M0470010

GEOLOGICAL SURVEY
OCT 2 1981
SALT LAKE CITY, UTAH
MINING BRANCH

American Gilsonite Company
P. O. BOX 28
BONANZA, UTAH 84008

Attn: Gordon, Boyd & Allen

September 29, 1981

Mr. Jackson W. Moffit, Area Mining Supervisor
United States Geological Survey, Conservation Division
2040 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

RE: Lease U-0126940

Dear Mr. Moffit:

Enclosed please find six (6) copies of our proposed mining plan for the Bonanza Gilsonite vein on Federal Lease U-0126940. This plan has been completely updated and revised to address all of the requirements of Title 30 CFR, Part 231.10(c).

Due to the number of revisions made with regard to mine site locations and access road requirements, a surface survey with your agency, the Vernal BLM office, and the State Division of Natural Resources would be advisable.

Also, please note at the end of the report part of the plan that the gilsonite vein is not contained entirely within the legal boundary of this lease. I will need to be advised of how to proceed with incorporating the section of vein located in the SW¼ NW¼ Sec. 17 into the current lease or the proceedure for acquiring this section in addition to the existing lease. This situation should be addressed separately from the mining plan approval to prevent holding up development of the first four mines on this lease. Your help with regard to this matter is greatly appreciated.

I regret the long delay in preparing and submitting this plan, and hope that this draft is complete enough to be processed and approved.

Very truly yours,

Richard Carlbert

Richard Carlbert

Encl.
6 copies Mine Plan (6 pgs)
6 copies Surface Map 1
6 copies Surface Map 2
6 copies Plan View 1
6 copies Plan View 2

APPROVED
MINING PLAN BY M.M.S.
BRANCH OF MINING OPERATIONS
Date: 4/2/82
By: J. Gordon Whitney
For District Mining Supervisor
Deputy District Mining Supervisor
Joseph B. McKee
Senior Staff Mining Engr.
Allen L. Vance
Mining Engineer

RECEIVED
DEC 14 2006
DIV. OF OIL, GAS & MINING

not over 2500 square feet. A compressor, usually housed in a small building or trailer would be located close to the hoist house. Conduit and piping would run along or under the ground between the hoist house, compressor, derrick, and airlift fans. The airlift fans would be located approximately fifty to one hundred feet from the shaft opposite the hoist house. Other surface features would include some type of latrine facility, and possibly a large water tank to be available for fire control at the mine site.

Electrical power to the mine sites will be provided by extending the existing line at the eastern border of the lease along the vein to the northwest. This line is typically spaced one hundred twenty five feet to one hundred fifty feet from the vein. Power rating of the line is 13,200 volts, 3 phase, and all powerlines would be constructed to be raptor safe as outlined in "Suggested Practices for Raptor Protection On Powerlines".

Primary access roads will be constructed in an acceptable manner with bar ditches on the sides and a slightly crowned surface. These roads, including drainage ditches would be thirty feet wide. Dip type crossings will be used at all washes and intermittent streams in order to assure that siltation and the accumulation of debris be avoided. Maximum grade on any road will not exceed eight percent.

It is anticipated that ground water will be encountered in the mining of this lease. This water will be pumped to the surface and discharged into natural drainages in accordance with EPA regulations. Ponding may be required prior to discharge. To help eliminate water from the mining areas, it may be necessary to drill boreholes to the bottom of the vein ahead of mining for the installation of pumps.

The Bonanza vein has been noted for containing methane gas. This fact may require the drilling of upreamed ventalation holes along the vein at locations other than the mine sites. These holes are typically twenty four inches in diameter.

Ore losses will be controlled through the use of bag house type dust collectors on the airlift systems. Ore is hauled from the mines in covered trucks and losses in loading will be minimized through the use of socks or loading chutes on the bins.

Federal mine safety regulations concerning the location of all structures, flammable materials, and vegetative growth surrounding or near each mine opening will be followed. Regulations relating to matches, smoking materials, or other ignition sources will also be strictly adhered to.

Hazards to public health and safety will be prevented by fencing off shaft areas and covering openings. A substantial surface pillar will be left above the active mining areas at all mines along this lease.

MINING METHODS

The gilsonite vein through the lease area strikes N67W with a dip of 2° south and ranges in width from eight inches at the surface to thirty six inches at a depth of 500 feet along the eastern border of the lease. Outcrops of the vein across the lease are minimal and widths of two to four inches are common where outcrops are found. A single diamond drill hole intercepted the

vein at a depth of 388 feet and coring indicated three feet of gilsonite at this horizon.

Mining will be performed utilizing a method of open stoping having timbered floors spaced at thirty foot intervals (top floor six feet below the surface or barrier pillar) in panels having the approximate dimension of 400 by 350 feet.

Spacing of the proposed mines has been planned to allow balanced mining as well as optimum mine site locations. The center to center distance of the proposed shafts are:

B-44 to B-46	790 feet	.1496 miles
B-46 to B-48	805 feet	.1525
B-48 to B-50	830 feet	.1572
B-50 to B-52	820 feet	.1553
B-52 to B-54	830 feet	.1572
B-54 to B-56	830 feet	.1572

Mine shaft locations have been staked out along the vein on this lease.

Surface pillars are anticipated and will have a minimum thickness of 35 feet.

Equipment required in the mining operations consists of hand operated pneumatic rock picks used to break the gilsonite ore from the face. The ore is then gravity fed down to the bottom of the slope where it is fed into an airlift system to be transported pneumatically to the surface. Under some circumstances, a slusher is required to transport the broken ore to the shaft where it is hoisted to the surface in a skip.

Each mine will utilize a crew of 4 to 6 men, consisting of one or two miners, one or two chute pullers, a hoistman, and a timberman. Currently, only one shift per day is anticipated. Since mining will be done sequentially across the lease, no increase in manpower is anticipated. Mine life will range from five to seven years per mine under normal conditions.

MINING SEQUENCE

Mining will proceed at B-44 shortly after approval of this plan and proceed toward B-56. It is planned to have one mine in production while a second is in a stage of development. The availablity of equipment, sales of ore, and mining conditions encountered will generally determine the rate of mining.

From mining experience at our B-40 mine, the Bonanza vein narrows considerably at 850 feet. For this reason, all mine planning is referenced to a mining depth of 850 feet.

In setting up a mine to go on line, development usually requires a period of fourteen months. This is based on the time necessary to construct surface facilities, sink a shaft, and develop an escapeway.

To maintain compliance with the Federal mine safety laws, mining must be performed in such a manner as to allow two means of egress from each working area prior to the beginning of production. This requires that at least two mines in a series must remain operational at all times along the vein.

AMERICAN GILSONITE COMPANY

PROPOSED MINING PLAN FOR THE BONANZA GILSONITE VEIN

FEDERAL LEASE U-0126940

GEOLOGICAL SURVEY
OCT 2 1981
SALT LAKE CITY, UTAH
MINING BRANCH

GENERAL

Lease U-0126940 is located in the NE¼ and the N½, NW¼, Section 17, T9S, R24E, approximately three miles northwest of Bonanza, Utah.

Total relief of this lease is not over 250 feet, with the lowest portion (5140 feet above sea level) on the northeastern border, and the highest point (5323 feet above sea level) on the eastern border. Landforms within the lease area consist of a flat elevated terrace to the west which has been eroded to steep walled canyons grading into a gently sloping basin to the east. Drainage is toward the northeast into Coyote wash.

The plant life in the lease area consists of sparse amounts of sagebrush, saltbush, and greasewood. Rabbitgrass, prickly pear cactus, and several species of range grasses are minor components located within the boundaries of the lease.

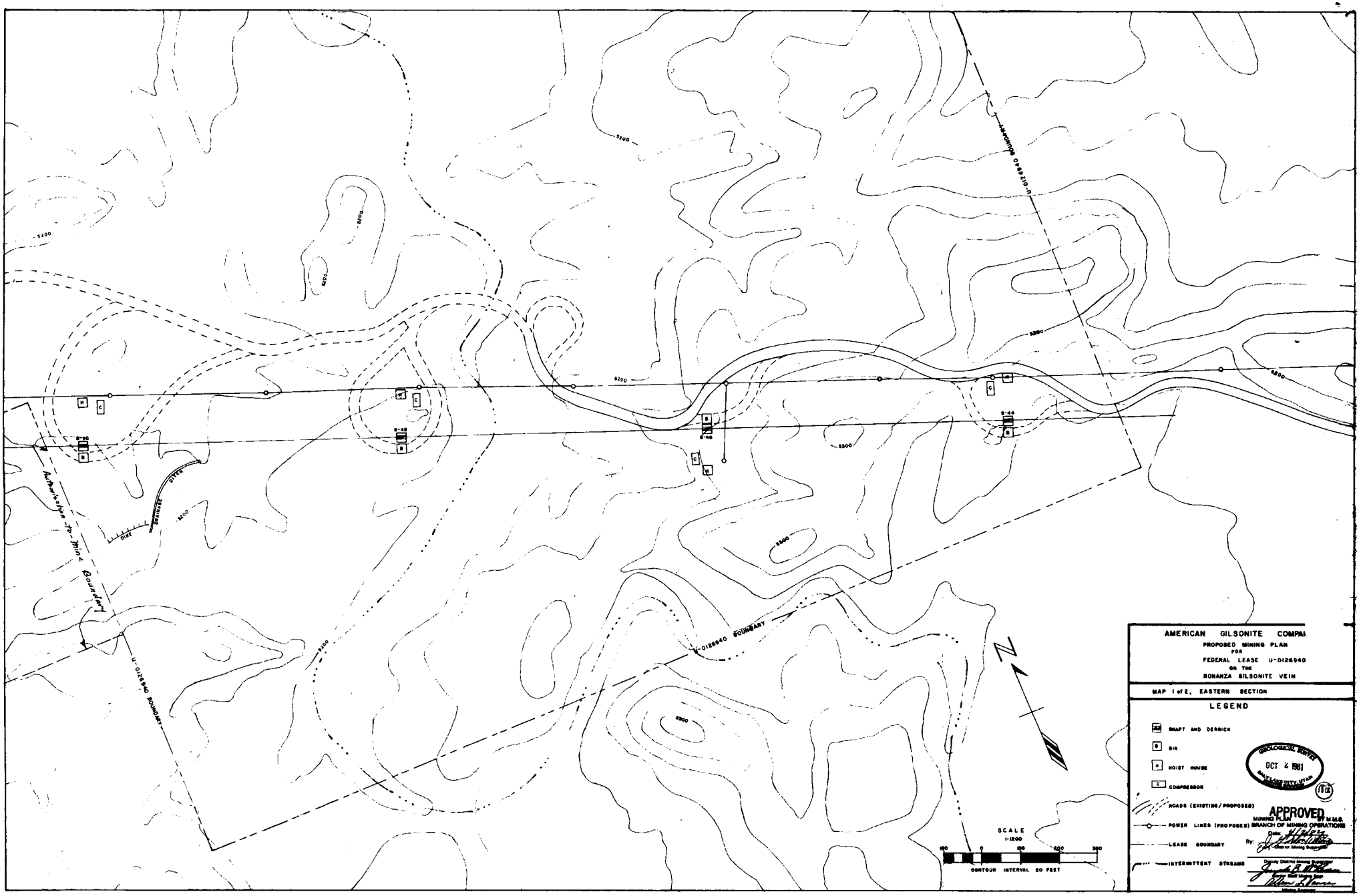
Animal life in the lease area is relatively scarce due to a lack of perennial streams or springs. Those observed and noted include antelope, rabbit, coyote, hawks, owls, and mice. Various species of lizards also inhabit the terrain.

The lease is accessible by a road constructed for a previous drilling program which enters the lease near the vein on the eastern boundary and extends to almost the center of the lease. Access to the mine sites will be obtained by extending this road to the end of the lease roughly along the vein and constructing loop roads to easch site.

SURFACE FACILITIES

Surface preparation would begin by removing and stockpiling the layer of topsoil at each mine site. The locations for the various structures would be leveled, which might require some cut and fill type construction, and concrete piers cast where required. The remainder of the site would be graded so as to permit runoff water to enter the natural drainage system while avoiding the mine and facilities. While surface erosion is not expected to be a problem due to the low annual rainfall, all grades would be kept as low as possible.

At each mine site location on this lease, mine surface facilities would consist of a derrick having a 20 x 20 foot base and a height of 77 feet. A storage bin ranging from sixty to one hundred fifty tons capacity would be located to one side of the derrick. Located at least 100 feet from the shaft would be a hoist house having a 20 x 15 foot base, and a timberyard occupying



AMERICAN GILSONITE COMPA
PROPOSED MINING PLAN
FOR
FEDERAL LEASE U-0126940
ON THE
BONANZA GILSONITE VEIN
MAP 1 of 2, EASTERN SECTION
LEGEND
SHAFT AND DERRICK
BIN
HOIST HOUSE
COMPRESSOR
ROADS (EXISTING/PROPOSED)
POWER LINES (PROPOSED)
LEASE BOUNDARY
INTERMITTENT STREAMS
GEOLOGICAL SURVEY
OCT 2 1981
SALT LAKE CITY, UTAH
APPROVED
MINING PLAN BY M.M.S.
BRANCH OF MINING OPERATIONS
Date:
By:
District Mining Supervisor
Deputy District Mining Supervisor
Senior Staff Mining Engr.
Mining Engineer
SCALE
1:1200
100 0 100 200 300
CONTOUR INTERVAL 20 FEET
U-0126940 BOUNDARY
Authorization to Mine Boundary
DIKE
DRAINAGE
DITCH
5200
5300
B-50
B-48
B-46
B-44