Docket

Noted MLS 4/4/62

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington
April 3, 1962

Memorandum

To: Chief, Division of Field Operations

From: Acting Field Officer, Region I

Subject: Application examination, OME-6174 (Gold-Lead-Silver), Harold R. Hogan, Silver Saddle and North Star Claims, Broadwater County, Montana

Harold R. Hogan applied for OME aid to explore on the Silver Saddle and North Star claims in Broadwater County, Montana. The Silver Saddle claims are the subject of Contract Idm-E811 with this applicant, and a final Field Team report is in Docket No. DMEA-3668. The North Star claims are the subject of an application which was denied (Docket No. DMEA-3271).

In the subject application, no specific proposal for any work at the North Star is presented. However, accompanying the application there is a longitudinal section of the North Star mine, on which 150 feet of proposed drift is indicated. In a letter transmitting the application, Hogan mentions the North Star shaft as being on a vein containing gold values "all the way to the bottom," ranging in value from $8.00 to $500.00 per ton and pointing out that the "vein is very small." He then says, "I would like your engineer's suggestions as to further exploration on this vein."

At the Silver Saddle, the applicant proposes to extend the lower tunnel crosscut about 50 feet to intersect the Silver Saddle vein, then to drift about 450 feet along that vein. He estimates the project will cost $20,000, of which the Government's share will be 50 percent, or $10,000.

The property was visited December 7, 1961, accompanied by Suk Koo Yoon, a Korean trainee, and Harold Hogan. There had been some snowfall prior to our visit, and the previous day the road had been plowed clear. It started snowing about 8:30 A.M. the day of the inspection and continued intermittently until about 11:00 A.M. We were able to reach the Silver Saddle claim, with some difficulty, and inspected the upper level where the DMEA work was done and the lower level, where the applicant now proposes to explore. It was impossible to get to the North Star because of the deep snow.

The geology of the area and the two levels of the Silver Saddle mine is described in a Field Team Final Report, Docket No. DMEA-3668, and need not be repeated. The only work done on the property since the DMEA contract terminated was the sinking of two shallow winzes from the upper adit, respectively about 25 and 70 feet in from the portal. Both were filled with caved debris, but according to Hogan the one nearest the portal was about 22 feet deep, and the other is about 5 feet deep. Ore from these winzes was shipped by John F. Hopkins, a lessee, from November, 1957, to February, 1958, inclusive, in the total amount of 12.9105 tons worth $385.05 before charges and other deductions, or $29.82 per ton. Smelter settlements totalled $207.05, on which total royalty in the amount of $10.35 has been paid.

No work has been done in the lower adit since Mr. Hogan's letter of July 11, 1957 (Docket No. DMEA-3668), in which he announced his decision to discontinue winzing and requested DMEA to consider participating in essentially the same work he now proposes.

The strongest part of the vein exposed in the lower adit extends from a few feet north to about 10 feet south of the crosscut. Three samples were taken from the drift at locations shown on plate 1, assaying from north to south, respectively, 0.39 ounce gold and 0.2 ounce silver per ton over a width of 0.4 feet, 0.1 ounce gold per ton and trace silver over a width of 1.5 feet, and trace gold and trace silver over a width of 2.0 feet. The vein is pretty well oxidized, only occasional flecks and blebs of sulfides being evident. Both the strike and the dip of vein in the lower adit indicate that it cannot be the Silver Saddle vein followed by the upper adit. In the No. 1 winze from the upper adit, the vein dips about 16°, and on the upper level about 35 feet north of the winze it dips 30°. Elsewhere in the upper adit the vein ranges in dip from 30° to 36°. Projected from the upper adit at 30°, the Silver Saddle would have been found in the lower adit about 25 feet back from the breast of the crosscut; projected at 20° it should lie about 25 feet ahead of the breast and should have been cut by the raise between the lower adit and the sublevel (pl. 1). At the bottom of page 4 of the Field Team final report, Docket No. DMEA-3668, the authors state:

> "The Operator and Weeks believed that they had found this vein (i.e. Silver Saddle) in the sublevel drift above the end of the lower adit, but the sheeted zone there, as well as the shear zone to the north in the raise, are not of the same character as the Silver Saddle vein and they do not lie on the downward projection of the vein."

The first paragraph on page 6 of the same report states:

> "None of the work under the contract revealed anything but a very weakly mineralized vein containing only a few small bunches of sulfide material. Plate 2, Assay Plan Map, illustrates this erratic occurrence. The values are spotty and generally low approaching ore-grade material principally around winzes No. 2 and No. 3."

Although the lower adit is only 41 feet vertically below the upper adit, the dip depth of the Silver Saddle vein to its projected intersection with the raise is about 100 feet. If the Silver Saddle were a more strongly mineralized structure at that depth down dip, it is reasonable to expect that it would have been readily recognized either on the lower adit level or in the raise.

It is concluded that the chance of a significant discovery resulting from the applicant's proposal is poor, and it is recommended that his application to explore the Silver Saddle vein be denied.

Because of the narrowness of the North Star vein as described in the report in DMEA Docket No. 3271, it is doubtful that a project could be recommended. As I have not seen this property, I leave it to you whether Mr. Hogan should be advised that if he presents a specific project on the North Star it will be considered, or whether a denial is justified on the basis of information in the DMEA file.

Enclosure
Distribution:
OME(3)
USGS(SRO)
Docket
MacLaren

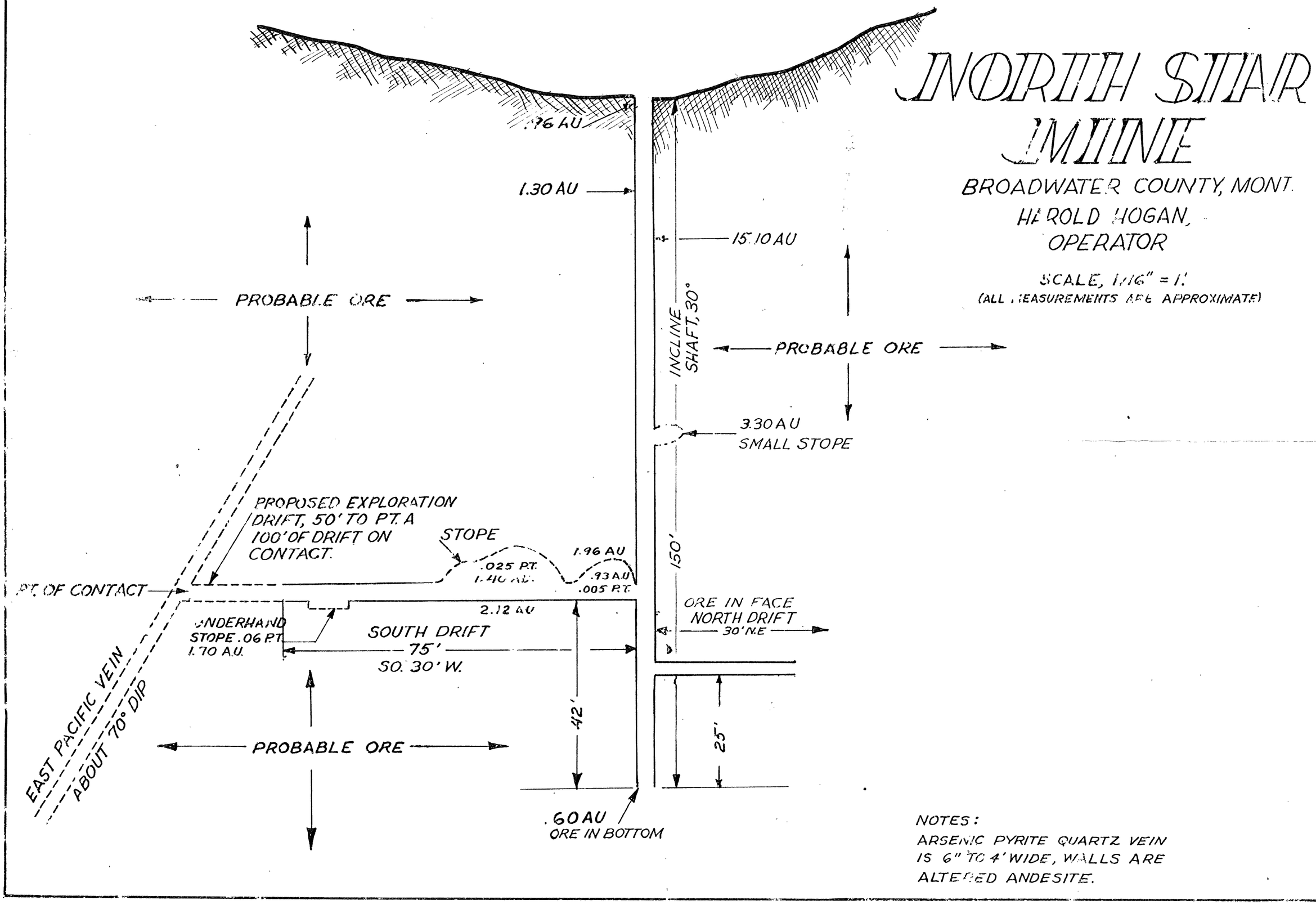
NORTH STAR MINE

BROADWATER COUNTY, MONT.

HAROLD HOGAN, OPERATOR

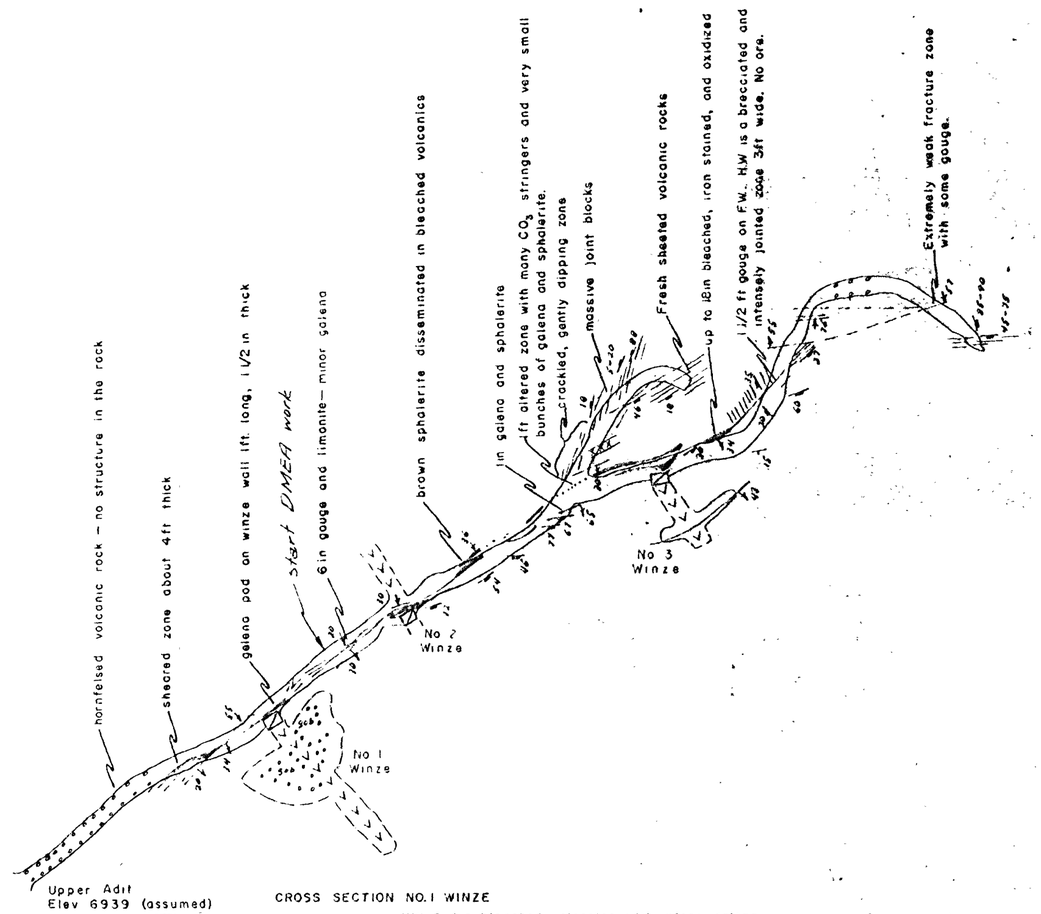
SCALE, 1/16" = 1'

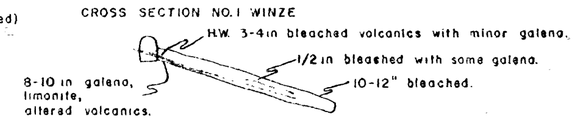
(ALL MEASUREMENTS ARE APPROXIMATE)



NOTES:

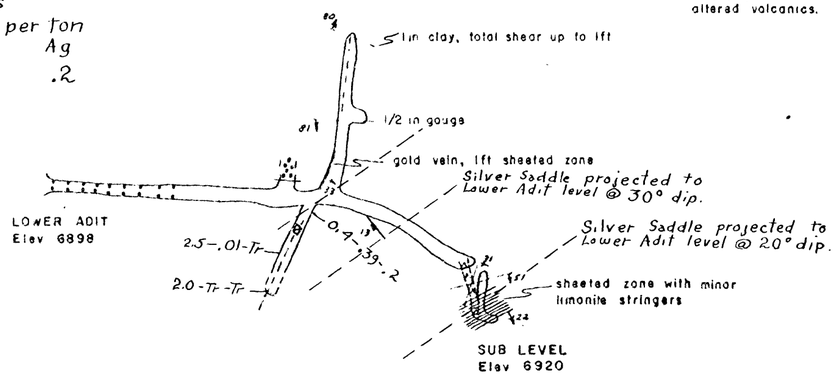
ARSENIC PYRITE QUARTZ VEIN IS 6" TO 4' WIDE, WALLS ARE ALTERED ANDESITE.





Assays

Width Feet	Oz per ton Au	Ag
0.4	.39	.2



From Field Team Final Report Docket DMEA-3668
Mapped by D M Pinckney and J J Quinlan, USGS.

GEOLOGIC MAP

Silver Saddle Mine

BROADWATER COUNTY, MONTANA

40 20 0 40 80 FEET

PLATE I