

**HOSEANNA CREEK AND EMMA CREEK
COAL EXPLORATION PERMIT 02-86-795
PERMIT REVISION APPLICATION**

JULY 2002

**USIBELLI COAL MINE, INC.
P.O. Box 1000
Healy, Alaska 99743**

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1.0 INTRODUCTION

Usibelli Coal Mine, Inc.'s (UCM) currently holds a coal exploration permit for its Hoseanna Creek properties (Permit No. 01-86-795). UCM is requesting the addition of the properties in and around the Emma Creek (Jumbo Dome) leases to this exploration permit. The following application addresses the regulatory requirements contained in 11 AAC 90.161 – 11 AAC 90.167

2.0 LOCATION OF THE EXPLORATION AREA

The proposed expansion of the exploration area encompasses UCM's original Hoseanna Creek coal lease holdings and the addition of the Jumbo Dome lease areas. Both sets of leases contain reserves from within the Usibelli Group and are located in the Nenana Basin coal field. Table 1 provides the legal description and acreage for each individual coal lease and also includes the total acreage within the exploration area. Figure 1 depicts the boundary for the entire exploration area.

3.0 SURFACE/SUBSURFACE OWNERSHIP AND LEASEHOLDERS

Information relative to the surface owner, mineral estate owner, surface land leaseholder, and mineral estate leaseholder is provided for each of the coal leases within the exploration area in Table I. The addresses for the owners and lessee is shown below.

State of Alaska 550 West 7th
Avenue, Suite 900D
Anchorage, Alaska 99501-3577
(907) 276-8600

Usibelli Coal Mine, Inc.
P. O. Box 1000
Healy, Alaska 99743
(907) 683-2226

Alaska Railroad Corp
PO Box 7-2111
Anchorage, Alaska 99510-7069

**TABLE 1
EMMA CREEK EXPLORATION AREA**

Coal Lease No.	Legal Description	Acreage	Surface Owner	Subsurface Owner	Lease Holder
ADL 673536 (Lease Block A)	<u>Township 10 South, Range 6 West, F.M.</u> Section 26: All Section 27: All Section 28: E ½ Section 34: All Section 35: All Total	2,880	State of Alaska	State of Alaska	Usibelli Coal Mine
ADL 673537 (Lease Block B)	<u>Township 11 South, Range 6 West, F.M.</u> Section 3: W ½ Section 4: All Section 5: E ½ Section 7: E ½ Section 8: All Section 9: All Section 10: All Total	3,200	State of Alaska	State of Alaska	Usibelli Coal Mine
ADL 673538 (Lease Block C)	<u>Township 11 South, Range 6 West, F.M.</u> Section 16: All Section 17: All Section 18: E ½ Section 19: E ½ Section 20: All Section 21: All Total	3,200	State of Alaska	State of Alaska	Usibelli Coal Mine

**TABLE 1
EMMA CREEK EXPLORATION AREA**

Coal Lease No.	Legal Description	Acreage	Surface Owner	Subsurface Owner	Lease Holder
ADL 673539	<p><u>Township 11 South, Range 5 West, F.M.</u> Section 7: S ½ Section 18: N ½</p> <p><u>Township 11 South, Range 6 West, F.M.</u> Section 11: E ½, SW ¼, SE ¼ Section 12: S ½ Section 13: All Section 14: All Section 15: All</p> <p align="right">Total</p>	3,120	State of Alaska	State of Alaska	Usibelli Coal Mine
	Total Emma Creek Exploration Area	12,400			

**TABLE 1
HOSEANNA EXPLORATION AREA**

Coal Lease No.	Legal Description	Acreage (State of Alaska)	Surface Owner	Subsurface Owner	Lease Holder
ADL 21545	<u>Township 11 South, Range 7 West, F.M.</u> Section 29: SE ¼ SE ¼ Section 32: All <u>Township 12 South, Range 7 West, F.M.</u> Section 4: S ½ NW ¼ Section 5: NW ¼, E 1/2 Total	1,500	State of Alaska	State of Alaska	Usibelli Coal Mine
ADL 20633	<u>Township 11 South, Range 7 West, F.M.</u> Section 33: All Section 34: All <u>Township 11 South, Range 7 West, F.M.</u> Section 3: All Section 4: E ½, N ½ NW ¼ Section 9: All Section 10: All Total	2,320	State of Alaska	State of Alaska	Usibelli Coal Mine
ADL 16925	<u>Township 11 South, Range 7 West, F.M.</u> Section 23: S ½ Section 24: S1/2 SW ¼, SE 1/4 Section 25: All Section 26: All Section 35: N ½ NE ¼, NW ¼, NW ¼ SW ¼, S ½ NE ¼, N ½ SE ¼ Section 36: N ½, NW ¼, N ½ NE ¼ Section 35: N ½ NE ¼, NW ¼, NW ¼ SW ¼, S ½ NE ¼, N ½ SE ¼ Section 36: N ½, NW ¼, N ½ NE ¼ Total	2,440	State of Alaska	State of Alaska	Usibelli Coal Mine

**TABLE 1
HOSEANNA EXPLORATION AREA**

Coal Lease No.	Legal Description	Acreage (State of Alaska)	Surface Owner	Subsurface Owner	Lease Holder
ADL 60496	<u>Township 11 South, Range 6 West, F.M.</u> Section 28: All Section 29: All Section 30: All Section 31: N ½ Section 32: N ½ Section 33: N ½ <u>Township 11 South, Range 7 West, F.M.</u> Section 36: S ½ N ½ Total	3,018.73	State of Alaska	State of Alaska	Usibelli Coal Mine
ADL 56505	<u>Township 11 South, Range 6 West, F.M.</u> Section 25: All Section 26: All Section 27: All Section 34: All Section 35: All Total	3,200	State of Alaska	State of Alaska	Usibelli Coal Mine
ARRC 6272	<u>Township 12 South, Range 7 West, F.M.</u> Section 5: SW 1/4 Section 8: NW ¼ East of Nenana River Section 6: E1/2 NE ¼, N1/8 East of Nenana River, S1/4 East of Nenana River, NW1/4 SW1/4 Section 7: NE1/4 east of Nenana River Total	NA	ARRC	ARRC	Usibelli Coal Mine
	Total Hoseanna Exploration Area Total Emma and Hoseanna Creek Areas	12,478.73 ac 24, 878.73 ac			

4.0 RIGHT OF ENTRY

UCM's coal leases provide the right to enter the exploration area and conduct coal exploration activities. For any activities covered under this permit that will involve lands outside the leases listed in Table I, UCM will supply DMLW with a right of entry from the respective land owner.

5.0 ENVIRONMENTAL RESOURCE INFORMATION

5.1 TOPOGRAPHY

The exploration area lies in the northern foothills of the central part of the Alaska Range near the town of Healy. The terrain is generally rolling, with streams eroding deep cuts with steep sides. Elevations range from 1200 to 3250 feet above sea level. The major water body in the area is the Nenana River, which flows northwest. Hoseanna Creek and Healy Creek are two main tributaries of the Nenana River in this area, flowing to the west. Several creeks drain the northern end of the leases, including Marguerite, California and Bonanza Creeks.

5.2 GEOLOGY

The coal-bearing group in the Nenana Coal field is of the Tertiary period, overlain in some areas by several thousand feet of Tertiary gravels—the Nenana Gravels. In areas targeted for surface mining, the Nenana Gravels have been eroded off, and up to one hundred feet of quaternary outwash gravels overlay the coal bearing formations: Healy Creek (Late Oligocene to Early Miocene), Sanctuary, Suntrana, Lignite Creek and Grubstake (all Miocene). Only the Healy Creek and Suntrana Formations have been mined and it is unlikely that the other members contain economic deposits of coal.

The mouth of Hoseanna Creek lies on the northern limb of a west-plunging anticline. Erosion of the overlying strata has brought the coal bearing formations near enough to the surface to allow strip mining of the Suntrana Formation. Mining is presently in progress on the southern and northern sides of Hoseanna Creek in the Poker Flats and Two Bull Ridge areas. The coal bearing

formation is cut off to the south by a fault having perhaps five thousand feet of vertical displacement with the up thrust side to the north. South of this fault, Nenana Gravels are exposed. The coal-bearing group continues its surface exposure to the east on either side of Hoseanna Creek, and to the northeast towards Jumbo Dome.

5.3 SURFACE WATER

Perennial streams, intersecting portions of the exploration area, include Hoseanna, Emma, Marguerite, Bonanza and Winter Creeks. These streams have watersheds that are steep and relatively long and narrow.

Typical stream flow is generated from precipitation and snowmelt. Flows vary seasonally with peak flows occurring in spring and early summer due to snowmelt and breakup and in late summer and early autumn due to rainstorms. Periods of lowest flow occur in winter when precipitation falls as snow and when little surface runoff occurs. Mid-summer low flows are usually sustained by effluent ground water flows.

The dominant erosion mechanisms within the basins are mass wasting and mechanical erosion processes associated with freeze/thaw activity acting on bare rock on high, steep, and unforested mountain slopes. In the forested areas at lower elevations, erosion of surficial soils by solifluction, rainfall and snowmelt runoff occurs.

5.4 VEGETATION

Vegetation of the general Healy area consists of a mosaic of communities transitional between boreal forest and alpine tundra (McKay and Joyce 1979). The 1979 study identified such communities as: closed spruce forest; floodplain riparian; birch forest; alder/shrub; sub-alpine meadow and alpine tundra in higher elevations. Studies conducted by Helm (1985 to present), looked at the entire Hoseanna Creek basin with additional detail targeted specifically at the Poker Flats and Two Bull Ridge permit area. Vegetation communities identified were: open black spruce forest; woodland white spruce forest; open mixed birch-spruce; closed birch; closed aspen forests; closed alder shrub lands; ericaceous shrub tundra and blue joint meadows.

5.8 ARCHAEOLOGY

An examination by Chris Campbell of the Alaska Heritage Resource Survey Index disclosed that the only sites in the vicinity of the proposed development were discovered by Glen Bacon and Chuck Mobley in an earlier survey for Usibelli. A letter of request was sent on April 7, 1983 to the Office of History and Archeology, Alaska Department of Natural Resources. This request was made to make a determination of the existence of any archeological, cultural, or historic features in the townships mentioned.

A determination was tendered by the agency that there were no known finds that were located in these townships, which encompass the proposed exploration area. A search of other data supports this view of no known areas of concern within or adjacent to the exploration area.

5.9 THREATENED AND ENDANGERED SPECIES

There are no threatened or endangered plant species known to exist in the proposed exploration area. This verification was received in correspondence dated May 13, 1983 from Dennis L. Money, Endangered Species Division Chief, United States Department of the Interior, Fish and Wildlife Service.

State and Federal threatened and endangered species lists for birds include five species: Artic peregrine falcon; American peregrine falcon; Aleutian Canada goose; Short-tailed albatross; and the Eskimo curlew. No site-specific field studies located in adjacent areas have discovered any of the five species. There are no threatened or endangered mammal species on either the State or Federal species list.

5.10 LAND USE

The entire proposed exploration area is within Sub region 4 of the Tanana Basin Area Plan. The land use is designated as subunit 4D1, Primary Surface Uses of Minerals and Wildlife Habitat.

5.11 AREAS UNSUITABLE FOR MINING

No lands within the exploration area are designated, or under study for designation, as unsuitable for mining.

6.0 EXPLORATION ACTIVITIES AND METHODS

Coal exploration work will be performed to 1) better define the complex geology, 2) find additional recoverable coal reserves, 3) define surface mineable reserve areas, and 4) better understand the chemical and physical characteristics of the coal. The information obtained from the exploration programs will ultimately be used to determine the feasibility of developing the coal resources within the exploration area. Since geology is not an exact science, the scope of work for the exploration activities may vary and will be refined as data is collected and evaluated. The types of activities and methods that will be used to complete the exploration work are outlined in the following sections.

6.1 ACCESS

Access within the exploration area itself is provided by a rather extensive network of roads and trails that resulted from past mining and exploration work, forestry activities, and recreational uses. In certain segments of these roads, minor grading may need to be performed to eliminate ruts and provide adequate drainage. Encroaching vegetation may have to be trimmed in other segments to allow safe passage.

In areas where no access is available, existing trails will be extended to reach the desired locations. A small dozer will be used to clear a path approximately 8 to 14 feet wide. Wherever possible, the vegetative root mat will be left in place to enhance the rapid reestablishment of native vegetation. If steeper hillsides are encountered, the trails will follow the contour wherever possible.

6.2 TYPES OF ACTIVITIES

The exploration program will involve two categories of activities: 1) activities that will not substantially disturb the land surface (11 AAC 90.161) and 2) activities that will substantially disturb the land surface (11 AAC 90.163). Specific activities that are being proposed under each of these categories are outlined below.

ACTIVITIES NOT SUBSTANTIALLY DISTURBING THE LAND SURFACE

- Geologic Mapping
- Use of existing trails/roads
- Baseline Data Acquisition (water samples, vegetation and soils mapping, cultural studies, weather data)

ACTIVITIES SUBSTANTIALLY DISTURBING THE LAND SURFACE

- Access Trails
- Exploration Drilling
- Installation of Monitoring Wells
- Trenching

6.3 METHODS

6.3.1 Activities Not Substantially Disturbing the Land Surface

GEOLOGIC MAPPING – The surficial and structural geology of the exploration area may be mapped in the field using aerial photographs and topographic maps. Coal seam outcrops or other exposed geologic features identified during the mapping may be surveyed to provide more precise locations. Vehicular travel will be limited to existing roads and trails or off road travel via ATV or other appropriate transport mechanisms. Most of the mapping and survey work will be done on foot.

6.3.2 Activities Substantially Disturbing the Land Surface

ACCESS TRAILS – The methods for constructing access trails within the exploration area were previously discussed in Section 6.1. During the initial two-year term of the permit approximately 15 miles of new access trail may be constructed for exploration purposes.

DRILL SITES – Wherever possible, drill sites will be located on relatively flat terrain to avoid having to excavate a level area for the drilling equipment. Excess vegetation will be removed to provide an adequate working area. If leveling is required, a small dozer will be used to level a useable area. Normally, an area approximately 50 feet long by 40 feet wide is required to set up the drilling equipment. However, the actual size of the area may vary depending upon the type of equipment that is used.

EXPLORATION DRILLING – To achieve the objectives outlined in Section 6.0, drill holes will be completed at a number of locations within the exploration area. During the first 2-year permit term, an estimated 40 to 60 holes may be drilled.

The drilling equipment for the exploration work will be similar to that used for the construction of domestic water wells. In addition to the drill rig, equipment may include an air compressor, carrier with drill pipe and support tools, water tank carrier, and a pickup truck.

In most cases, the maximum diameter of the drill holes will be 6 inches. Depths will vary based on the location and intended objective of each hole. In areas where surficial gravels or previously mined overburden occur, the hole may be cased with steel pipe from the surface down to bedrock. This step may be necessary to keep the drill hole open. At some of the drill sites, a nontoxic biodegradable drilling mud or foaming agent may be used to stabilize the walls of the hole and increase circulation. The relatively small quantity of water required for the drilling activities will be obtained under a Temporary Water Use Permit from the DMLW.

Several different methods will be used to collect geologic data from each drill hole. As the drill rig produces cuttings, a field geologist will physically describe the material and manually produce a geologic log of the hole. The drilling activities will be continuously monitored by the geologist and any unusual conditions will be noted on the log. After drilling has been completed, the hole may be geophysically logged. Log data may include resistivity, gamma, density, and caliper. Personnel handling the logging equipment will be properly licensed.

In order to evaluate the physical and geochemical characteristics of the coal groups and lithotypes in each hole, samples of cuttings from selected intervals may be collected and sent to a laboratory for analyses. As an alternative to using cuttings, a drill rig may be used to retrieve samples of core from selected holes.

Upon completion of the drilling work, each drill hole will be surveyed to provide accurate locations. In addition to coordinates, the surface elevation of each drill hole will also be determined.

INSTALLATION OF MONITORING WELLS – In order to acquire data on the groundwater resources within the exploration area, some of the drill holes may be developed into groundwater monitoring wells. Actual well designs will be determined on site after a thorough review of the geologic and geophysical logs. Standard well installation procedures will be used to make certain that accurate and reliable monitoring data are collected.

TRENCHING – To more accurately understand the stratigraphy within the exploration area, up to ten trenches may be excavated. Trench excavations are anticipated. The DMLW will be notified of final trench locations once they are determined and the reclamation bond will be modified accordingly.

It is estimated that each trench may disturb an area roughly 250 feet long by 250 feet wide. After removal of the vegetation, any salvageable topsoil will be pushed to one side with a dozer to segregate the material from excavated overburden. A backhoe will dig the trench to a depth of 25 to 30 feet and place the overburden material on each side of the trench. It is currently assumed that the trenches can be excavated without the use of explosives. However, if the backhoe cannot efficiently remove the material, small scale blasting procedures may be required. If this occurs, the DMLW will be notified in advance of the blasting work and given a description of the planned procedures. The length of the trenches may vary and could be in the range of 250 feet. The floor of the trench will be approximately 5 feet wide. Trench wall design will vary according to the type of material that is encountered and may include safety benches.

During the excavation work, appropriate erosion control measures will be used to make certain that excessive sediment is not transported off site. Control measures may include ditching, silt fences and/or hay bales in required areas.

After the coal seam has been exposed, a geologist will map the sections and collect samples for laboratory analyses. Upon completion of the work, the trench will be backfilled and reclaimed in accordance with the procedures outlined in Section 8.0 of this document.

7.0 COAL REMOVAL

Small amounts of coal may be taken from core samples and/or cuttings for quality analyses. In addition, up to 225 tons of coal per trench may be removed from the trenches discussed in Section 6.3.2. This coal will be used for laboratory analyses.

8.0 RECLAMATION PROCEDURES

Reclamation will be an integral part of the exploration program and will be implemented in a contemporaneous manner. The following sections describe the procedures that will be used to reclaim the disturbances resulting from the exploration activities.

8.1 DRILL HOLE ABANDONMENT

When a drill hole has been completed or a monitoring well is no longer needed, the surface casing (if present) will be cut off approximately one foot below the ground surface. The hole will be filled with dry cuttings or sand to within 12 feet of the surface. A mixture of 40% bentonite, and 60 % cuttings or sand will be used to fill the next 10 feet of hole. The top 2 feet will be filled with topsoil or overburden material. Temporary hole markers may be left at the hole collar until the survey work on the hole location has been completed.

8.2 REMOVAL OF FACILITIES AND EQUIPMENT

Upon completion of the exploration activities, all equipment and supplies will be removed from the exploration area. No permanent or temporary field camps will be used. A conscientious effort will be made to avoid any littering and to clean up each site after drilling is completed.

8.3 BACKFILLING AND GRADING

In areas where excavating work was done, a small dozer will be used to backfill and regrade the site. Subsoil materials will be placed in the deepest portion of the excavations. The surface will

be dressed with any available topsoil and graded to blend with the surrounding topography. If necessary, water bars or ditches may be established to provide adequate drainage.

It may be necessary to leave the trenches open for several years for annual studies. If this occurs, drainage from the disturbed area at each site will be directed into the trench or to a local sediment control structure. The disturbed area, including the slopes of the overburden and topsoil piles, will be fertilized and seeded with a temporary seed mixture to prevent excess erosion. A reclamation bond will be held for each trench site by the DMLW and will not be released until final reclamation is completed.

On any trenches left open, the excavated overburden material will essentially form a safety berm around the entire perimeter of the trench. The walls of the trench will be appropriately graded to provide public safety.

8.4 REVEGETATION

A 20/20/10 fertilizer will be applied to the graded areas with a manually operated spreader at a rate of 400 pounds per acre. Next a seed mixture containing 5% Nugget and/or Canada Bluegrass, 32% Arctared and/or Boreal Red Fescue, 2% Meadow Foxtail, 18% Manchar Smooth Brome, 4% Peace and/or Rangelander Alfalfa, 2% Reed Canary Grass, 11% Annual Ryegrass, 18% Scaldis Hard Fescue, 4% Tobin Rape Seed, and 4% Norcoast Bering Hairgrass will be manually broadcasted at a rate of 56 pounds per acre. All disturbed areas will be fertilized and seeded to ensure optimum revegetation.

9.0 TIME FRAME

Pursuant to 11 AAC 90.165, the initial permit term will be two years. UCM requests that non-disturbing activities (11 AAC 90.161) be approved within 30 days of receipt of this application. These activities will then occur at random for this and subsequent permit terms.

For other activities covered under this permit (substantial disturbance activities), UCM will notify DMLW prior to initiating such work. The bond amount required will be determined, recorded on the applicable bond status table, and the self-bond indemnity agreement will be adjusted accordingly. UCM anticipates that this process should only require a few days notification to complete the required bonding process for activities to begin.

10.0 RECLAMATION COST ESTIMATE

There will be reclamation costs associated with the trail extensions, drill pads, trenches, and drill holes. Over the 2-year permit term it is estimated that several miles of trail extensions will be required to complete approximately 50 drill holes. The disturbance area for a drill pad and a sample trench will be approximately 0.046 acres and 1.43 acres, respectively. Approximately 6,000 cubic yards of dirt may be removed from each trench.

Rates for specific reclamation activities are as follows:

- Hole Plugging - \$300.00 per hole.
- Backfilling and Grading Trails and Pads - \$200.00 per acre
- Backfilling Trenches - \$0.30 per cubic yard
- Fertilizing and Seeding - \$350.00 per acre

A reclamation bond in the amount of \$19,550 is currently held by the DMLW for Coal Exploration Permit No. 01-86-795. This bond is secured through a self-bonding agreement with the DMLW. Upon approval of this permit application, UCM will increase the current bond by \$36,892.50 for field activities to be carried out under this approved permit bringing the total bond amount to \$56,442.50

Table 2 Bond Status Table

<i>Permit Year</i>	<i>Currently bonded and active Piezometers/Monit or wells</i>	<i>Holes or wells that have been mined through and not released</i>	<i>Drilled and plugged; ready for release</i>	<i>Holes never drilled but bonded for</i>
1986	86A5 (1 hole)			
June 1990				
August 1990	90PZ8 (1 hole)			
1991	91GA9, 3, 2 (3 holes)			
1994	94GA1, 2, 3, 5, 9, 11, 12, 18, 20, 22, 23, 25 94P1 (13 holes)			
April 1996	96TM2C, 3C (2 holes)			
May 1996	96TM2, 3A, 3B, 4A, 5A, 5B, 6A, 6B, 7, 8, 9, 10A, 10B, 11 (14 holes)			
August 1996				
September 1996 & January 1997	96UCM20 (NOTE: this well should be mined through in February 2001), 96UCM5 (2 holes)			
July 1997 (Al and Ed's	97PF1 (Poker Monitor Well)			

Table 2 Bond Status Table

<i>Permit Year</i>	<i>Currently bonded and active Piezometers/Monit or wells</i>	<i>Holes or wells that have been mined through and not released</i>	<i>Drilled and plugged; ready for release</i>	<i>Holes never drilled but bonded for</i>
Excellent Adventure) 2001 Renewal	97P6, 10, 12 (4 holes)			15 holes
TOTALS	40 holes	0 holes	0 holes	15 holes

Base on the above, the following is the **total current bond**:

55 drill holes at \$300 per hole	\$16,500
Mob/Demob	\$ 2,500
Regrade/Reseed (1 acres @ \$550 per acre)	<u>\$ 550</u>
Total Bond (less trail regrade allowance)	\$19,550

Total additional bond for this permit revision:

Test Trenches:

10 pits X 250 ft. 250 ft. = 625,000 sq. ft. or 14.35 acres
 14.35 acres X \$550/acre for seeding, fertilizing and regrade = \$7892.50
 6000 cu. yds./trench X 10 trenches X \$.30/cu. yds = \$18,000
 Total Bond Required for 10 trenches = \$25,892.50

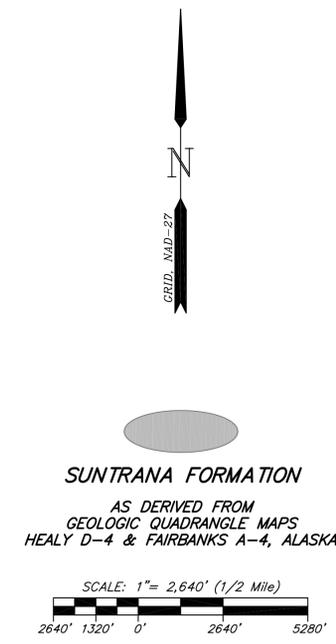
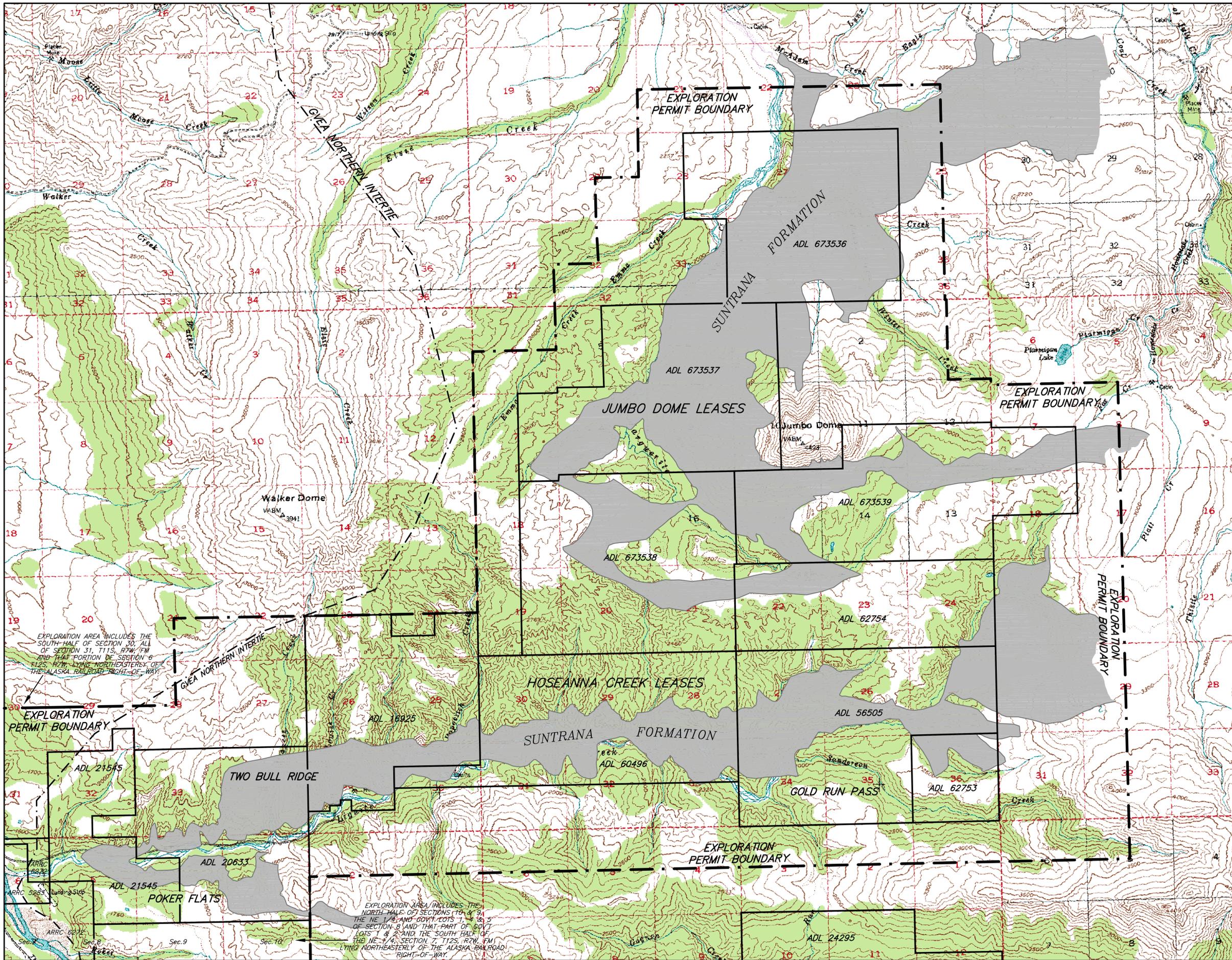
Trail Construction:

15 miles of Trail at an average of 11 wide = 871,200 sq. ft. or 20 acres
 20 acres X \$550/acre for seeding, fertilizing and regrade = \$11,000

Bond Amount for proposed new exploration = \$36,892.50

Existing Bond Amount = \$19,550

Total New Bond Amount = \$56,442.50



EXPLORATION AREA INCLUDES THE SOUTH HALF OF SECTION 30, ALL OF SECTION 31, T11S, R7W, FM AND THAT PORTION OF SECTION 6 T12S, R7W, LYING NORTHEASTERLY OF THE ALASKA RAILROAD RIGHT-OF-WAY.

EXPLORATION AREA INCLUDES THE NORTH HALF OF SECTIONS 16 & 9, THE NE 1/4 AND GOV'T LOTS 1, 4 & 5 OF SECTION 8 AND THAT PART OF GOV'T LOTS 1 & 2 AND THE SOUTH HALF OF THE NE 1/4, SECTION 7, T12S, R7W, FM LYING NORTHEASTERLY OF THE ALASKA RAILROAD RIGHT-OF-WAY.

EXPLORATION PERMIT AREA
 HOSEANNA CREEK & JUMBO DOME COAL LEASES



USIBELLI COAL MINE, INC.
 HEALY, ALASKA 99743

Compiled By:
 UCM/ENGINEERING DEPT.
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