Docket

Geologic Division
Resources Research Branch
8426 Federal Building
Salt Lake City, Utah 84111

RECEIVED
JUL 21 1965
OME
SPOKANE, WASHINGTON

July 19, 1965

Memorandum

To: Acting Field Officer, Region I, OME

From: L. S. Hilpert

Subject: Application examination

OME-6390
Warm Creek Silver Mines, Inc.
Big Smokey, et al., claims
Lemhi County, Idaho

INTRODUCTION

The Warm Creek Silver Mines property was visited on June 25, 1965, in company with James E. Reddy, President, his son Teddy and a friend, Dale Knobleck, and Harry Coleman, a contract miner from Leadore, Idaho. On the way to and from the property, we visited with Wilbur Woods, a partner in the corporation and former claimant and miner on the Big Smokey and Edna claims, in his cabin at the mouth of Sawmill Canyon. About 6 hours were spent on the property to determine the merits of the Applicant's proposal for a $28,905 project to explore for ore bodies beneath old workings on the Big Smokey and Edna claims.

PROPERTY, LOCATION, AND ACCESSIBILITY

The property consists of the contiguous unpatented Big Smokey, Edna, Dave, and Ollie claims, which are in adjacent parts of projected secs. 29 and 32, T. 12 N., R. 27 E. (unsurveyed), Boise Meridian, Lemhi County. The property is in the southern part of the Spring Mountain mining district, and is at an altitude of about 9,500 ft near the head of Warm Creek, immediately west of the divide of the Lemhi Range (see figure 1).

Access from Arco, the nearest town and shipping point, is by about 70 mi of paved highway and unimproved roads. To reach the property, drive east from Arco on Highway 26, turn left on Highway 22, 7.6 mi east of

Arco, and drive to Howe. Drive north from Howe 36.8 mi on the road up Little Lost River and take right diagonal turn onto partly maintained dirt-gravel Sawmill Canyon Road (see fig. 1). Proceed across bridge over Little Lost River (5.9 mi from main road) and about 0.1 mi beyond bridge, take sharp right onto dirt road. Follow road south, ford Warm Creek, and then keep left up Warm Creek to property, which is about 4 mi from Warm Creek Crossing. The last 3 mi or so is a steep and rough "cat" road that is negotiable by two-wheel drive vehicle only when dry. During the winter and early spring the property is inaccessible because of snow.

DESCRIPTION OF CLAIMS AND WORKINGS

The workings on the property probably are situated on the Big Smokey and Edna claims, but none of the claim corners could be positively identified during the examination and their placement and orientation on the sketch map (fig. 2) is speculative. According to Mr. Reddy the claims have not been surveyed and were only measured by tape and oriented with their long dimensions trending approximately north, as shown on the Applicant's sketch. The only corner that Reddy could identify with a posted description is the one shown at the center of the north end line of the Edna. From the description, however, it could not be determined if it was a corner post or the center post, as shown. The corner found and shown as the NE corner of the Big Smokey was ascertained to be on the north end line of the Big Smokey by Reddy, but it also had no posted description. As it was situated about 300 ft westerly from the post, Reddy judged to be on the north end line of the Edna, we concluded the post on the Edna marked the center of the end line. I then took a Brunton bearing between the two posts and thus oriented and constructed the segments of the four claims shown on figure 2. As the claims are probably not exactly rectangular, their boundaries as established by accurately surveyed lines might be much different than shown. Moreover, if the corner thought to be the center of the north end line of the Edna is actually the northeast corner of the claim, some of the workings might lie near the eastern boundary of the Applicant's property.

The workings on the property consist of two pits or shallow winzes and a caved adit on the Edna claim, an adit of unknown length near the corner common to the four claims, and a pair of adits, each about 100 ft long, and one or two shallow caved pits or shafts that connect with them on the Big Smokey claim. These workings and the found corners were surveyed by Brunton and tape with the assistance of the other members of the party. Vertical control was determined by aneroid. Control for the sketch map is rough because of brush, steep slopes, and snow, which filled the ravine, the open pits, and blocked the openings to two of the adits. Although Reddy had informed me the property was clear of snow, I found the snow pack in the ravines, hollows, and entries to the workings a considerable obstacle to making a satisfactory examination.

GEOLOGY

No detailed geologic work has been published on the Spring Mountain mining district and adjacent areas. The following summary is taken largely from Umpleby[1], who referred to the district briefly as a part

[1] Umpleby, 1913, Geology and ore deposits of Lemhi County, Idaho: U. S. Geol. Bull. 528.

of his reconnaissance studies of Lemhi County.

The country rock of the district consists of a thick sequence of quartzite at the base overlain by limestones. The quartzite is probably several thousand feet thick and may be equivalent to the Kinnikinic Quartzite, of Ordovician age in Custer County[1]. The limestones are a sequence of

[1] Ross, C. P., 1934, Correlation and interpretation of Paleozoic stratigraphy in south-central Idaho: Geol. Soc. America Bull., v. 45, no. 5.

Devonian and probable Mississippian beds, at least 1,200 ft thick, that have a northerly strike and dip eastward. The limestone has been intruded by several quartz diorite dikes, of probable Late Cretaceous or early Eocene age, that are generally parallel to the strike of the limestone beds.

The metal deposits are principally tabular lead-silver replacement bodies that are controlled by north-striking fractures and cross fractures. Most of the ore mined was oxidized material, but some sulfides were produced. Identifiable minerals included argentiferous galena, pyrite, chalcopyrite, and manganese oxide, which were associated with a siliceous gangue.

Production records of the Spring Mountain district indicate it has yielded about 4,000 tons of oxidized lead-silver ores with a total value of about $175,000. These were mostly direct shipping ores, produced from about a dozen properties that have been operated intermittently since the early eighties, when the first claims were located. Prior to about 1911, Umpleby (1913, p. 85) estimated the ores that had been produced had a total value of about $50,000. Analyses of ores from six of the properties showed an arithmetic average of 8.8 oz silver and 23.7 percent lead, and one property showed 0.02 oz gold and another 3 percent copper (Umpleby, 1913, p. 65). Since 1910, for the bulk of the ores produced, the silver has averaged 7.7 oz, lead 20 percent, copper 0.6 percent, and a trace of gold. The small and erratic shipments from the several properties indicate the operations were marginal and generally non-economic.

On the Applicant's property, the host rock is a medium-bedded gray limestone that strikes about N. 30° W., and dips 25-30° E. The quartzite is not exposed on the property and probably underlies the limestone at a depth of at least several hundred feet. A quartz diorite or monzonite porphyry intrudes the limestone on the Edna claim, as indicated by the dump debris of a caved adit. No surface exposure of the intrusive was observed, but it could have been covered by bulldozer debris and snow. Silicified fracture zones or veins on the property are typical of those described by Umpleby for the district. The veins are principally parallel to the strike of the beds and subordinate ones are transverse to the strike. The veins consist of sheared and locally brecciated zones that contain irregular fillings and replacements of white quartz and irregular spotty concentrations and seams of galena, tetrahedrite, cerussite, pyrite, chalcopyrite, and earthy incrustations of iron sulfates and copper carbonates. These veins will be discussed in more detail in the review of the Applicant's proposed exploration.

REVIEW OF PROPOSED EXPLORATION

The Applicant proposed driving an adit under "the old Big Smokey tunnel to intersect the present ore showings in the old tunnel and establish an ore body," and he proposed driving another adit under the Edna workings, presumably for the same purpose. Reddy explained that each adit would be driven from the ravine, the Edna about 150 to 200 ft long and the adit under the Big Smokey workings to be about 30 ft vertically below them and of unspecified length.

The proposed adit on the Edna would intersect the Edna vein about 100 ft below the surface. This vein, as determined from the exposures at the collars of the two pits, strikes N. 10° W., dips about 75° W., and ranges from 6 in. to about 3 ft wide. As the pits were filled with snow and the surface along the strike of the vein was covered by debris and snow, the Applicant's assertion that it is exposed along the strike for 1,000 ft, and that it widens at depth, could not be verified. His assay sample No. 3550 (taken by Gerald Cooper) shows a content of 0.03 oz gold, 133 oz silver and 43.3 percent lead. Reddy informed me, however, that the sample represents selected high-grade chunks picked from the dumps at the two pits. I took a grab sample of the dump material (sample No. 2) which assayed a trace of gold, 2.3 oz silver, 8.4 percent lead, and 0.48 percent copper. This sample probably indicates the vein material is low-grade and the Applicant's sample probably indicates the vein merely contains some small pockets and seams of high-grade material.

The proposed adit under the Big Smokey workings was planned to be driven under the western part, referred to for convenience as the Wilbur tunnel. This area apparently marks the intersection of several cross shears and a northerly trending vertical shear zone, exposed at the Wilbur tunnel

entry, where the shear is about 4 ft wide. A near-vertical, eastward-striking cross shear is exposed at the collar of a surface pit or caved shaft about 40 ft north of the Wilbur tunnel entry, and similar cross shears are exposed in the Harry tunnel about 15 ft and 40 ft, respectively, from the entry. About 25 ft from the face of this tunnel, a caved or gob-filled opening can be observed in the west wall. The walls of the Harry tunnel are fractured, silicified, and iron stained from within about 15 ft of the entry to the face, which might mark the periphery of more intensely broken and mineralized material at the intersection of the shears in the Wilbur tunnel workings. The original shape of the workings is uncertain, but they were apparently irregular and small. The Wilbur and Harry dumps contain little more material than would have been removed from the workings shown on figure 2, so any possible stoped areas above or below the Wilbur level would be small.

Assays of eight samples taken from the Wilbur dump and workings, as submitted by the Applicant, ranged from about 2 oz to 130 oz silver, 0.01 to 0.02 oz gold, and 0.4 to 51.0 percent lead. Most, if not all, of these samples, however, were taken from high-grade material similar to those taken from the Edna dumps. Sample Serial No. 31370, which assayed 130 oz silver and 16 percent lead, was taken from a high-grade chunk on the Wilbur dump, according to Reddy. Also, the Applicant's three samples, serial No. 3579, were taken by G. D. Cooper in the Wilbur tunnel about the same time he took the Edna dump sample. These Wilbur samples ranged from 0.01 to 0.02 oz gold, 4.0 to 106 oz silver, and 0.4 to 51 percent lead. As their locations could not be identified, it can only be assumed the samples were selected high grade and of as little use as the Edna sample. The four samples identified as from the dump of the old mine working (serial 28004-7) were random pieces taken from the Wilbur dump, according to Reddy. The arithmetic average of these samples is 9.7 oz silver, which may be a rough average of the dump material. The lead content is probably low as only the highest grade sample was assayed for lead, which showed 15.5 percent. My sample No. 3, which was a grab of some of the more obviously mineralized material on the dump, assayed 0.02 oz gold, 17.7 oz silver, 7.05 percent lead, and 0.15 percent copper. My sample No. 1, taken from a small muck pile at the face of the Harry tunnel assayed 0.03 oz gold, 2.55 oz silver, 0.30 percent lead, and 0.13 percent copper. It probably represents low-grade material in the periphery of the Wilbur deposit. It is concluded from the assay data that the Edna vein is constituted by material that runs considerably less than the district average in silver, lead, copper, and gold, and that the vein or body in the Wilbur workings of the Big Smokey probably contained about 10 oz silver, 10 percent lead, and small amounts of gold and copper.

The Applicant's proposal to crosscut to intersect the vein below the Edna workings does not seem warranted in view of the indicated low-grade silver and lead and lack of any evidence that the vein widens or increases in richness at depth. The proposal to drive under the Wilbur workings at a

depth of about 30 ft below the Wilbur tunnel also does not seem warranted. Proximity of such a crosscut to the old workings is considered merely a development of known material. Exploration for a deposit at greater depth is also unwarranted. The deposit on the Big Smokey is apparently small and submarginal and there is no reason to expect other hidden deposits to be more attractive.

At the conclusion of the field examination, I advised Reddy that it did not appear that the property warranted the proposed exploration but that the limited access to the underground workings and surface, because of snow and debris, prevented me from making a complete examination. If subsequent work by his company should lead to a more favorable evaluation he might consider requesting another field examination.

CONCLUSION

It is concluded that the chance of making a discovery of commercial importance under the Applicant's proposed exploration program is poor and it is recommended that his application be denied.

L. S. Hilpert

LSH:jp

Attachments: Fig. 1.--Location map
Fig. 2.--Sketch map
Crismon & Nichols assay sheet

cc: Office of Minerals Exploration
Spokane
Docket
MacLaren
Commodity
SLC file

P. M. CRISMON, Pres

CRISMON & NICHOLS

ASSAYERS AND CHEMISTS

229-231 SOUTH WEST TEMPLE STREET

PHONE EM 3-7417

P. O. BOX 1708

SALT LAKE CITY, UTAH

REPORT OF ASSAY

United States Geological Survey P.O. #61994 June 29, 1965

WE HAVE ASSAYED YOUR three SAMPLES AND FIND these TO CONTAIN AS FOLLOWS:

DESCRIPTION	NO.	OZS. GOLD PER TON	OZS. SILVER PER TON	PER CENT LEAD	PER CENT COPPER	PER CENT ZINC	PER CENT IRON	PER CENT	VALUE PER TON
Warm Creek Silver Mine	1	0.03	2.55	0.30	0.13				$ 1.05
Warm Creek Silver Mine - Edna Pitts	2	Trace	2.30	8.40	0.48				
Wilbur Dump Hi-Grade Grab	3	0.02	17.70	7.05	0.15				70¢

REMARKS

CHARGES $ 16.50

CRISMON & NICHOLS

By /s/ P. M. Crismon

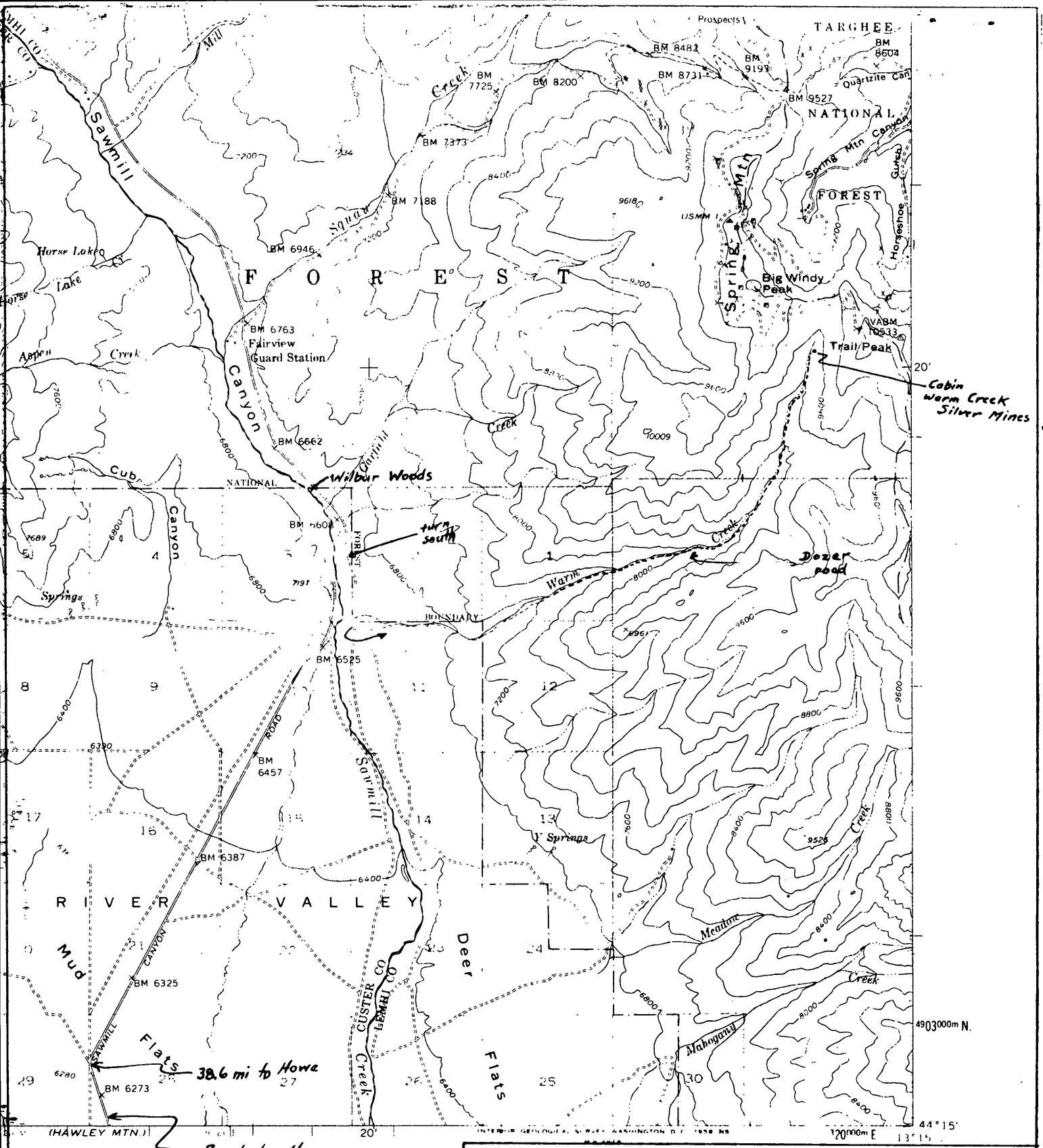


Figure 1 —

Part of Gilmore, Idaho 15-minute quad., showing location of Warm Creek Silver Mines

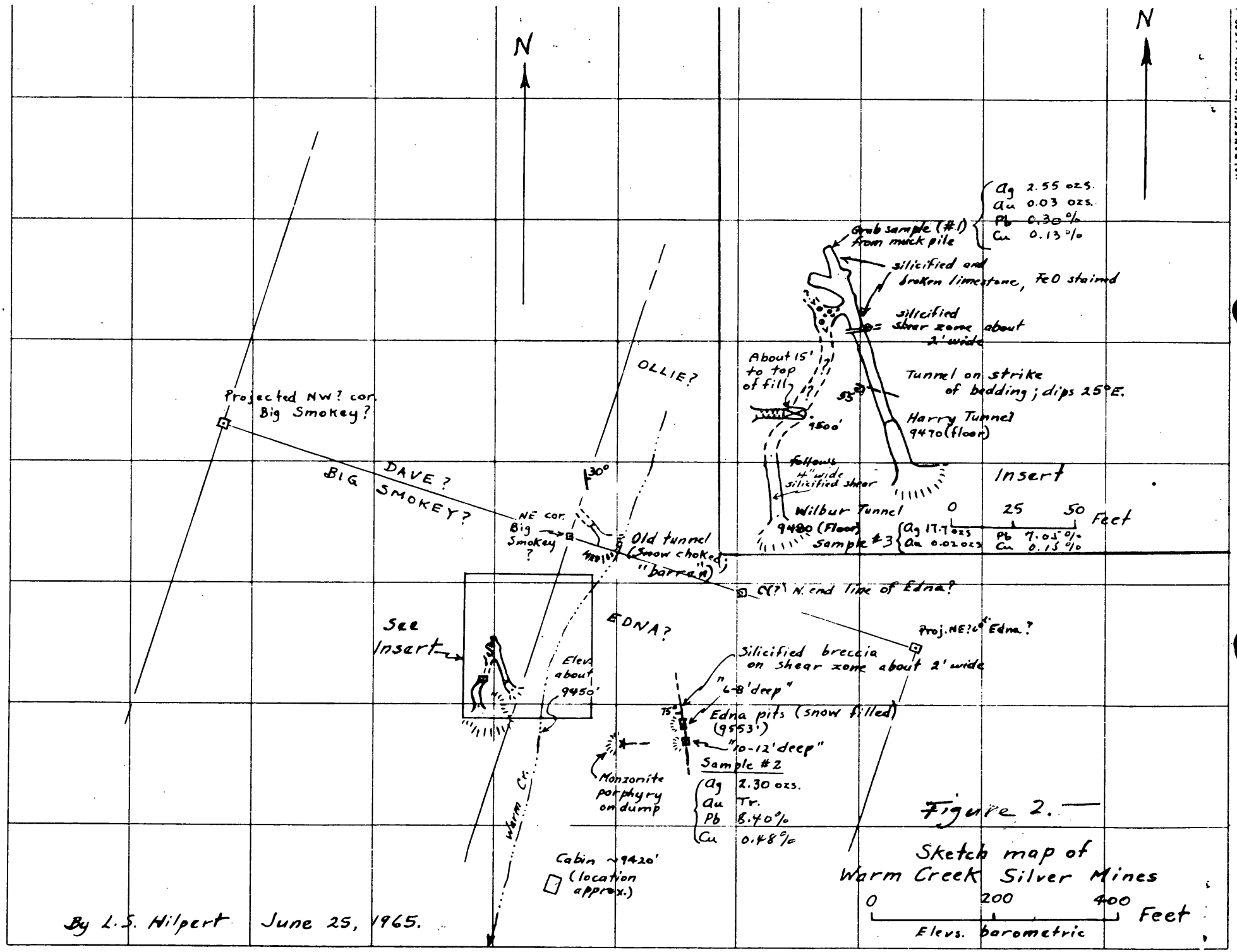


Figure 2.—

Sketch map of Warm Creek Silver Mines

By L.S. Hilpert June 25, 1965.

"ALBANENE" NO. 1066M A&ECO.,INC. U.S. PAT. OFF.

RECEIVED

JUL 16 1965

OME
SPOKANE, WASHINGTON

Pocatello, Idaho
July 14, 1965.

Mr. D.R. MacLaren,
Acting Field Officer, OME
Region 1, Spokane, Washington.

Re-OME 6390 Silver
Warm Creek Silver Mines Inc
Big Smokey, et al, Claims
Lemhi County, Idaho.

Dear Mr. MacLaren:

Mr. Lowell S. Hilpert of the U.S. Geologic Survey has completed his examination of the above mentioned property and has recommended that we bring in a competent mining engineer to make recommendations for exploration. We secured the services of Mr. L.M.Buhler of Salt Lake City, Utah and are enclosing a copy of his findings and report.

In line with Mr. Buhler's recommendations, we are revising our cost estimate and other items as follows:

Item 5, Exploration work: (a) Eliminate this paragraph and substitute the recommendations as outlined in Mr. Buhler's report.

Item 7: Estimate of costs: We are negotiating a contract with Harry Coleman of Leadore, Idaho to drive the tunnel recommended, Mr. Coleman to furnish all necessary equipment, rails and cars at an estimated cost of $34.00 a foot. Mr. Buhler estimated the tunnel length at 220 feet which would amount to a cost of $7480.00.

(b) Personal services.

Engineering services. Approximately	$ 500.00
Supervisin (hauling water, fuel, supplies and maintenance work)	500.00
	1000.00

(c) Eliminate. Except for fuel for trucks 150.00

(d) Equipment to be purchased:

1 500 Gallon Water tank.....	100.00
1 4-wheel drive truck.....	3325.00
1 Heavy duty truck.....4-wheel drive.....	2000.00
1 Chain saw.....	180.00
20 Defted drilldizer, $20.00.hour).....	1600.00
	7438.60

(f) O.K.
(g) Eliminate.

The only change to be made on the OME Form 40 is the item on page 1, "Estimated Cost of Project", changed from 28905.00 to $16068.00.

Trust everything is now in order.

Yours very truly,

WARM CREEK SILVER MINES INC

By James E. Reddy Jr.
Jas E. Reddy Jr., President.

REPORT OF EXAMINATION OF THE
WARM CREEK GROUP OF MINING CLAIMS
IN LEWIS COUNTY, IDAHO

BY

L. H. BUHLER

JULY 22, 1965

DESCRIPTION AND LOCATION

The Warm Creek Group of Claims consists of four adjacent claims, namely Big Smokey, Edna, Dave and Ollie. The location of these claims is shown on Fig. 1 at the head of Warm Creek canyon just east and south of Big Windy Peak in an unsurveyed area in Township 12 North, Range 27 East, Lemhi County, Idaho.

Last fall the owner of these claims, Silver Creek Mines, Pocatello, Idaho, constructed a road approximately four miles long from a point near the mouth of Warm Creek from the forest boundary to the claims. This road is presently passable by 4 wheel drive vehicles and trucks. Warm Creek empties into the Little Lost River about 40 miles NW of Howe, Idaho.

A two bedroom frame cabin was constructed by the owners last fall on the Big Smokey Claim. Water is hauled from the head of Warm Creek about 2 miles down the road.

The writer surveyed the claims by transit and stadia. See Fig.2. Four original claim corner monuments and the discovery monument on the Big Smokey claim were found in place. Three other claim corners were relocated as shown on the Claim Map (Fig.2) A traverse was run connecting these corners, discovery monument, existing tunnels, prospect inclines and pits, and location of proposed exploration tunnel. See Fig.3.

EXISTING WORKINGS

The Wilbur and Harry Tunnels consists of about 150 feet of tunnel, drifts, and inclines interconnected and surfaced at point "B". These working are in nearly flat lying dolomite-limestone beds dipping slighty to the south-east. Several places in the workings there are exposures of small pockets of high grade galenite type lead silver minerals. According to legend this property produced considerable quantity of high grade silver ore some time after the Civil War. The appearance of the old log cabin and the Blacksmith shop on the Wilbur dump indicate that the timing is about right. A grab sample of mineralized vein material was taken from the Wilbur dump. Assay results are attached.

On the Edna Claim there are two inclines and two pits. Three of these are in one vein which can be traced for about 300 feet along the strike. This vein dips about 74° to the west. Inclines #1 and #2 show a mineralized zone varying from eight inches to about two feet near the bottom. There was still snow in these prospect holes. No. 3 pit is on the same strike as No. 1 and 2. No. 4 pit if on a paralell vein about twenty feet to the west. A grab sample of vein material was also taken from the dump of the Edna Prospects. See assay sheet. These exposures are also in a grey dolomite limestone. The difference in dip of the formations indicated faulting in the vicinity of Warm Creek Wash.

FURTHER EXPLORATION

The writer recommends that the first exploration work be done on the Lima vein. This vein can be traced for 300 feet along the strike and the presence of one or more parallel veins is indicated in pit #4. It is possible that these veins may join together at depth. The proposed 220 feet exploration tunnel is shown in plan and cross-section in Fig. 3. The cost for driving this 5 feet by 7 feet tunnel should be about $34. per foot. When the vein or veins are intersected, if findings indicate, further exploration could be done by drifting in both directions. Also if commercial grade ore is found in the Lima vein, entry at a lower level of 100 to 200 feet would be indicated.

ECONOMICS

The following cost estimate would indicate that $50. per ton ore would be necessary until such time as a large ore body could be developed to justify a mill and reduce mining costs.

	Per Ton
Mining	$15.
Trucking off hill	2.
Trucking to S.L.C.	14.
Milling cost	4.
Overhead expenses	5.
Profit & interest on Investment	10.
Total	$50.

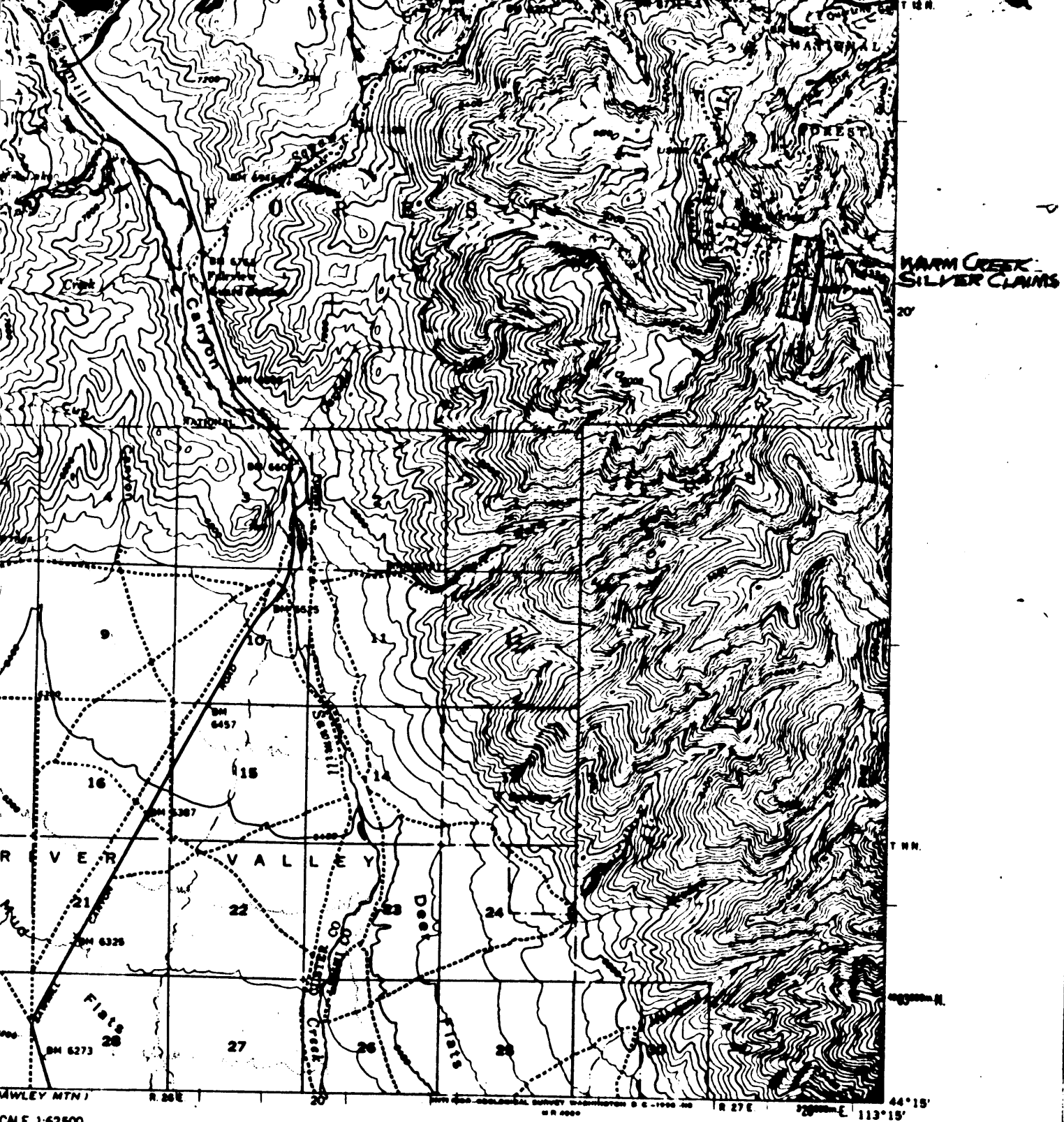
REMARK

The writer recommends an initial exploration tunnel of 220 feet in length be driven to intersect the Lima vein or veins. This recommendation is made for the following reasons.

1. Vein outcrop can be traced for about 300 feet on surface.
2. At least two veins are indicated on the surface which may join together at depth.
3. The dip of 75° north would help to reduce mining costs if commercial ore is discovered.
4. Assays of grab samples from dumps indicate that commercial grade ore could be found at depth on the property.

Respectfully submitted,

[illegible]
Consulting Engineer
July 22, 1[illegible]



SCALE 1:62500

1 2 3 4 MILES

5000 10000 15000 20000 25000 FEET

1 2 3 4 5 KILOMETERS

ROAD CLASSIFICATION

Medium-duty ——— Light-duty ———

Unimproved dirt .....

State Route

QUADRANGLE LOCATION

R INTERVAL 80 FEET
EPRESENT 40 FOOT CONTOURS
IS MEAN SEA LEVEL

NATIONAL MAP ACCURACY STANDARDS
, DENVER 2, COLORADO OR WASHINGTON 25, D. C.
MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

GILMORE, IDAHO
N4415—W11315/15

1957

CLAIM LOCATION MAP

Exh. 1

Feb. 7th 65

P. M. CRISMON, PRES.

CRISMON & NICHOLS

ASSAYERS AND CHEMISTS

229-231 SOUTH WEST TEMPLE STREET

PHONE EM 3-7417

P. O. BOX 1708

RECEIVED JUL 6 - 1965 M E SPOKANE, WASHINGTON

REPORT OF ASSAY

SALT LAKE CITY, UTAH June 29, 1965

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REMARKS:

CHARGES $ 16.50

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BY P. M. Crismon