County of Oneida, State of New York, does hereby make, constitute and appoint

Bruce L. Ferguson, Bruce W. Ferguson, Gary A. Mongilutz,
Thomas R. Koller, and Patricia S. Lee
Louisville, Kentucky

its true and lawful Attorney(s)-in-fact in their separate capacity if more than one is named above to make, execute, sign, seal and deliver for and on its behalf as surety and as its act and deed (without power of redelegation) any and all bonds and undertakings and other writings obligatory in the nature thereof (except bonds guaranteeing the payment of principal and interest of notes, mortgage bonds and mortgages) provided the amount of no one bond or undertaking exceeds FIVE HUNDRED THOUSAND AND 00/100 Dollars (\$ 500,000.00).

The execution of such bonds and undertakings shall be as binding upon said UTICA MUTUAL INSURANCE COMPANY as fully and to all intents and purposes as if the same had been duly executed and acknowledged by its regularly elected officers at its Home Office in New Hartford, New York.

This Power of Attorney is granted under and by authority of the following resolution adopted by the Directors of the UTICA MUTUAL INSURANCE COMPANY on the 27th day of November, 1961.

"Resolved, that the President or any Vice-President, in conjunction with the Secretary or any Assistant Secretary, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly acknowledged by the regularly elected Officers of the Company in their own proper persons.

"Now Therefore, the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney by a facsimile, and any such Power of Attorney bearing such facsimile signatures or seal shall be valid and binding upon the Company."

In Witness Whereof, the UTICA MUTUAL INSURANCE COMPANY has caused these presents to be signed by its Authorized Officers, this 22nd day of October, 1985.

UTICA MUTUAL INSURANCE COMPANY

John P. Sullivan
Secretary



J.B. Riffle
President

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

On this 22nd day of October, 1985, before me, a Notary Public in and for the State of New York, personally came J. B. RIFFLE and JOHN P. SULLIVAN to me known, who acknowledged execution of the preceding instrument and, being by me duly sworn, do depose and say, that they are *President* and *Secretary* respectively of UTICA MUTUAL INSURANCE COMPANY; that the seal affixed to said instrument is the corporate seal of UTICA MUTUAL INSURANCE COMPANY; that said corporate seal is affixed and their signatures subscribed to said instrument by authority and order of the Board of Directors of said Corporation.

In Testimony Whereof, I have hereunto set my hand at New Hartford, New York, the day and year first above written.



Rosemary Wada
Notary Public

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

I, John D. Yonkers Assistant Secretary of the UTICA MUTUAL INSURANCE COMPANY do hereby certify that the foregoing is a true and correct copy of a Power of Attorney, executed by said UTICA MUTUAL INSURANCE COMPANY, which is still in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the Seal of the said Corporation at New Hartford, New York, this 22nd day of September, 1986.

John D. Yonkers
Assistant Secretary

UTICA MUTUAL INSURANCE COMPANY,

GRAPHIC ARTS MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

CHANGE OF ACREAGE RIDER

To be attached to and form a part of Bond No. SU 34593, issued by the Utica Mutual Insurance Company in favor of New Hartford, New York in favor of State of Utah, Department of Natural Resources and Energy, effective as of January 19, 1981.

In consideration of the premium charged for the attached bond, it is agreed that:

1. The Surety hereby gives its consent to increase the bonded acreage from:

30.7

to

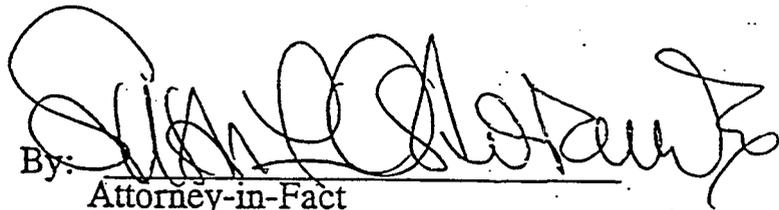
34.2

PROVIDED, however, that the attached bond as changed by this Rider shall be subject to all its agreements, limitations and conditions, and that the liability of the Surety under the attached bond and under the attached bond as changed by this Rider, shall not be cumulative.

2. This Rider shall become effective as of the 26th day of February 1993.

Signed, sealed and dated this 26th day of February, 1993.

Utica Mutual Insurance Company

By: 

Attorney-in-Fact

Susan L. Osborne

UTICA MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

No. 137

POWER OF ATTORNEY

Know all men by these Presents, the UTICA MUTUAL INSURANCE COMPANY, as a New York Corporation, having its principal office in the Town of New Hartford, County of Oneida, State of New York, does hereby make, constitute and appoint
 Bruce L. Ferguson, Bruce W. Ferguson, Scott C. Ferguson, Patricia S. Lee
 and Susan L. Osborne
 Louisville, Kentucky
 its true and lawful Attorney(s)-in-fact in their separate capacity if more than one is named above to make, execute, sign, seal and delivery for and on its behalf as surety and as its act and deed (without power of redelegation) any and all bonds and undertakings and other writings obligatory in the nature thereof (except bonds guaranteeing the payment of principal and interest of notes, mortgage bonds and mortgages) provided the amount of no one bond or undertaking exceeds Five Hundred Thousand & 00/100 Dollars (\$ 500,000.00).

The execution of such bonds and undertakings shall be as binding upon said UTICA MUTUAL INSURANCE COMPANY as fully and to all intents and purposes as if the same had been duly executed and acknowledged by its regularly elected officers and its Home Office in New Hartford, New York.

This Power of Attorney is granted under and by authority of the following resolution adopted by the Directors of the UTICA MUTUAL INSURANCE COMPANY on the 27th day of November, 1961.

"Resolved, that the President or any Vice-President, in conjunction with the Secretary or any Assistant Secretary, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be binding upon the Company as if they had been duly acknowledged by the regularly elected Officers of the Company in their own proper persons.

"No Therefore, the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney by a facsimile, and any such Power of Attorney bearing such facsimile signatures or seal shall be valid and binding upon the Company."

In Witness Whereof, the UTICA MUTUAL INSURANCE COMPANY has caused these presents to be signed by its Authorized Officers, this 8th day of May, 19 92.

George P. Wardley
 Secretary



UTICA MUTUAL INSURANCE COMPANY
Wallace H. Watkins
 President

STATE OF NEW YORK }
 COUNTY OF ONEIDA } ss:

On this 8th day of May, 19 92, before me, a Notary Public in and for the State of New York, personally came WALLACE H. WATKINS and GEORGE P. WARDLEY to me known, who acknowledged execution of the preceding instrument and, being by me duly sworn, do depose and say, that they are President and Secretary respectively of UTICA MUTUAL INSURANCE COMPANY; and that the seal affixed to said instrument is the corporate seal of UTICA MUTUAL INSURANCE COMPANY; and that the said corporate seal is affixed and their signatures subscribed to said instrument by authority and order of the Board of Directors of said Corporation.

In Testimony Whereof, I have hereunto set my hand at New Hartford, New York, the day and year first above written.

STATE OF NEW YORK }
 COUNTY OF ONEIDA } ss:



Rosemary Wadas
 Rosemary Wadas Notary Public

I, Stephen J. Lorenz Assistant Secretary of the UTICA MUTUAL INSURANCE COMPANY do hereby certify that the foregoing is a true and correct copy of a Power of Attorney, executed by said UTICA MUTUAL INSURANCE COMPANY, which is still in full force and effect.

Witness Whereof, I have hereunto set my hand and affixed the Seal of the said Corporation at New Hartford, New York, this 26th day of February, 19 93.

Stephen J. Lorenz
 Assistant Secretary

0017017

UTICA MUTUAL INSURANCE COMPANY, GRAPHIC ARTS MUTUAL INSURANCE COMPANY
NEW HARTFORD, NEW YORK

ATTACHMENT B

Special Condition

The following is added to bond number SU 34593.

To the extent that Federal lands are involved, release of this surety bond also is conditioned upon compliance with applicable Federal laws and regulations and the provisions of the Utah State-Federal Cooperative Agreement at 30 CFR 944.30. If the Utah State-Federal Cooperative Agreement is terminated, this surety bond shall revert to being payable only to the United States and the phrase "Utah Division of Oil, Gas and Mining" and the term "UDOGM" and "DOGM" and any other acronyms or abbreviations for the phrase "Utah Division of Oil, Gas and Mining" shall be interpreted to mean OSM to the extent that Federal lands are involved.

ANDALEX RESOURCES, INC.


Principal

UTICA MUTUAL INSURANCE COMPANY

Susan L. Osborne, Attorney-in-Fact

Signed and Sealed this 7th day of May, 19 91.

UTICA MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

No. 137

POWER OF ATTORNEY

Know all men by these Presents, the UTICA MUTUAL INSURANCE COMPANY, a New York Corporation, having its principal office in the Town of New Hartford, County of Oneida, State of New York, does hereby make, constitute and appoint

Bruce L. Ferguson, Bruce W. Ferguson, Scott C. Ferguson, Patricia S. Lee & Susan L. Osborne
Louisville, Kentucky

its true and lawful Attorney(s)-in-fact in their separate capacity if more than one is named above to make, execute, sign, seal and deliver for and on its behalf as surety and as its act and deed (without power of redelegation) any and all bonds and undertakings and other writings obligatory in the nature thereof (except bonds guaranteeing the payment of principal and interest of notes, mortgage bonds and mortgages) provided the amount of no one bond or undertaking exceeds UNLIMITED Dollars (\$ UNLIMITED).

The execution of such bonds and undertakings shall be as binding upon said UTICA MUTUAL INSURANCE COMPANY as fully and to all intents and purposes as if the same had been duly executed and acknowledged by its regularly elected officers at its Home Office in New Hartford, New York.

This Power of Attorney is granted under and by authority of the following resolution adopted by the Directors of the UTICA MUTUAL INSURANCE COMPANY on the 27th day of November, 1961.

Resolved, that the President or any Vice-President, in conjunction with the Secretary or any Assistant Secretary, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly acknowledged by the regularly elected Officers of the Company in their own proper persons.

Now Therefore, the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney by a facsimile, and any such Power of Attorney bearing such facsimile signatures or seal shall be valid and binding upon the Company.

In Witness Whereof, the UTICA MUTUAL INSURANCE COMPANY has caused these presents to be signed by its Authorized Officers, this 28th day of February, 1989.

UTICA MUTUAL INSURANCE COMPANY

John P. Sullivan
Secretary



W. Craig Heston
President

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

On this 28th day of February, 1989, before me, a Notary Public in and for the State of New York, personally came W. CRAIG HESTON and JOHN P. SULLIVAN to me known, who acknowledged execution of the preceding instrument and, being by me duly sworn, do depose and say, that they are *President* and *Secretary* respectively of UTICA MUTUAL INSURANCE COMPANY; and that the seal affixed to said instrument is the corporate seal of UTICA MUTUAL INSURANCE COMPANY; that said corporate seal is affixed and their signatures subscribed to said instrument by authority and order of the Board of Directors of said Corporation.

In Testimony Whereof, I have hereunto set my hand at New Hartford, New York, the day and year first above written.



Rosemary Wadas
Notary Public

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

I, John D. Yonkers Assistant Secretary of the UTICA MUTUAL INSURANCE COMPANY do hereby certify that the foregoing is a true and correct copy of a Power of Attorney, executed by said UTICA MUTUAL INSURANCE COMPANY, which is still in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the Seal of the said Corporation at New Hartford, New York, this 7th day of May, 1991.

John D. Yonkers
Assistant Secretary

CENTENNIAL
UT-0022

Permit Number: ACT007/019

Bond No. SU 1354086

Expiration Date: 7-1995

EXHIBIT "B"

SURETY BOND
(FEDERAL COAL)

THIS SURETY BOND entered into and by and between the undersigned PERMITTEE, and SURETY company, hereby jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns unto the State of Utah, Division of Oil, Gas and Mining (DIVISION), and the U.S. Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSM) in the penal sum of \$ 699,000.00---- (Surety Bond Amount) for the timely performance of reclamation responsibilities of the permit area described in Exhibit "A" of this Reclamation Agreement.

This SURETY BOND will remain in effect until all of the PERMITTEE's reclamation obligation have been met and released by the DIVISION and is conditioned upon faithful performance of all of the requirements of the Act, the applicable rules and regulations, SMCRA, the approved permit and the DIVISION.

The SURETY will not cancel this bond at any time for any reason, including non-payment of premium or bankruptcy of the Principal during the period of liability.

The SURETY and their successors and assigns, agree to guarantee the obligation and to indemnify, defend, and hold harmless the DIVISION and OSM from any and all expenses which the DIVISION and OSM may sustain as a result of the PERMITTEE's failure to comply with the condition(s) of the reclamation obligation.

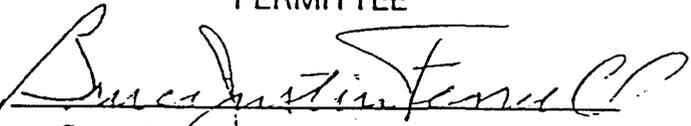
The SURETY will give prompt notice to the PERMITTEE and to the DIVISION and OSM of any notice or action involving insolvency or bankruptcy of the SURETY, or alleging any violations of regulatory requirements which could result in suspension or revocation of the SURETY's license in this state. In the event the Cooperative Agreement between the DIVISION and OSM is terminated, then the portion of the bond covering the Federal Lands will be payable only to the United States, Department of Interior, Office of Surface Mining.

Terms for release or adjustment of this BOND are as written and agreed to by the DIVISION and the PERMITTEE in the RECLAMATION AGREEMENT incorporated by reference herein, to which this SURETY AGREEMENT has been attached as Exhibit "B".

IN WITNESS WHEREOF, the PERMITTEE has hereunto set its signature and seal
this 23 day of February, 1993.

ANDALEX Resources, Inc.

PERMITTEE

By: 
Title: Secretary

IN WITNESS WHEREOF, the SURETY has hereto set its signature and seal
this 23rd day of February, 1993.

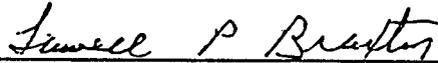
UTICA MUTUAL INSURANCE COMPANY

SURETY

By: 
Title: Susan L. Osborne, Attorney-in-Fact

ACCEPTED BY THE STATE OF UTAH

this 19th day of March, 1993.


Lowell P. Braxton, Acting Director
Division of Oil, Gas and Mining

NOTE:

An Affidavit of Qualification must be completed and attached to this form for each authorized agent or officer. Where one signs by virtue of Power of Attorney for a company, such Power of Attorney must be filed with this Agreement. If the PERMITTEE is a corporation, the Agreement shall be executed by its duly authorized officer.

UTICA MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

No. 137

POWER OF ATTORNEY

Know all men by these Presents, the UTICA MUTUAL INSURANCE COMPANY, a New York Corporation, having its principal office in the Town of New Hartford, County of Oneida, State of New York, does hereby make, constitute and appoint

Bruce L. Ferguson, Bruce W. Ferguson, Scott C. Ferguson, Patricia S. Lee & Susan L. Osborne
Louisville, Kentucky

its true and lawful Attorney(s)-in-fact in their separate capacity if more than one is named above to make, execute, sign, seal and deliver for and on its behalf as surety and as its act and deed (without power of redelegation) any and all bonds and undertakings and other writings obligatory in the nature thereof (except bonds guaranteeing the payment of principal and interest of notes, mortgage bonds and mortgages) provided the amount of no one bond or undertaking exceeds UNLIMITED Dollars (\$ UNLIMITED).

The execution of such bonds and undertakings shall be as binding upon said UTICA MUTUAL INSURANCE COMPANY as fully and to all intents and purposes as if the same had been duly executed and acknowledged by its regularly elected officers at its Home Office in New Hartford, New York.

This Power of Attorney is granted under and by authority of the following resolution adopted by the Directors of the UTICA MUTUAL INSURANCE COMPANY on the 27th day of November, 1961.

*Resolved, that the President or any Vice-President, in conjunction with the Secretary or any Assistant Secretary be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity and all other writings obligatory in the nature thereof with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly acknowledged by the regularly elected Officers of the Company in their own proper persons.

*Now Therefore, the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney by a facsimile, and any such Power of Attorney bearing such facsimile signatures or seal shall be valid and binding upon the Company.

In Witness Whereof, the UTICA MUTUAL INSURANCE COMPANY has caused these presents to be signed by Authorized Officers, this 1st day of September, 19 90.

UTICA MUTUAL INSURANCE COMPANY

John P. Sullivan

Secretary



Wallace H. Watkins

President

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

On this 1st day of September, 19 90, before me, a Notary Public in and for the State of New York, personally came WALLACE H. WATKINS and JOHN P. SULLIVAN to me known, who acknowledged execution of the preceding instrument and, being by me duly sworn, do depose and say, that they are President and Secretary respectively of UTICA MUTUAL INSURANCE COMPANY; and that the seal affixed to said instrument is the corporate seal of UTICA MUTUAL INSURANCE COMPANY; and that said corporate seal is affixed and their signatures subscribed to said instrument by authority and order of the Board of Directors of said Corporation.

In Testimony Whereof, I have hereunto set my hand at New Hartford, New York, the day and year first above written.

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:



Rosemary Wadas
Notary Public

I, John D. Yonkers Assistant Secretary of the UTICA MUTUAL INSURANCE COMPANY do hereby certify that the foregoing is a true and correct copy of a Power of Attorney, executed by said UTICA MUTUAL INSURANCE COMPANY, which is still in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the Seal of the said Corporation at New Hartford, New York, this 22nd day of February, 19 93.

John D. Yonkers
Assistant Secretary

UTICA MUTUAL INSURANCE COMPANY, GRAPHIC ARTS MUTUAL INSURANCE COMPANY
NEW HARTFORD, NEW YORK

ATTACHMENT B

Special Condition

The following is added to bond number SU 1354086.

To the extent that Federal lands are involved, release of this surety bond also is conditioned upon compliance with applicable Federal laws and regulations and the provisions of the Utah State-Federal Cooperative Agreement at 30 CFR 944.30. If the Utah State-Federal Cooperative Agreement is terminated, this surety bond shall revert to being payable only to the United States and the phrase "Utah Division of Oil, Gas and Mining" and the term "UDOGM" and "DOGM" and any other acronyms or abbreviations for the phrase "Utah Division of Oil, Gas and Mining" shall be interpreted to mean OSM to the extent that Federal lands are involved.

ANDALEX RESOURCES, INC.


Principal

UTICA MUTUAL INSURANCE COMPANY

Susan L. Osborne, Attorney-in-Fact

Signed and Sealed this 7th day of May, 19 91.

UTICA MUTUAL INSURANCE COMPANY

NEW HARTFORD, NEW YORK

No. 137

POWER OF ATTORNEY

Know all men by these Presents, the UTICA MUTUAL INSURANCE COMPANY, a New York Corporation, having its principal office in the Town of New Hartford, County of Oneida, State of New York, does hereby make, constitute and appoint

Bruce L. Ferguson, Bruce W. Ferguson, Scott C. Ferguson, Patricia S. Lee & Susan L. Osborne
Louisville, Kentucky

its true and lawful Attorney(s)-in-fact in their separate capacity if more than one is named above to make, execute, sign, seal and deliver for and on its behalf as surety and as its act and deed (without power of redelegation) any and all bonds and undertakings and other writings obligatory in the nature thereof (except bonds guaranteeing the payment of principal and interest of notes, mortgage bonds and mortgages) provided the amount of no one bond or undertaking exceeds UNLIMITED Dollars (\$ UNLIMITED).

The execution of such bonds and undertakings shall be as binding upon said UTICA MUTUAL INSURANCE COMPANY as fully and to all intents and purposes as if the same had been duly executed and acknowledged by its regularly elected officers at its Home Office in New Hartford, New York.

This Power of Attorney is granted under and by authority of the following resolution adopted by the Directors of the UTICA MUTUAL INSURANCE COMPANY on the 27th day of November, 1961.

"Resolved, that the President or any Vice-President, in conjunction with the Secretary or any Assistant Secretary, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly acknowledged by the regularly elected Officers of the Company in their own proper persons.

"Now Therefore, the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney by a facsimile, and any such Power of Attorney bearing such facsimile signatures or seal shall be valid and binding upon the Company."

In Witness Whereof, the UTICA MUTUAL INSURANCE COMPANY has caused these presents to be signed by its Authorized Officers, this 28th day of February, 1989.

John P. Sullivan
Secretary



UTICA MUTUAL INSURANCE COMPANY
W. Craig Heston
President

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

On this 28th day of February, 1989, before me, a Notary Public in and for the State of New York, personally came W. CRAIG HESTON and JOHN P. SULLIVAN to me known, who acknowledged execution of the preceding instrument and, being by me duly sworn, do depose and say, that they are *President* and *Secretary* respectively of UTICA MUTUAL INSURANCE COMPANY; and that the seal affixed to said instrument is the corporate seal of UTICA MUTUAL INSURANCE COMPANY; that said corporate seal is affixed and their signatures subscribed to said instrument by authority and order of the Board of Directors of said Corporation.

In Testimony Whereof, I have hereunto set my hand at New Hartford, New York, the day and year first above written.



Rosemary Wadas
Notary Public

STATE OF NEW YORK }
COUNTY OF ONEIDA } ss:

I, John D. Yonkers Assistant Secretary of the UTICA MUTUAL INSURANCE COMPANY do hereby certify that the foregoing is a true and correct copy of a Power of Attorney, executed by said UTICA MUTUAL INSURANCE COMPANY, which is still in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the Seal of the said Corporation at New Hartford, New York, this 7th day of May, 1981.

John D. Yonkers
Assistant Secretary