

Doc
copy

EXPLORATION PLAN

Federal Coal Leases U-7653, U-47977,
and State of Utah Coal Lease ML-22509

Emery County, Utah

RECEIVED
JUL 19 1982
DIVISION OF
OIL, GAS & MINING

Submitted by:

West Appa Coal Company
2851 South Parker Road, Suite 650
Aurora, Colorado 80014

MINERALS MANAGEMENT SERVICE
JUL 6 - 1982
SALT LAKE CITY, UTAH
MINING BRANCH

Exploration Plan

West Appa Coal Company controls several Federal and State Coal leases located in and around the Rilda Canyon vicinity, Emery County, Utah, SLM, specifically described as follows:

Federal Lease No. SL-50862

T16S, R7E, Section 28: W $\frac{1}{2}$ SW $\frac{1}{4}$
Section 29: E $\frac{1}{2}$ SE $\frac{1}{4}$
Section 33: W $\frac{1}{2}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$
containing 280 acres more or less

Federal Lease No. U-7653

T16S, R7E, Section 31: All
containing 411.6 acres more or less

Federal Lease No. U-47977

T16S, R7E, Section 32: All
containing 640 acres more or less

State of Utah Lease No. ML-22509

T16S, R6E, Section 36: All
containing 640 acres more or less

Total lease acreage controlled by West Appa Coal Company =
1,971.6 acres more or less

The following exploration plan is submitted covering drilling activity only on State Lease No. ML-22509.

(1) The following are names, addresses and telephone numbers of persons responsible for operations under the plan and to whom notices and orders are to be delivered:

Leonard D. Witkowski, Vice President - Manager of
Engineering
Michael J. Minkel, Manager of Geology;
both may be reached at:

West Appa Coal Company
2851 South Parker Road, Suite 650
Aurora, Colorado 80014
Phone: (303) 752-2981

The names and addresses of surface owners of record and owners of record of sub-surface minerals are as follows:

Federal Lease No. U-7653

Surface and minerals - U.S. Government

Federal Lease No. U-47977

Surface and minerals - U.S. Government

State Lease No. ML-22509

Surface and minerals - State of Utah
Division of State Lands
3100 State Office Building
Salt Lake City, Utah 84114

In addition, all land above falls within the perimeter of the Manti-La Sal National Forest which is administered by the U.S. Forest Service.

(2) The following is a brief description of the geologic, water, vegetation, and other physical factors, and the distribution, abundance, and habitat of fish and wildlife, particularly threatened and endangered species, that may be affected by the proposed operation within the area where exploration is to be conducted, and the present land use within and adjacent to the area.

(i) Geology

The tract of interest is located in Sections 31 and 32, T16S, R7E, SLM; and in Section 36, T16S, R6E, SLM. This land is west of Huntington Creek and south of Rilda Canyon approximately 12 miles northwest of the town of Huntington, Utah (see figure 1). The northern portion of the proposed exploration plan area consists of the steep canyon wall on the south side of Rilda Canyon with slopes ranging up to 60%. The remaining portion of the area consists of the upper plateau region on the top of East Mountain with slopes ranging from 0-20%.

Two coal seams are the target zones for the proposed exploration. The lower or Hiawatha Coal outcrops to the northeast of the subject area on the adjacent federal leases, and has a range in thickness across the State lease area of 2-11 feet. Structurally, the Hiawatha Seam dips gently to the southeast at about 1-2°. The Hiawatha Seam rests on the Starpoint Sandstone, a littoral shoreline sand, which marks the base of the coal bearing section in this area.

Approximately 40-100 feet above the Hiawatha Seam is the Blind Canyon Seam which ranges in thickness from 6-14 feet across the State lease area.

Overburden depth above the Hiawatha Seam ranges from 0-2400+ feet, but averages somewhere below 2000 feet over the entire lease tract.

The stratigraphy between the seams, and overlying the Blind Canyon Seam is generally a sequence of alternating sands, silts and shales.

No known major north-south block faulting similar to the Joe's Valley or Pleasant Valley Fault Systems exists on the lease area. However, some minor faulting may be present to the south of the area as has been suggested by seismic profiles run by Utah Power and Light on the adjacent Deer Creek Mine property to the south. These faults may trend approximately N45°E.

(ii) Water

From the Regional Analysis of the Final Environmental Statement for Central Utah, the mean annual precipitation for the area of interest varies between 16 and 24 inches.

This precipitation is largely in the form of snow and summer rain cloudbursts, and is caused mainly by the atmospheric conditions created by air moving along the up-slope on the western side of the Wasatch Plateau. Huntington Creek is the major source of drainage for the area, and runs in a northwest-southeast direction.

To the north of the property lies Rilda Canyon, that runs from west to east into the Huntington Creek Canyon. West of the property is the Cottonwood Creek drainage. Most of the immediate drainage is of an intermittent type, flowing into the perennial Huntington Creek. Ground water flow from this area is expected to follow the pattern of the surface water courses as a result of the fracturing associated with the faults in the area.

(iii) Vegetation

The vegetation over the property is similar to that outlined in the Final Environmental Statement for Central Utah with reference to the Belina Mines and the McKinnon Mines. The northern slopes, because of their steepness, do not propagate vegetation. The upper areas are largely covered with conifer and aspen type trees on the north-facing slopes and aspen interspersed with mountain meadows on the south-facing slopes. Because of the high elevation, which ranges from 8000 feet to 10,000 feet, mountain brush and ponderosa pine are also found.

(iv) Fish Habitat

The Huntington Creek, the northernmost tributary of the San Rafael River, originates on the Wasatch Plateau and flows in a southeast direction. The headwaters of Huntington Creek come from Electric Lake, which is a 476 acre reservoir managed for cut-throat trout. The area of the Creek north of the Electric Lake is closed for fishing. Twenty-two miles of Huntington Creek, between the Electric Lake Dam and the main river diversion, contain cut-throat, brown, and rainbow trout. Brown and rainbow are stocked annually while cut-throats are naturally reproduced in the stream. Below the main diversion the creek is dewatered for irrigation, and the return water downstream is too low in quality to support game fish. No endangered species are known to inhabit the waters of the area.

(v) Wildlife

The Wasatch Plateau is one of the major areas of mule deer population, which represents the main wildlife species in this property. One of the three major elk herd units in Central Utah is also in this area. North of the lands of interest, moose are present in the Fish Creek area, bordering with the Moose Management District. Also known to exist in the area are cougar and black bear.

Smaller species of wildlife include cottontail and snowshoe rabbit, pheasant, quail and grouse. The property abuts an area which has been designated as potential black-footed ferret range because of sightings directly southwest, south and north. Actual presence of the animal is difficult to determine because of its night-time existence. Peregrine falcons have also been sighted in the area, but they are thought to be migratory birds rather than native of the area.

East of the property is a bald eagle roosting site. Bald eagles are winter visitors to the region between the months of November and March. They often congregate in groups at roost areas near food sources. Golden eagles are found throughout the region and several active eyries are present. Because established roads into the area will be used for access to the exploration locations, the area's fish and animal habitats will not be disturbed.

(vi) Present Land Use

The land adjacent to the area to be explored, is part of the Manti-La Sal National Forest, characterized in large part by natural vegetation and grazing for wild animal species. Some land surrounding the area is steeply sloping and cannot support vegetation or animal habitation.

3. The following description concerns the exploration operations to be conducted by West Appa on the land under application:

(i) Method of Exploration and Types of Equipment to be Used

The proposed exploration will consist of drilling five holes. The planned location of these holes are shown on figure 1, and are more specifically described as follows:

| <u>Hole No.</u> | <u>Location</u> |
|-----------------|--|
| R1 | Sec. 36, T16S, R6E: 1600 FNL, 2100 FWL |
| R4 | Sec. 36, T16S, R6E: 1000 FSL, 1300 FEL |
| R3 | Sec. 31, T16S, R7E: 2200 FSL, 1600 FEL |
| R5 | Sec. 32, T16S, R7E: 1700 FSL, 150 FEL |
| R6 | Sec. 32, T16S, R7E: 1300 FSL, 700 FWL |

These holes will be rotary drilled from the surface to a depth approximately 100 feet above the Blind Canyon Coal Seam. The remainder of the hole will be continuously cored through the underlying Star Point Sandstone. All holes will be geophysically logged using the standard coal suite. Equipment will consist of one or more truck - mounted drill rigs, water trucks and pickups or other 4-wheel drive vehicles. Access road rehabilitation will be performed using a D-8 Caterpillar or similar sized dozer, if necessary.

Table 1 is a list of the proposed holes and the projected total depth which each hole will be drilled.

TABLE 1
PROPOSED DRILL HOLE LOCATIONS
AND ESTIMATED DEPTHS

| <u>HOLE NO.</u> | <u>LOCATION</u> | <u>SURFACE ELEVATION</u> | <u>PROJECTED T.D.</u> |
|-----------------|-----------------|------------------------------|---------------------------|
| R1 | SEC. 36 | 10,260 | 2450 |
| R4 | SEC. 36 | 10,180 | 2500 |
| R3 | SEC. 31 | 9,730 | 1970 |
| R6 | SEC. 32 | 9,880 | 2250 |
| R5 | SEC. 32 | 9,470 | 1930 |

(ii) Prevention of Damage to the Environment

For fire prevention, each rig, water truck and pick-up truck will be equipped with a fire extinguisher. Drilling sump water will also be used in the event of a fire.

Soil disturbance will be kept to a minimum and all disturbed areas will be graded in such a manner that excessive soil erosion will be minimized. Existing access roads into the area will be used and rehabilitation work will be kept at a minimum.

Surface waters that run across the disturbed areas will be diverted into the sump used for drilling operations. This will prevent waters crossing the disturbed area from entering into natural drainages. No ephemeral, intermittent, or perennial streams will be diverted during exploration activities. In the event ground water is encountered during drilling activities, any fluid which may be expelled will be contained in excavated reservoirs. All aquifers encountered will be sealed off as each hole is plugged upon completion of drilling.

The only significant air-born emissions from the exploration operation will be amounts of suspended particles and fugitive dusts created by traffic on access roads. Travel on these roads will be intermittent and activities are not expected to create significant amounts of particulate matter. Most dust particles will be large enough to rapidly settle out of the atmosphere. Since most drilling operations will be using air-mist and foam as a drilling medium, no significant amount of dust will be released. Significant impact on natural wildlife is not expected, because access roads are already existing. The drilling location is remote from any populated area or controlled public activities so that no hazard to public

health and safety will exist. As explained above, no fish habitat is present in the vicinity.

(iii) Plugging of Drill Holes

All drill holes will be plugged in accordance with USGS standards. Cuttings will be disposed of down the hole or scattered. The entire length of the hole will be plugged with Sure Gel or its equivalent, mixed to the manufacturer's specifications for bentonite/polymer sealants. In addition a surface cement plug will be placed in the hole to protect wildlife or grazing animals.

(iv) Surface Reclamation

Immediately following the completion of drilling activities and plugging of drill holes, the disturbed land area will be reclaimed in accordance with surface mining regulations. The drillsites will be back-filled to conform with the surrounding terrain, water barred where necessary, tilled with shovels or portable roto-tillers to loosen the soil, and reseeded with the mixture specified by the authorized officers. Slash material pushed aside will be hauled away. Topsoil will be stockpiled prior to operations and replaced during reclamation. Where the area is steep, it will be terraced to prevent deterioration of the soil prior to the re-establishment of vegetation. Planting will be done by the broadcast method for grasses and undergrowth type vegetation. Shrubs, if necessary, will be planted by starter plants.

4. Timetable

Drilling operations are expected to begin as soon as approved during the summer of 1982. Operations are presently anticipated to last approximately two months. Rehabilitation of existing access roads could begin immediately after approval of this plan and prior to rig move in. D-8 Caterpillar work will be done in such a manner that unnecessary erosion of the soil from precipitation runoff will be avoided. Completion of operations is expected before the first snowfall. If postponement is necessary, work will be completed during the following drilling season in 1983.

5. Topographic Maps

The attached map (figure 1) shows topographic and drainage features within the property. No bodies of water are known to exist.

6. Additional Information

The area has not been surveyed for cultural, paleontological, or other known site specific determinations. During access

road rehabilitation, drilling and drillsite establishment, general surveys will be conducted to assure that no existing cultural locations are destroyed.

The major source of impact on terrestrial fauna will result from surface disturbance and increased human activity. Increase in human activity and vehicular traffic in the area will result in the harassment of a variety of wildlife species, such as deer, small mammals and birds. The relatively small amount of surface disturbance will make these impacts minor. Due to the remote location of the drillsites, very few people will view the operations. Adverse environmental effects will be short in duration. Dust, noise, personnel and vehicular traffic will be intermittent, and will have little effect on plant and animal life. Soil disturbances will be minimal and all disturbed areas will be properly graded and/or reseeded. The activity will be monitored by inspections, and adverse environmental effects reduced as much as possible. The remoteness of the drillsite locations will minimize public irritation.

There are no alternatives to the proposed plan. This program is essential for the logical and systematic gathering of geologic and engineering data required to permit the property for mining development. Stipulations contained in the adjacent federal leases for this tract require that a formal mine plan be submitted within three years after the effective date of issue for lease U-47977. Additional data required for the permit application may include hydrologic monitoring of one or more of these exploration holes. For this purpose, selected holes (shown in red on the attached figure 1) will be cased with a chemically inert pipe and completed as observation wells which will be monitored throughout the life of the mine. Upon final abandonment of mining operations, these wells, will be sealed in accordance with applicable regulations.

