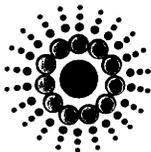


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ANDALEX
RESOURCES, INC.
Tower Division

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PRICE, UTAH 84501
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July 4, 1990

Dr. Dianne Nielson
Director
State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
JUL 06 1990

DIVISION
OIL, GAS & MINING

Attn.: Daron Haddock
Permit Supervisor

Dear Dr. Nielson:

Enclosed please find two (2) each copies of Andalex Resources' response to the Division's deficiency letter.

Included is revised Plate 25 showing the subsidence monitoring stations located above the new Graves Lease. This map also depicts the cover (overburden isopachs) lines.

Page 84 now includes a brief narrative regarding the type of mining which will take place in all seams. Page 84-A is added so as not to effect succeeding page numbers.

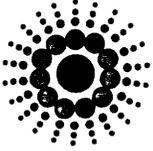
Page 194 has been updated to include new subsidence monitoring stations over the new Graves Lease. Also page 194-A has been added so as not to effect succeeding page numbers.

Page 192 has been updated to include a sample monitoring program within the new and existing lease areas. Reference is made to sampling in the vicinity of section corners. Also, page 192-A has been added so as not to effect the succeeding page numbers.

In reference to the question of the fan in the left fork, this is definitely still viable; however, it is not directly associated with this new lease. Andalex will submit plans for an incidental boundary change when this installation is anticipated.

Regarding the revegetation monitoring, page 120 (old 117) has been updated to further describe sampling adequacy and methods.

Please note that the BLM's final tract delineation contains 933.32 acres. The legal description is accurately shown in Chapter II (page enclosed).



ANDALEX

RESOURCES, INC.

Tower Division

Dr. Dianne Nielson
July 4, 1990
Page Two

The information for the public notice has been compiled.
Please advise us if we may proceed with this publication.

We greatly appreciate your assistance and your expeditious
review of the enclosed.

Sincerely,

Michael W. Glasson
Senior Geologist

MWG/as

Enclosures

cc: File

subsequently relinquished in December 1987 after reserves were depleted. The lease is still part of this MRP.

U-05067

T.13S., R.11E., SLM, Utah
Sec. 4, S 1/2
Sec. 9, NW 1/4 NE 1/4
W 1/2 NW 1/4
NE 1/4 NW 1/4

containing 320 acres, more or less.

UTU-66060

T.13S, R.11E., SLM, Utah
Sec. 31, Lots 3, 4, 5, 6, 13, 14, 16,
17, 18, 19, 20, 21, and 22

T.13S, R.10E., SLM, Utah
Sec. 1, Lots 1-8, S 1/2 N 1/2
Sec. 12, Lot 1

Entire Lease contains 933 acres, more or less.

The private fee leases are described as follows:

T.13S., R.11E., SLBM, Carbon County, Utah
Sec. 7: S 1/2 NW 1/4
N 1/2 SW 1/4
SE 1/4 SW 1/4

containing 200 acres, more or less.

The name and address of the lessor is Zion Securities Corporation, 10 East South Temple Street, Salt Lake City, Utah. This lease was originally made and entered into between Zion's and Centennial Coal Associates on August 1, 1972. AMCA Coal Leasing, Inc., acquired the lease in February, 1977.

T.13S., R.11E., SLBM, Carbon County, Utah
Sec. 9: SE 1/4 NW 1/4
S 1/2 NE 1/4
NE 1/4 NE 1/4
N 1/2 SE 1/4

containing 240 acres, more or less.

The name and address of the lessor is Sunedco Coal Company, 7401 West Mansfield Avenue, Suite 418, P.O. Box 35-B, Lakewood, Colorado 80235. AMCA Coal Leasing, Inc., acquired the lease in June, 1988.

Revised 07/04/90

observation of Andalex until the surety release is granted.

Revegetation monitoring parameters to be measured are growth rate, plant density and percent cover. We would expect to monitor or supervise monitoring at least monthly during the first two growing seasons. From experience with interim revegetation at the minesite, we have learned that two growing seasons are needed to establish any success. After this we would know whether reclamation was progressing successfully.

Monitoring will take place during years 1, 2, 5, 9, and 10. Years 9 and 10 will include estimates of cover, wood density, productivity, and composition, both on reclaimed areas and on reference areas. Parameters sampled on reclaimed areas will meet or exceed 90% of the reference area standard with a 90% confidence level. Andalex will use approved sampling methods and will use the same method for both reclaimed and reference areas.

5.9

Reference Areas

The reference areas to be used by Andalex Resources in revegetation are shown on Plate 9 which is a Watershed and Revegetation Reference Areas Map. These reference areas have been described by the Soil Conservation Service with regard to condition and production. This description can be found in Appendix M following EEC's soils and vegetation survey.

There are three reference areas, each one acre in size, two of which are located on slopes and one in a drainage area. Reference area R-1 will be used in conjunction with the seed mixture for drainage areas. Areas R-3 and R-4 will be used in conjunction with the seed mixture for slopes and will also be used in conjunction with drainage areas to establish the success of Gamble's Oak.

Each reference area established will be re-evaluated every five years prior to permitting.

Revised 07/04/90

information on the mining method, please see Part B, Section 2.

3. Geologic Factors

The Pinnacle Mine is located within the Blackhawk formation of the upper Cretaceous Meseverde Group. As is the case with all the active mines in the Book Cliffs coal field, the Pinnacle Mine drifts in from the outcrop and immediately the cover drastically increases as there are very steep sided cliff-like canyons. Naturally, the same factors are present in the Lower Sunnyside, Aberdeen and the Centennial Seams. Therefore, from a geologic standpoint, the following conclusion can be drawn: it is assumed, as mining progresses, that as pillars are pulled, the roof will cave in behind the crews as they retreat. This is the normal scheme of mining in this type of development. In fact, if the cave does not occur as planned, serious mining problems can result. However, in a case such as ours, where the average cover over the coal seams is 1,000 feet or more, these caves will appear on the surface as minor cracks if at all. A solid block of overburden 1,000 feet thick will not drop into the 6 or 7 foot void resulting from pillar extraction. In fact, the rock will bridge off very quickly and result in minimal disturbance of the overlying country rock.

4. Preventive Measures

Stations have been set up as required for constant monitoring of subsidence movements. However, it should be pointed out, major subsidence is not expected to occur. The only preventative measure possible is to leave coal in place. This is in direct contrast to maximum economic coal recovery.

With the addition of our newly acquired lease in Hoffman Creek, one additional subsidence monitoring station will be added to the currently approved monitoring station system. This additional station is indicated on Plate 25 with this submittal. The average cover over the coal in Hoffman Creek is 1,000 feet. Please refer to Plate 25 for the three new subsidence monitoring locations above the

Graves Lease. Due to excessive cover it is unknown at this time whether pillar extraction will be possible; however, the subsidence monitoring stations will be established in any case.

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IV. Part UMC 784 - Requirements for Reclamation and Operation Plan

UMC 784.11 Operation Plan: General Requirements

Andalex Resources, Inc. has added 933 acres in lease #UTU 66060 to its' currently approved Centennial Project. The lease contains 7.5 million tons of recoverable coal. All reserves will be mined simply as an underground extension of the existing, approved, and currently operating Pinnacle and Aberdeen Mines. As such, no additional surface facilities are required nor will there be any additional surface disturbances of any kind. Access to and handling and extraction of all coal will be through the existing Pinnacle and Aberdeen Mines.

All necessary surface and support facilities have been constructed, approved, and are currently in operation for the Pinnacle and Apex Mines. Aberdeen facilities are to be completed in early 1990; therefore, there will be no change from the currently approved Operation Plan. There will be no change in the currently approved Environmental Protection Plan.

A. Overview of Project

1. Type of Mine

The initial underground mining operation known as the Pinnacle Mine, located on the Zion's fee property, began production on October 3, 1980. It consisted of a single unit's production with an output projected to be approximately 200,000 tons per year and with 20 employees. The mine moved onto the federal leases and with the addition of the Apex Mine in 1982, the Centennial Project now has a production capacity of 800,000 tons per year. As there are four minable seams present, the Aberdeen, Gilson, Centennial, and Lower Sunnyside, in ascending order, mining plans call for simultaneous operation of a mine in each seam. The existing operations are in the Gilson Seam and Lower Sunnyside Seam and the Aberdeen Seam. The Centennial Seam will be mined via rock tunnels from the existing Pinnacle Mines (Gilson Seam).

Mining will consist of the underground method of coal extraction using continuous miners, shuttle cars, and conveyor haulage. Room and pillar development will be employed with final extraction estimated to be about 65 percent of the reserve, after pillar extraction.

Coal is presently being loaded into 40 ton coal trucks and hauled to Wildcat Jct. near Helper. All seams will be mined using continuous miners and room and pillar. Because there is deep cover over the reserves on portions of the Graves Lease, it is possible that first mining only will be employed. Please refer to Plate 25 which shows depth of cover over the seams of the Graves Lease.

2. Area of Operations

2.1 Mine Plan Area

The mine plan area is limited to and contained within the proposed permit area. Mine plans for each of the minable seams are included as Plates 29, 30, 31 and 41.

2.2 Permit Area

The permit area consists of six federal leases and two fee leases, all controlled by Andalex Resources. The Hoffman Creek Lease has been relinquished although it still remains in the permit area. Presently, mining operations are taking place on four federal coal leases. Federal leases are U-010581, SL-027304, SL-063058 and #U-05067. These leases are shown on Plate 4. Mining commenced on #U-05067 in July of 1989. Mining will commence on #UTU-66060 in late 1990.

2.3 Disturbed Surface Area

Surface disturbances are minimal due to the nature of the mining activities. The permit area has been previously impacted by mining. Surface disturbances will be limited to the existing facilities which have been constructed. The total existing surface area disturbed is 32.34 acres. Existing facilities are indicated on Plate 6 and 7.

The land affected by mining operations which shall be reclaimed, in compliance with the Mining and Reclamation Plan and all requirements of the Mined Land Reclamation Act

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and Rules and Regulations adopted in accordance therewith, can be described as follows:

32.34 acres located in T13S, R11E, S.L.B.&M., Carbon County, Utah and contained within,

SE 1/4 SW 1/4 Section 7
NE 1/4 SW 1/4 Section 7
SW 1/4 SE 1/4 Section 7

Appendices E and H currently contain the majority of the information necessary to determine whether roof, floor, or mid seam material is acid or toxic forming. If any roof rock from the Aberdeen Mine is developed, it will be disposed of underground or in one of the underground development waste storage areas depicted on Plate 6. Some coal development waste has been used as a stock pile pad for the Aberdeen Mine. This material will be treated as coal mine development waste upon reclamation and back filled into our high wall areas.

Future pond accumulations for the entire mine site will be stored at least temporarily on the material storage site located above the Apex Mine or in the now defunct Pond A. Please see Plate 6.

Andalex will analyze the mid-seam of all four coal seams in addition to the roof and floor material on an annual basis or more frequently if mining operations change which could result in a modification to the roof floor or the mid-seam. Andalex will use this monitoring program in conjunction with the new Graves Lease. Andalex will make an effort to sample the material in the vicinity of section corners which occur within our leases. Andalex agrees to monitor for acid or toxic forming materials according to Table 6, "Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining". These parameters will prove pH, Electrical Conductivity, Saturation Percentage, Particle Size Analysis, Soluble Ca, Mg and Na, Sodium Adsorption Ratio, Selenium, Total N, Nitrate-N, Boron, Maximum Acid Potential, Neutralization Potential, Organic Carbon, Exchangeable Sodium, Available Water Capacity, and Rock Fragments. These parameters will be measured by acceptable methods at a qualified commercial testing laboratory.

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There is no equipment located within our permit area which contain any of the substances listed by the Toxic Substances and Control Act, particularly PCB's. All transformers and OCB's are relatively new and are PCB free.

The storage of petroleum products on site is done in such a manner that hazards from spillage do not exist. Andalex operates with