MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE

Contract No. _____ Docket No. 6849

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semiannual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) 6-30-71
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____: Reports
- [ ] Analysis of Semiannual Inspection Reports
- [ ] Project Summary (Interim) by MME Engineers

Right Side

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with Transmittal, Narrative and Maps

Folders No. _____: Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty Material

72195-65

ROUTING AND TRANSMITTAL SLIP

		ACTION
1 TO (Name, office symbol or location)	INITIALS	CIRCULATE
Chief, OME	DATE	COORDINATION
2 Re: OME 6849 (Gold-Silver) Merlyn and Bernice Butler Wolverine Mine Powell County, Montana	INITIALS 26 1971	FILE
	DATE	INFORMATION
3	INITIALS	NOTE AND RETURN
	DATE	PER CONVERSATION
4	INITIALS	SEE ME
	DATE	SIGNATURE

REMARKS Attached are two bids for contract labor and a geological report by Virgil R. Chamberlain--these complete the application I mailed to you on May 17, 1971.

I was hoping that the geologic maps of the adits would include some assay data. The shipment records will have to serve as evidence that the veins contained gold, silver, and lead.

The earliest that I can schedule a field examination will be the week starting June 14, 1971. I doubt that I could prepare a report approving a contract before the end of this fiscal year. It generally takes me a week to get assay results. This might qualify for a contract that could be approved next fiscal year. It looks like a simple project of following a vein in quartz monzonite. How large the ore shoots are is important but I see little evidence in the report on which to base an estimate.

Do NOT use this form as a RECORD of approvals, concurrences, disapprovals, clearances, and similar actions.

FROM (Name, office symbol or location)	DATE
Willard P. Puffett Field Officer, Region I WPP	5/24/71
	PHONE

OPTIONAL FORM 41
AUGUST 1967
GSA FPMR (41CFR) 100-11.206

GPO : 1967 O—300-455 (8-H) 5041-101

RECEIVED
MAY 24 1971
O. M. E.
SPOKANE, WASH.

May 24th 1971

Mr Puffett,

I am sorry for the delay in sending you the enclosed Geologist Report and Labor bids. But Mr Chamberlain, Our geologist was out in the Field and just got back.

I hope this is all you need. But if there is anything else please contact me or my Father anytime you can.

Thank you very much for all the help and time you given to me and the Wolverine project.

Thanks Again

Marilyn Butler

April 26, 1971

Merlin Butler
Wolverine Mine
Elliston, Montana
59728

Dear sir:

In regards to your request for a labor bid pertaining to underground mining I would like to submit the following.

$15.00 per foot crosscutting + drifting for un-timbered tunnel.

$17.00 per foot timbered.

If this meets your approval let me know as soon as possible.

Respectfully

Larry Ward
Hard Luck Mines
Elliston, Montana
59728

RECEIVED
MAY 24 1971
O. M. E.
SPOKANE, WASH.

RECEIVED
MAY 24 1971
O. M. E.
SPOKANE, WASH.

April 27, 1971

Merlyn Butler
Box 433 - Wolverine Mine
Elliston, Mont. 59728

RECEIVED
MAY 24 1971
O. M. E.
SPOKANE, WASH.

Dear Sir:

In response to our conversation last week, I would like to submitt the following bid for all labor pertaining to underground work at the Wolverine Mine.

For all untimbered cross-cutting & drifting, I will supply all labor for $15 a tunnel foot. For all timbered, $17 a foot, not counting materials.

If you are interested, please contact me as soon as possible.

Sincerely,
Harold Thériault

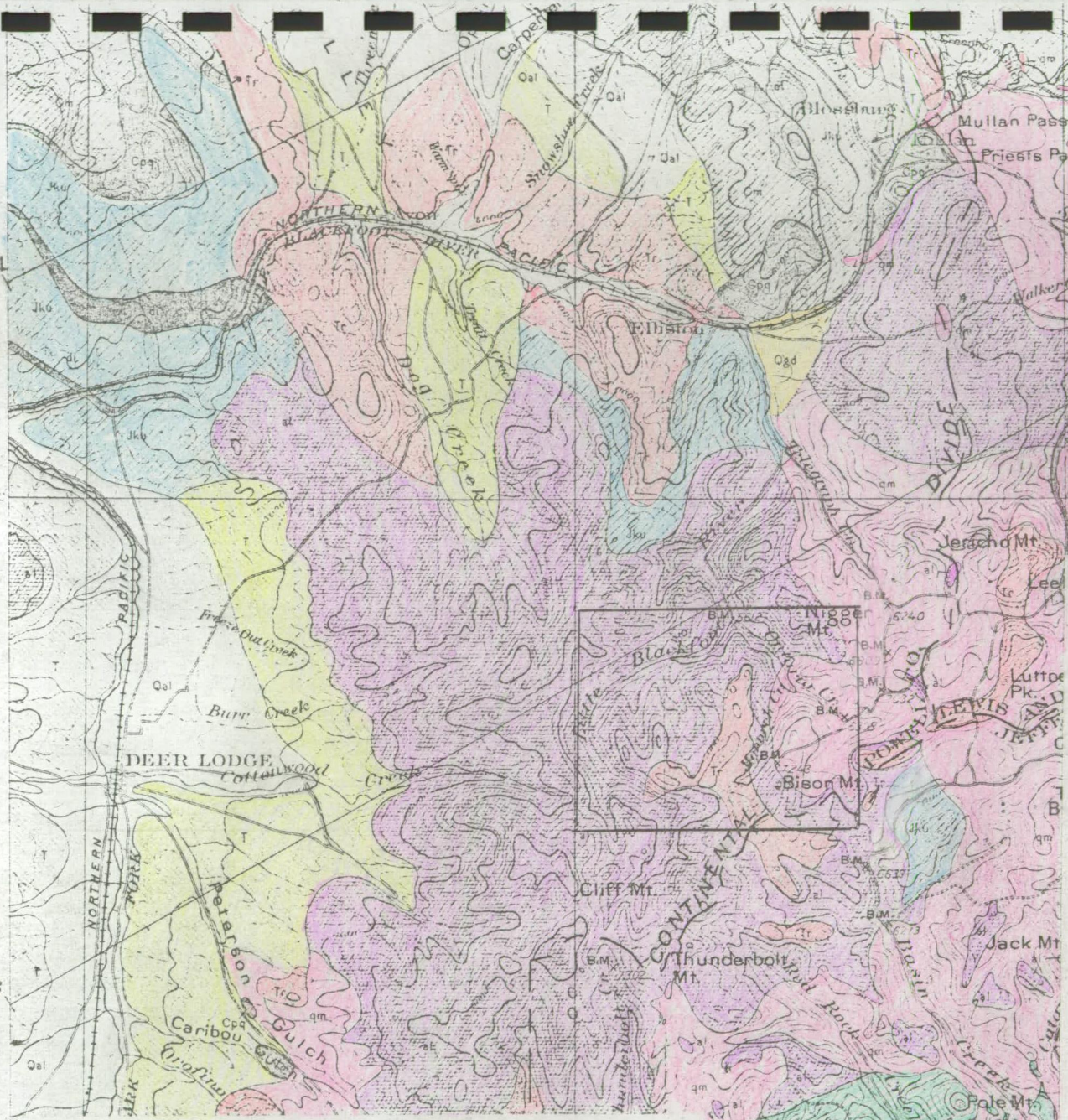
RECEIVED
MAY 24 1971
O. M. E.
SPOKANE, WASH.

RECEIVED
MAY 24 1971
O. M. E.
SPOKANE, WASH.

RECONNAISSANCE REPORT

Wolverine Mine
Sections 19 & 20
Twp. 8 N., R. 6W.
Powell County, Montana
by

Virgil R. Chamberlain May, 1971



GEOLOGIC MAP
WOLVERINE MINE AREA
Powell, Jefferson, and Lewis and Clark Co.
Montana

Scale 1" = 20,400'

Note. This map is portion of Plate 2 USGS Bul 842

Figure 1 General Areal Geology

LEGEND

Pleistocene and Recent
- Qal Alluvium
- Qgd Glacial drift

Tertiary
- T Chiefly clay, sand and gravel with some volcanic tuffs

Cretaceous - Jurassic
- JKu Undifferentiated shale, sandstone and limestone

Permian-Pennsylvanian
- Cpq Phosphoria formation and Quadrant quartzite

Mississippian
- Cm Madison limestone

Igneous Rocks

- Tb Basalt
- Tr Ryholite
- Tda Dacite
- qm Quartz monzonite including granodiorite and quartz diorite
- al Andesite and latite (chiefly flows)
- di Diorite and gabbro

RECONNAISSANCE REPORT

Wolverine Mine
Sections 19 & 20
Twp. 8 N., R. 6W.
Powell County, Montana.

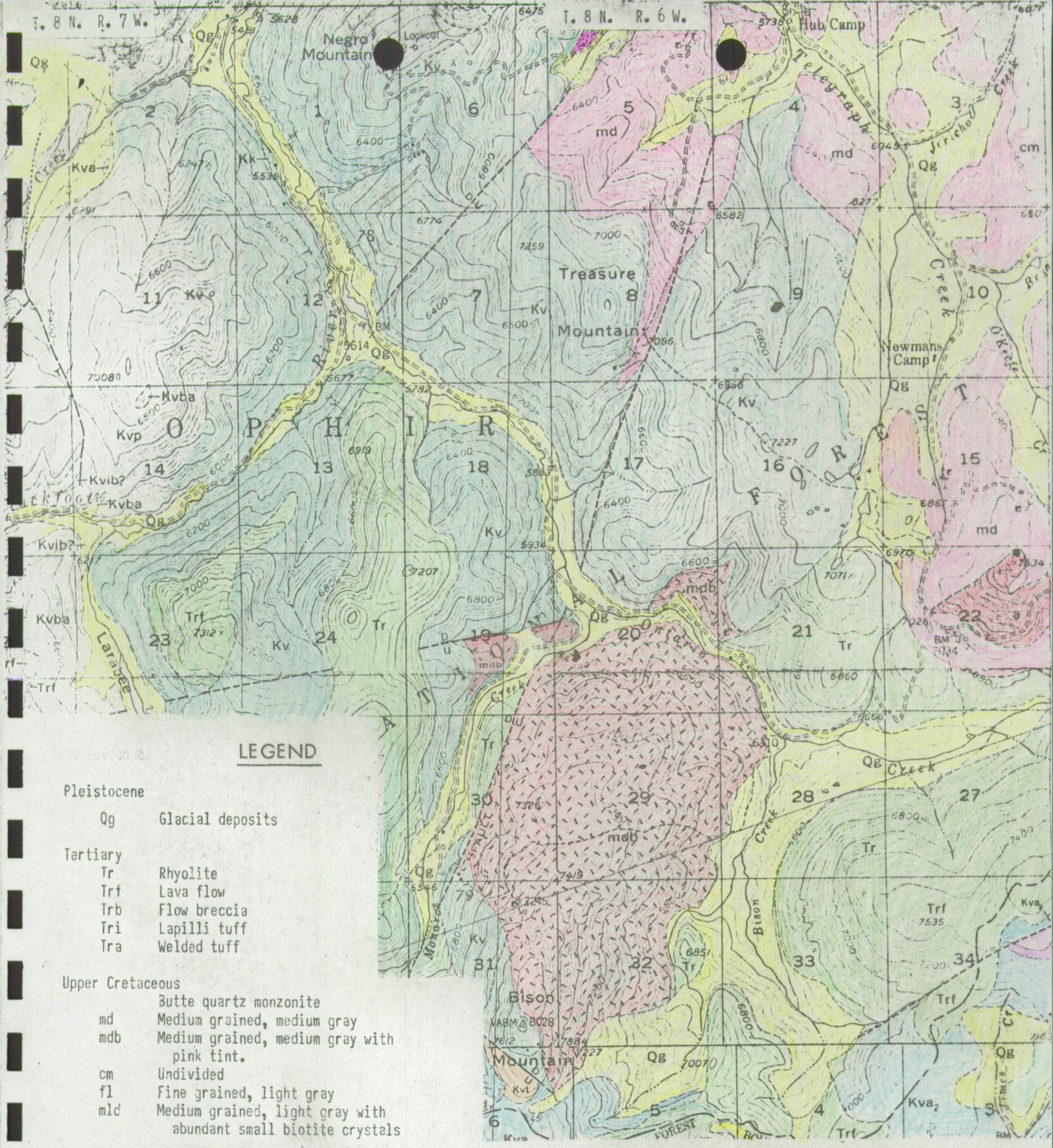
INTRODUCTION

The Wolverine mine lies within the Elliston Mining District, a part of the Greater Helena Mining Region on the northwest fringe of the Boulder Batholith. The mine lies about 11 miles south of the town of Elliston, not far from the junction of Ontario and Monarch creeks, tributaries to the Little Blackfoot river. Elliston lies west of Helena 23 miles on U. S. 12 and on one of the main Northern Pacific (Now Burlington-Northern) rail lines. A good gravel road traverses the Little Blackfoot valley and a good graded road leads into the Wolverine mine and claims.

The general geology of the area, the ore deposits, and some of the mines in the area, is given in the following U. S. Geological Survey Bulletins.

Bulletin 527, 1913 A. Knof. Ore deposits of the Helena Mining Region, Montana.
Bulletin 842, 1933 Pardee and Schrader. Metalifferous Deposits of the Greater Helena Mining Region, Montana.
Bulletin 1151, 1963. E. T. Ruppel. Geology of the Basin Quadrangle Jefferson, Lewis and Clark, and Powell Counties, Montana.

Accessible underground workings were mapped by the writer in January, 1966 and in early May of the same year. During both visits to the mine, much of the surface was covered with snow, so I have depended upon the material in the U. S. Geologicql Survey reports for the surface geology, but I am responsible for the sub surface geology of the workings as shown.



LEGEND

Pleistocene

Qg	Glacial deposits

Tertiary

Tr	Rhyolite
Trf	Lava flow
Trb	Flow breccia
Tri	Lapilli tuff
Tra	Welded tuff

Upper Cretaceous

Butte quartz monzonite

md	Medium grained, medium gray
mdb	Medium grained, medium gray with pink tint.
cm	Undivided
fl	Fine grained, light gray
mld	Medium grained, light gray with abundant small biotite crystals
g	Quartz monzonite - fine to medium grained dark gray.

Elkhorn Mountains volcanics

Quartz latite and andesite ; basalt provisionally included in formations

Kv	Undivided
Kvi	Intrusive andesite
Kva_2	Medium and light gray welded tuff
Kva_1	Dark gray and greenish gray welded tuff
Kvp	Tuff breccia

GEOLOGIC MAP
WOLVERINE MINE AREA
Powell County, Montana

Scale 1" = 4,000'

NOTE: This map is part of Plate I of USGS Bul 1151 and is used without corrections or modifications.

Figure 2 Geology of Area of Interest

This mining property consists of four (4) claims, the Babe, Gunner, Deb, and Lynn. The present workings are on the Gunner claim in 20-8N-6W, MPM.

GEOLOGY

The general geology of the area is shown on the accompanying maps. Figure 1, the smaller scale map, is a portion of a map included in Bulletin 842. This shows the general geology and lithology of the mine area and the surrounding region. Figure 2, is of the same general area, but on a larger scale and consequently, shows more detail on structure and rock types.

The valleys of both Monarch and Ontario Creek are filled with glacial gravels. The country rock is mainly a medium grained Butte Quartz monzonite, medium gray in color, with a slight pinkish tint. Mineralized zones are generally associated with fissures or shear zones transversing the monzonite, along the contacts with the monzonite and intruded rocks, or between the monzonite and flow rocks. Pardee and Schrader in their paper (U.S.G.S. Bul. 842 pg 266-267) describe two mines in this general area, namely the Monarch and the Ontario. The Monarch is reported to have operated extensively about 1894 and again in 1909. It is said to have produced about $1,000,000 worth of ore. Pardee and Schrader say of this mine "The development workings aggregate about a mile in length and include two tunnels, a shaft 350 feet deep and 3,000 feet of drifts. The ore deposits are in a vein located at or near the contact between quartz monzonite and andesite. The vein strikes east and dips steeply north, and in places is 20 feet or more wide. The wall rock is altered and contains specularite and disseminated grains of sulphides. The ore consists of galena, sphalerite, pyrite, arsenopyrite, chalcopyrite and tetrahedrite in

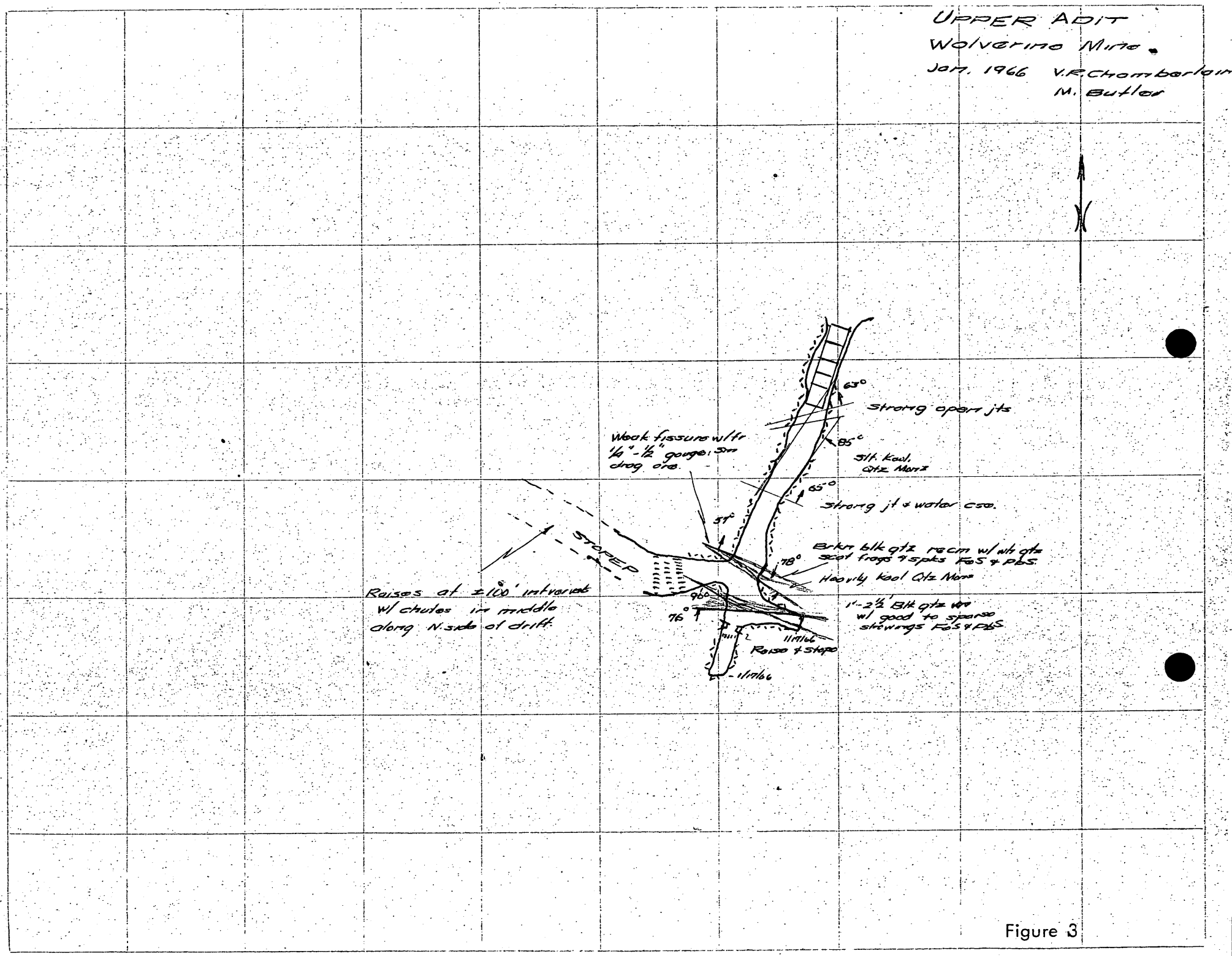

UPPER ADIT
Wolverine Mine
Jan. 1966 V.R. Chamberlain
M. Butler
N
63°
Strong open jts
85°
Slt. Kaol. Qtz Monz
65°
Strong jt & water cso.
Weak fissure w/fr 1/4"-1/2" gouge; Sm drag ore.
51°
STOPEP
Raises at ±100' intervals w/ chutes in middle along N. side of drift.
78°
Heavily Kaol Qtz Monz
96°
76°
1'-2 1/2' Blk qtz vein w/ good to sparse stringers FeS & PbS
11/17/66
Raise & Stope
11/17/66

Figure 3

a gangue of altered country rock and quartz." No mention is made of the gold and silver minerals although these were the minerals of value in the shipping ores of that time.

Of the Ontario mine the same authors state " The Ontario mine, near the head of Ontario Creek, is mentioned by Knoff, who visited the district in 1911, as having the reputation of being one of the largest producers in the district. It was developed by a tunnel 800 feet long, from which was sunk a shaft 320 feet deep. The country rock is granite, but ore as shown on the dumps consists of pyrite, sphalerite, and galena inclosed in quartz." Here again, no mention is made of the silver and gold content of the veins. It is my assumption that the silver values are probably associated with galena, and the gold values with pyrite and possibly with the galena. It is also possible that the values of these ores may have been enriched through oxidation and redeposition in a secondary zone of enrichment.

Geology of Wolverine Mine

The Gunner claim is being prospected by driving an adit slightly west of south into the hillside to intersect a vein previously worked by an upper adit and drift, approximately 110 feet above the new adit. Both of these workings were mapped by the writer in January, 1966 using a tape and Brunton compass. At the time of my visit the drift along the vein, westerly off the upper adit, was inaccessible. It could be seen that beyond the caved area, the vein had been extensively stoped with chutes off the drift at approximately 100 foot intervals. It is reported that a winze had been sunk in ore at the end of this drift, but this could not be ascertained because of cave and "heavy" ground.

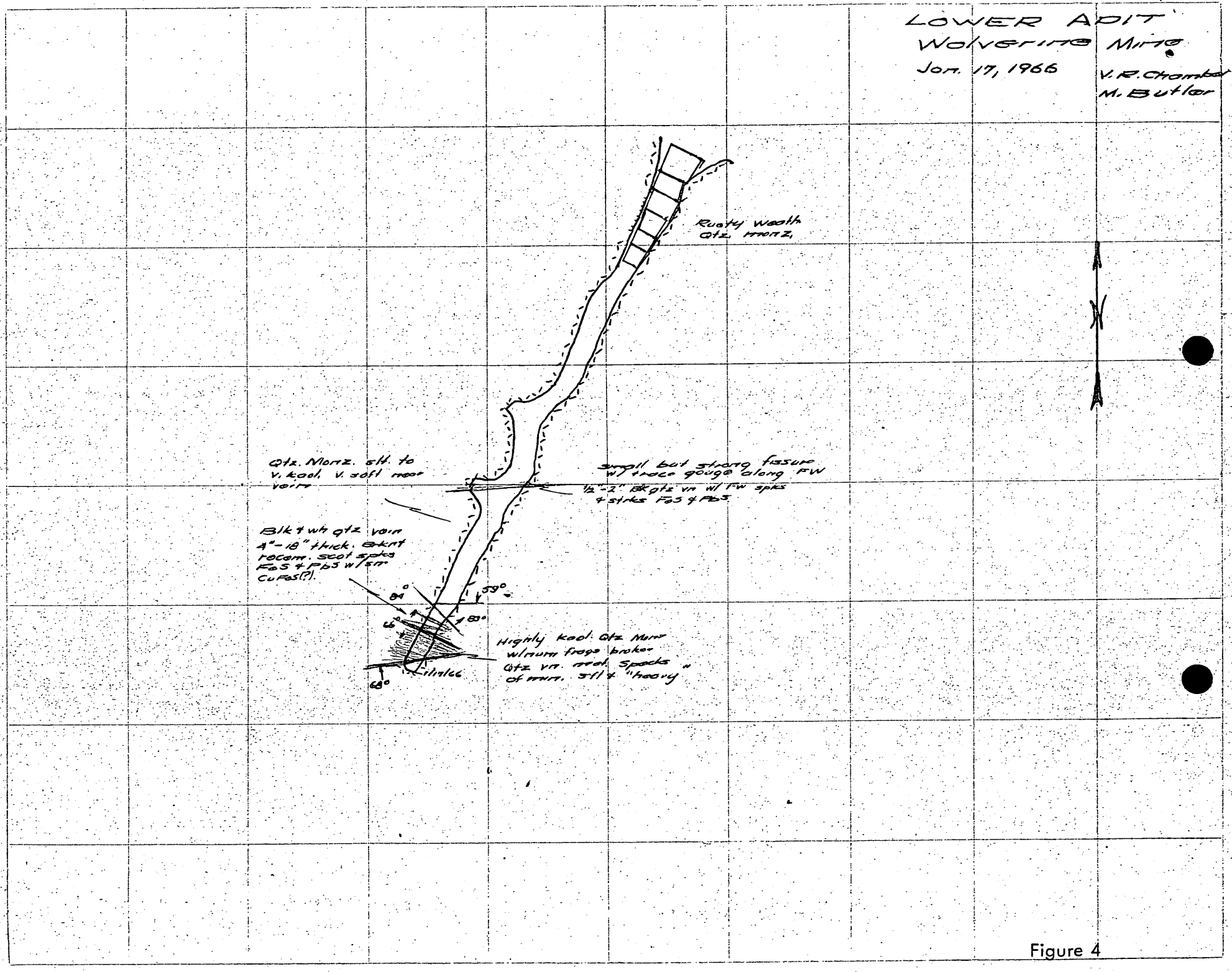

LOWER ADIT
Wolverine Mine
Jan. 17, 1966
V. R. Chamberlain
M. Butler
Rusty Weath Qtz. Monz.
Qtz. Monz. slt. to v. kaol. v. soft near vein
small but strong fissure w/ trace gouge along FW
1/2"-2" Bk qtz vn w/ FW spks & stks FeS & PbS
Blk & wh qtz vein 4"-18" thick. Bkrnt recom. scat spks FeS & PbS w/ sm. CuFeS(?).
84°
59°
80°
66°
68°
Highly kaol. Qtz Monz w/num frags broken Qtz vn. rnd. Specks of min. sfl & "heavy"

Figure 4

Both adits were mapped on the scale of 1" -- 40' and are included as Figures 3 and 4 of this report.

Figure 3 is of the Upper Adit. This adit begins in quartz monzonite and was driven in south approximately 125 feet through the vein. At a distance of approximately 90' from the portal a drift was driven in west along the vein. It would appear that raises were then driven off this drift to develop the ore. At a distance of 100' from the portal, a drift was driven to the east about 25 feet where it would appear to have run out of ore.

The veins appear to follow shear zones which have been infilled with gray to black quartz. Iron pyrite and galena were the only sulphides noted with the quartz. Where the lower adit intersects the mineralized shear zone the footwall and hanging wall veins are narrow, but from the appearance of the caved workings the mining width must have been considerably more (+15 ft) in the stoped area.

The lower adit has been driven south a distance of approximately 200 feet at the time of my mapping. I understand that since my visit the adit was driven on through the entire shear zone into firm country rock on the other side of the shear. In this adit a small vein was encountered at a distance of approximately 125 feet from the portal, and another vein in the main shear zone at about 180 feet from the portal. The adit crosses through quartz monzonite which is quite chalky in the mineralized area. The veins are composed of a white and dark gray quartz gangue with pyrite and galena again being the dominant sulfides. The vein material within the shear zone from 180-200 feet from the portal is very broken and contains much broken quartz vein material.

COMPOSITE PLAN VIEW
Upper and Lower Adit s of Wolverine
Scale 1" = 40'

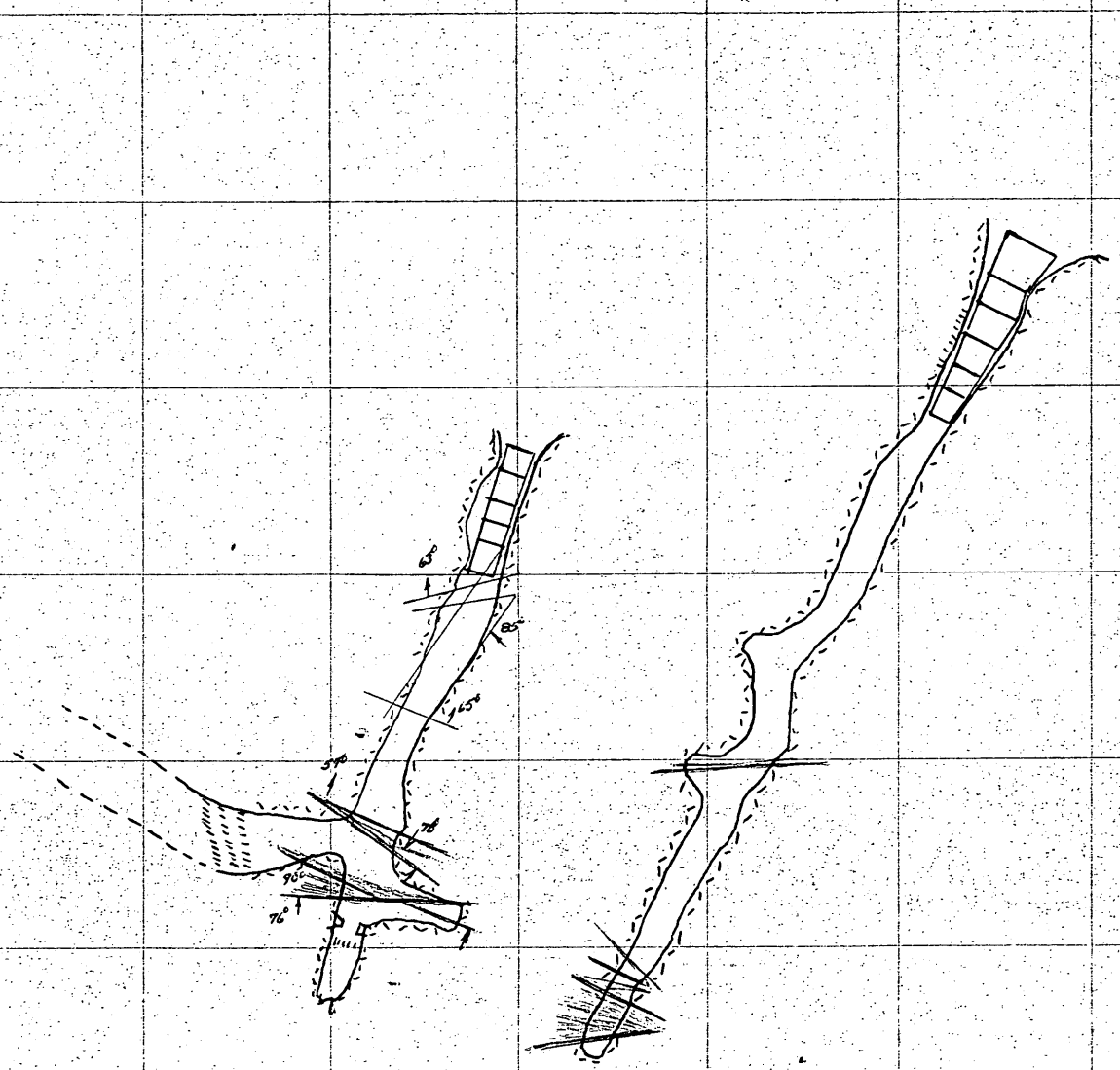


Figure 5

No development off the adit had been done at the time of my mapping.

To better understand the vein association a composite plan map was constructed and a cross section through the vein and a longitudinal section along the vein were made. These are shown as Figures 5,6,7. The composite plan of the upper and lower adits is shown in Figure 5. At first glance it would appear that the vein would have to have a near vertical dip, which it does in part. The workings would also indicate a rake to the mineralized area to the east.

Figure 6 is a Cross Section through the adits or at roughly right angles to the plane of the vein. It is unfortunate that some of the raises and stopes inthe mined out area could not be examined. As drawn this section indicates the vein to be cut and displaced by the faults. If the workings above the drift in the Upper Adit could be mapped, it would be possible to obtain the amount of displacement. As the chutes and raises were all on the north side of the adit. This would indicate that the ore to the north of the drift or had a southerly dip. As mapped, the mined out area could have been in ore above the fault and probably on the downthrown side of the fault.

A Longitudinal Section in the plane of the vein was also made. This section is hypothetical as the length of the drift, and amount of workings and the winze could not be mapped at the time of examination. The winze shown at the end of the drift is shown to the depth reported. It was also reported that the winze ran out of ore. This information, plus the correlation of the workings in the plan view of the two adits would indicate the ore body had a decided rake to the east. If this is the case, then drifting westward along the mineralized shear zone should encounter mineable ore.

Cross Section
Through Upper and Lower Adits

Scale 1" = 40'

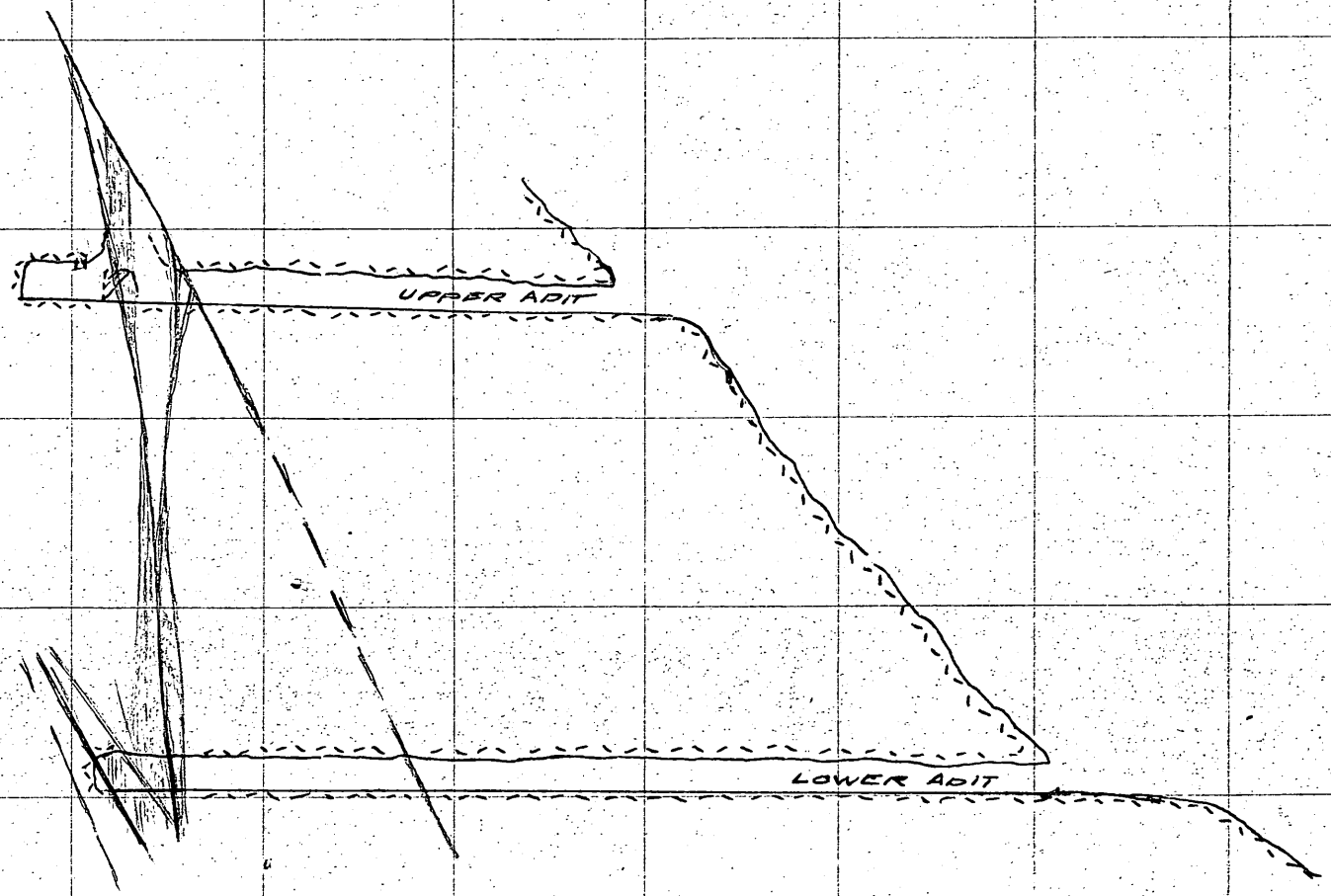


Figure 6

ORE SHIPMENTS

One of the most striking things about these workings is the lack of "Waste dumps" compared with the amount of workings. There does not appear to be any record of shipments made to the old Timber Butte Mill, or to the Washoe Samplers, both in Butte, Montana. I have enclosed data on shipments and the shippers for the Wolverine Mine beginning in 1905. This data is included as an appendage to this report. The amount would indicate amounts taken by a person having the mine leased and surely is not indicative of the rock shipped from the stoped area above the Upper adit. The assays of the shipments do not show any consistency of ratio of lead to silver content as the ratios vary from 1 oz Ag/1% Pb to 12.7 oz Ag/1% Pb. The assays definitely show that silver was the principle ore mineral, and that the operations in the late 19th century probably ceased with the drop in the silver market in the 1890's. The last shipment of record showed a marked increase in gold over most of the other shipments.

CONCLUSIONS & RECOMMENDATIONS

The Wolverine Mine, and the adjoining claims have a good production potential. As there is a disproportionate amount of waste dump material for the amount of underground excavation one can only draw the conclusion that most of the rock broken was shipped. The longitudinal section as well as the plan view of the upper and lower adits indicates a decided rake to the orebody. From the data on hand this direction would appear to be to the east. If this is the case, drifting westerly along the vein structure of the lower adit should develop commercial ore.

At the time of my examination of the property much of the area was covered

LONGITUDINAL SECTION
Plane of vein
Looking southerly

Scale 1" = 40'

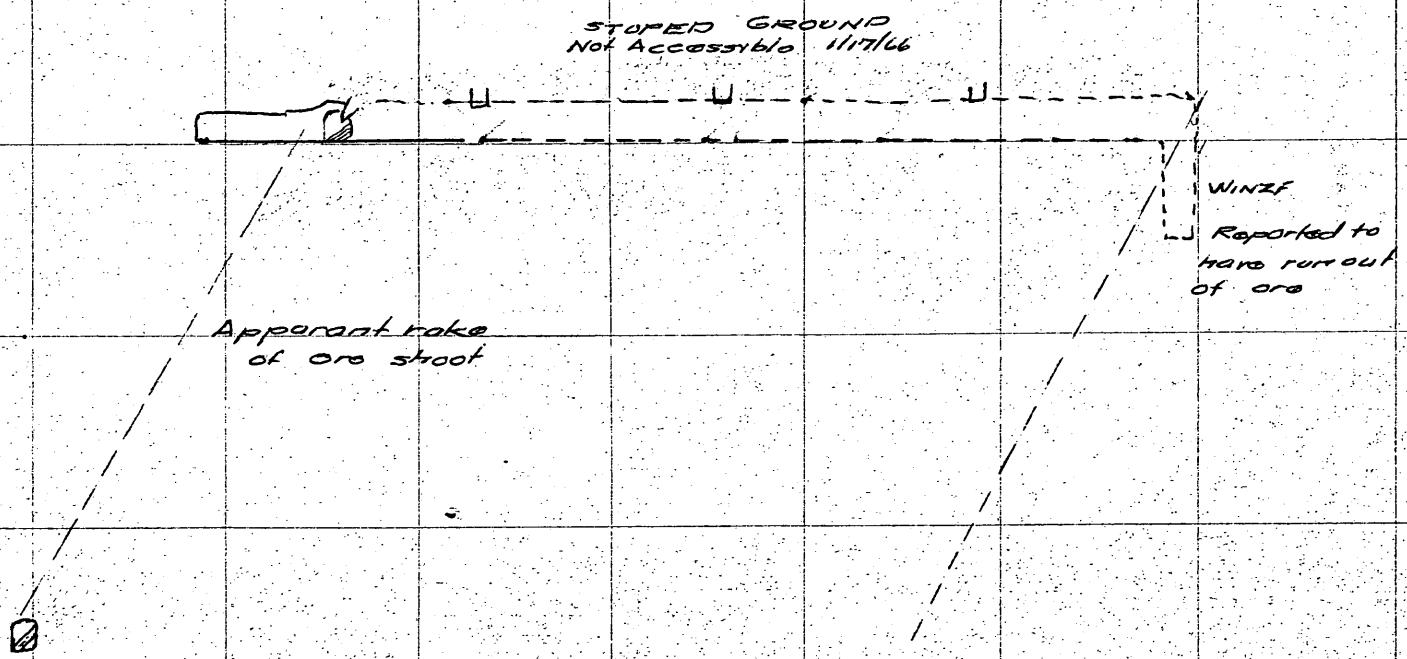


Figure 7

with snow. There is also considerable timber and bush covering the slopes. In spite of these inherent difficulties an attempt should be made to map all surface workings, and mineral occurrences. Dips and strikes of both the fissures and veins are needed to supplant the lack of information in the stoped area. The surface expression of all faults should also be mapped. Once this is done, cross sections can be constructed through the claims which will show the known veins and structures, the position of the veins with depth, as well as possible new and as yet unexplored mineralized areas. The areal geology map shows at least two strong faults in this general area, and several thousands of feet of contacts that should be explored.

A diamond core hole program should be considered for sometime in the future. Diamond drilling is expensive as is all mining, but particularly so if one does not have all data possible on what is to be expected. An intelligent exploration program of this type should await completion of all surface and sub-surface mapping.

Some of the mines and many of the dumps in the near by Rimini district were radio-active. The dumps from the Wolverine were not tested for radio active material, by me. However, if they should be even mildly radio-active, a scintalometer could be used in mapping mineralized zones concealed by overburden. Soil sampling (Geochemical prospecting) might also be used at some time in the future, and possibly an I.P. (Induced Polarization) survey might be applicable.

However, for the immediate future I believe that a drift should be driven westerly along the fissure to prospect for an extension of the ore shoot mined from the upper adit. Should this ore body be present minable ore could readily be blocked out, mined and

shipped. Money from such a source could be used for additional equipment and to help defray exploration costs. It would also be wise to drift eastward along this vein.

This prospect appears to have good potential. Proper exploration and development should make the mine operational with a relatively low capital expense.

Respectfully submitted,

Virgil R. Chamberlain
Geological Engineer

The following is a record of shipments from the Wolverine mine to the American smelting and Refining Company, East Helena, Montana and can be verified at the Smelter in East Helena, montana.

Shipper;	Morris	June 28, 1905	48.22 Tons
Gold	0.02		
Silver	77.0		
Lead	11.5		
Shipper	Geo. Wilson	May 31, 1905	89.11 Tons
Gold	0.90		
Silver	103.3		
Lead	36.3		
Shipper	G. Boulman	April 9, 1909	14077 lbs
Gold	0.08		
Silver	21.7		
Lead	20.4		
Shipper	Otto Christopherson	January 19, 1914	34.38 Tons
Gold	0.10		
Silver	354.4		
Lead	39.8		
Shipper	Otto Christopherson	December 8, 1915	15.62 Tons
Gold	0.22		
Silver	214.7		
Lead	46.6		
Shipper	Geo. Wilson	July 18, 1924	9.74 Tons
Gold	1.53		
Silver	128.2		
Lead	10.1		

Records of shipments made to the Timber Butte Mill in Butte, Montana and Washoe Samplers, Butte, Montana are not available to this Company.

United States Department of the Interior

GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION
656 U. S. Court House
W. 920 Riverside Ave.
Spokane, Wash. 99201

COPY
O. M. E.
RECEIVED
MAY 19 1971
INITIALS | CODE

May 17, 1971

Memorandum

To : Chief, OME

From : Field Officer, Region I

Subject: New application (Gold-silver)
Merlyn and Bernice Butler
Wolverine mine
Powell County, Montana

Enclosed is an application from Mr. Merlyn Butler, 2711 Miles Ave., Billings, Montana 59102. Yet to be included in the application are a geological report and bids for contracting underground work.

Mr. Butler has visited my office several times for assistance in preparing his application. I'm favorably impressed with his cost analysis.

The proposed exploration will drift along a vein from which former efforts produced are worth $55,000.00 (90 tons). Recent work extended an adit crosscut to the vein. Lack of a geologic report prohibits a meaningful appraisal of the proposed work. The property is a few hundred feet west of Basin quadrangle, described by Ed Ruppel in USGS Bulletin 1151.

I'm forwarding this application now, rather than waiting for the geologic report and contract bids, in hope of expediting action for there does seem to be a fair possibility that I can recommend an OME contract.

Enclosure

Willard P. Puffett

Willard P. Puffett

Budget Bureau No. 42-R1368
Approval expires Dec. 1971

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Pursuant to Public Law 85-701 (72 Stat. 700; 30 U.S.C. 641)

NAME OF APPLICANT *(Full legal name and mailing address as they should appear on contract if one is executed.)*

Merlyn M & Bernice Butler
2711 Miles Avenue
Billings, Montana 59102

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6849
DATE RECEIVED: 5-19-71
REGION: I
DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

- INDIVIDUAL [X]
- CORPORATION [ ]
- PARTNERSHIP [ ]
- OTHER *(Specify)* [ ]

STATE IN WHICH FIRM IS ORGANIZED:

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Merlyn M. Butler Bernice Butler	2711 Miles Ave. Billings, Montana 59102	Owners

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: Gold Silver Lead

ESTIMATED COST OF PROJECT: 25,075.00

PROPERTY NAME	LOCATION COUNTY	STATE
Wolverine Mine	Powell	Montana

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. II). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit two copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Department of the Interior, U.S. Geological Survey, Office of Minerals Exploration, Washington, D. C., 20242, or with the nearest OME Field Office.*

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief, and that he would not ordinarily undertake the proposed exploration under current conditions and circumstances at his sole expense.

May 7, 1971
DATED

Merlyn M Butler
BY *(Signature)*

owner
TITLE

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include (1) true copies of your letters to credit sources which show date of loan request, amount and terms requested, and proposed use of loan funds and (2) true copies of replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

(b) List names and addresses of affiliated, parent, or controlling companies or organizations and state extent and nature of their interest.

(c) State how you propose to furnish your share of the cost of the exploration work.

2. Applicant's Rights in Land:

(a) State your interest in the land and mineral rights, whether owner, lessee, purchaser under contract, or other. If you are not the owner, submit one true copy of the lease, contract, or other document (with address of owner) under which you control the property. Describe all liens, mortgages, or other encumbrances on the land and state book and page number and official place where recorded.

(b) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all adjacent land which you own or control. Describe any part of the land or workings which should not be subject to Government royalty and liens. If the land consists of unpatented claims, state book and page number for each recorded location notice, including amended locations, and official place where recorded. State all the names by which you know the property.

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements signed by owner on MME Form 52. If the agreements cannot be obtained, state reasons and whether you can furnish a performance bond.

3. Physical Description:

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the land. Include existing mine workings and all production facilities.

(b) State your interest, if any, in operations described in (a)

(c) State, if you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves, giving quantities and grades.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) If you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates. State your reasons for expecting to find ore.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you have, indicating whether you require their return.

4. Accessibility of Property:

(a) To aid the OME representative who may examine the property state name, address, and telephone number of person who will meet him; give directions for reaching the property; and describe accessibility of property and of any mine workings.

(b) Name the shipping and supply points and state the distances to the property.

5. Exploration Work:

(a) Describe fully the proposed exploration work giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

(b) If an access road must be built, show the proposed location on the property map and state the length, type and construction methods proposed.

(c) If an OME contract is executed, state how soon thereafter work would be started and finished. State your anticipated average daily or monthly rate of progress for each type of work.

6. Experience:

State your operating experience and background to conduct this exploration work and also that of the person who will supervise the work.

7. Estimate of Costs:

Furnish detailed estimates of the necessary costs for time and materials *for each item of the work proposed in 5(a)* under the headings listed below with a total for each heading and the estimated total cost of the work. Costs for any work to be performed by an independent contractor should be listed separately under category (a) below. Costs for any work that is not to be performed by an independent contractor should be listed under categories (b) through (g).

(a) Independent contracts. State the total cost of any proposed independent contract for all or any part of the work, and the number of units and the unit cost for each type of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, or per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. (*Note*—If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. The cost of supervision, engineering and geological services, outside consultants, and labor should be itemized by numbers and classes of employees; rates of wages, salaries or fees; and periods of employment. State whether these services are available.

(c) Operating materials and supplies. List items of material and supplies giving quantity and price of each. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of equipment and tools costing $50 or more per unit. Give specifications and indicate how each item is to be acquired—i. e., rented, purchased or provided by the applicant. If rented or purchased, state the estimated rental or purchase price. If furnished by the applicant, state condition and present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant which will be used in the exploration work.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration work, stating specifications and cost including labor, materials, and supervision.

(g) Miscellaneous. Describe the type and estimate the cost of repairs and maintenance of the operating equipment listed in 7(d). Do not repeat initial repairs listed in 7(e). Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories. [*Note*—The Government will not contribute to costs incurred before the date of the contract, or to costs of or incident to: (1) acquiring, using, or possessing land and any existing improvements, facilities, buildings, installations, and appurtenances, or the depreciation and depletion thereof; (2) general overhead, corporate management, interest and taxes (other than payroll and sales taxes); (3) insurance (other than employees' liability insurance); and (4) damages to persons or property (other than authorized repair to or replacement of equipment or other property used in the work).]

U. S. Department of the Interior
Geological Survey

Office of Minerals Exploration

Legal description of the property to be explored: Gunner Lode Mining Claim, County of Powell, State of Montana, recorded in ~~Book~~ Vol No. 6 Page No. 135, located to wit: NW¼ section 20 and NE¼ section 19 Township 8N Range 7W, MPM.

We, Merlyn M. Butler and Bernice E. Butler, husband and wife, are the sole owners of the property. We will furnish our share of cost in cash.

Description of pertinent geology of the property: Refer to Geology Survey Bulletin 1151 dated 1963. Also refer to attached report by Virgil Chamberlain, Geologist, Great Falls, Montana.

Reasons for expecting to find ore: Early workings on the upper portions of the vein. There was a large tonnage of ore removed from stopes on an ore ~~chute~~ shoot about 300 feet in length. The ore lying on the foot wall from two to five feet in width. Partial smelting returns shipped between 1905 and 1924 by different operators to AS&R Smelter, East Helena, Montana, showed a gross return of approximately $55,000.00 for 90 tons of ore. Other shipments were made to Timber Butte Mill, Butte, Montana, and various other mills throughout the Montana mining district. No record of these returns is any longer available.

Proposed exploration: A cross cut tunnel to the vein was started in 1967 and has been completed to the east end of the ore chute. The proposed exploration will now be to run drifts west along the vein under the old workings and easterly along the strike of the vein.

Cost and estimates:

Cost per foot	$62.86	550 foot drift	$34,573.00
Total cost to run 550 feet is		34,573.00	
Exploration Loan Request at 75% is		25,929.75	
Portion to be paid by me is		8,643.25	

My portion is to be paid by cash.

Compressor: $6.69 per foot

A compressor capable of producing 250 CFM will be required at a lease cost of $440.00 per month, 22 working days per month.

Compressor cost per day	$20.00
Fuel requirement - 30 gal. per day	6.00
1 quart motor oil per day	.40
1 quart Almo oil (Drill oil)	.38
Total Compressor cost per round	$26.78

Spikes. .26 per foot

$26.00 per CWT, 36 per foot required = 26¢ per foot.

Rail. 1.15 per foot

$184.00 per ton ÷ 20 lb rail = 6.33 1/3 per ft. or 12.67 per tunnel foot

12.67 x 550 feet = 6,969 lb. or approximately 3½ ton at $180.00 per ton (not delivered)

Total rail cost $630.00

Fish plates .18 per foot

1.80 per set = 3.60 per 20 feet

Nuts and Bolts .10 per foot

8 nuts and bolts and washers per 20 feet at 25¢ each = $2.00

Powder:	3.33 per foot	$40.00 per CWT delivered to mine. Three rounds per CWT or 12 feet per CWT.
Fuze and Caps:	46¢ per foot	12 caps at 50¢ .50 66 Foot fuze $1.32 (in 3,000' rolls) $1.82

Labor: $31/27 per foot - Two contract underground miners at $17.00 per foot.

1 days pay outside man at $25.00 per day
converted to foot cost = 25' per week $125.00 per week
= $5.00 per foot cost.

Supervision = Engineer's cost $100.00 per day - 4 days per month = $400.00 per month. At 25 feet per week it will take approximately 22 weeks this job = 4½ months ÷ Engineer cost of $1,800.00 or $3.27 per foot. Mine supervisor $600.00 per month = $6.00 per foot.

SEC and Insurance	$5.05 per foot	15.5% of wages = $4.85 per foot
Bookkeeping	.50 per foot	100 ft per month = $50.00
Timber, Lagging and Ties	$10.20 per foot	Timber - Inside timbered dimensions 7'x5' spacing, 2 each 8"x8" post 7' long = 84.66 board feet 1 each 8" x 8" Cap 5½' long 29.31 board feet 1 each 6" x 8" sill 6' long = 24 board feet Lagging 6' long 3" material = 342 board feet 2 each Gurts 4" x 4" x 5' = 13 board feet 2 each Ties 6" x 8" x 3' 500.97 Lumber $100.00 per M = 501 board feet =$51.00

Steel and Drill Maintenance	.85	Steel sharpening at $14.00 each
		132 feet of hole per sharpening
		Replacement Drill Steel $60.00.
		Drill Chuck Replacement $35.00
		Seals, pins and other small replacement parts $10.00
		Many intangables are involved
		with the per foot cost on steel.
		The life can be 10,000 fee or
		1,000 feet before breakage, etc.
Fan Line 8"	.50 per foot	
Air Line Fan	.36 per foot	
Water and Air Pipes (blank steel)	$1.16	.68½ per foot on 2" air pipe
		.32½ per foot on 1" water pipe
Air valve	.15 per foot	1 air valve every 100' = $15.00
		.023 per foot Union 2" = one per 100' = $ 2.30
		Union 1" - one per 100' = $1.10
		.021 per ft. Tee's 2" - one per 100' = $2.05
		.008 per ft. Tees 1" one per 100' = $ .75
		.007 per ft. Couplings 2" = 14 each 5 req. = $ .70
		.007 per ft Couplings 1" 14 each 5 req. = $ .70
		.009 per ft. Nipple 2" Close = $ .92
		..003 per ft. Nipple 1" close .34
		.05 per ft. 1" gate valve $4.99
		$1.16 per foot

Miscellaneous	$1.00	Assays as required and contingencies. Virgil Chamberlain has been retained as consultant until completion of contract.

Accessibility to the Property.

To aid OME representative who may examine the property, contact

Mr. William M. Butler
1090 Sun Valley Road
Helena, Montana 59601

Phone 458-5733

Or

Mr. Merlyn M. Butler
2711 Miles Avenue
Billings, Montana 59102

Phone 656-5579

Transportation is available to the site all year. If necessary, snowmobiles are on hand for winter travel.

The following is a record of shipments from the Wolverine mine to the American Smelting and Refining Company, East Helena, Montana and can be verified at the Smelter in East Helena, Montana.

Shipper:	Morris	June 28, 1905	48.22 Tons
	Assay		
Gold	0.02		
Silver	77.0		
Lead	11.5		
Shipper	Geo. Wilson	May 31, 1905	89.11 Tons
Gold	0.96		
Silver	103.3		
Lead	36.3		
Shipper	G. Boulman	April 9, 1909	14077 lbs
Gold	0.08		
Silver	21.7		
Lead	20.4		
Shipper	Otto Christopherson	January 19, 1914	34.38 Tons
Gold	0.10		
Silver	354.4		
Lead	39.8		
Shipper	Otto Christopherson	December 8, 1915	15.62 Tons
Gold	0.22		
Silver	214.7		
Lead	46.6		
Shipper	Geo. Wilson	July 18, 1924	9.74 Tons
Gold	1.53		
Silver	128.2		
Lead	10.1		

Records of shipments made to the Timber Butte Mill in Butte, Montana and Washoe Samplers, Butte, Montana are not available to this Company.

COMMERCE BANK & Trust Company

P. O. BOX 1732 / (406) 442-1850 / HELENA, MONT. 59601

January 22, 1971

Mr. Merlyn M. Butler
2711 Miles Avenue
Billings, Montana

Dear Mr. Butler;

With regard to your application for a loan in the amount of $25,000.00, I have presented your application to the loan committee and it was the consensus of the loan committee that we would not be able to make this loan to you.

Thank you very much for letting us consider your application and perhaps at some later date we might be able to be of service to you.

Very truly yours,

John C. Waeckerlin

John C. Waeckerlin
Vice President & Cashier

JCW/cr

A FULL SERVICE BANK

January 5, 1971

Commerce Bank & Trust Co.
500 N. Main St.,
Helena, Montana 59601

Gentlemen:

I am undertaking a mining venture on my lead and silver properties in the Elliston Mining District NW$\frac{1}{4}$ Section, NE$\frac{1}{4}$ Section 19, T8N R7W.

I need $25,000.00 to start and do the work required. This money is to extend my present workings 400 feet on the vein I am now on. Also additional equipment is required to do this work. I will be acquiring a compressor and a mucking machine for an approximate cost of $5,000.00.

I can put up my mining claims and existing equipment for security. These are four mining claims and equipment listed below:

1. Gardener Denver Compressor
2. Gardener Denver Drill & Leg
3. Ingersol Rand Drill
4. Buzzey Stoper Drill
5. 200 feet of 12 lb rail
6. Ore Car
7. Assorted equipment such as air, water lines, etc.

It would be my intention to make repayment to you out of smelter receipts.

Thank you for your consideration.

Merlyn Butler

Merlyn Butler

FIRST Security BANK of Helena

P. O. BOX 218 HELENA, MONTANA 59601

January 22, 1971

Merlyn M. Butler
2711 Miles Avenue
Billings, Montana 59102

Dear Mr. Butler:

Thank you for your letter of January 5, 1971. At the present time our Bank is unable to provide funds for your mining venture. We find that at the present time we have a larger demand in other loaning fields.

Very truly yours,

Thomas E. Kirwin
Vice-President

January 5, 1971

First Security Bank of Helena
1721 11th Avenue.
Helena, Montana 59601

Gentlemen:

I am undertaking a mining venture on my lead and silver properties in the Elliston Mining District NW¼ Section 20, NE¼ Section 19, T8N R7W.

I need $25,000.00 to start and do the work required. THis money is to extend my present workings 400 feet on the vein I am now on. Also additional equipment is required to do this work. I will be acquiring a compressor and a mucking machine for an approximate cost of $5,000.00.

I can put up my mining claims and existing equipment for security. These are 4 mining claims and equipment listed below:

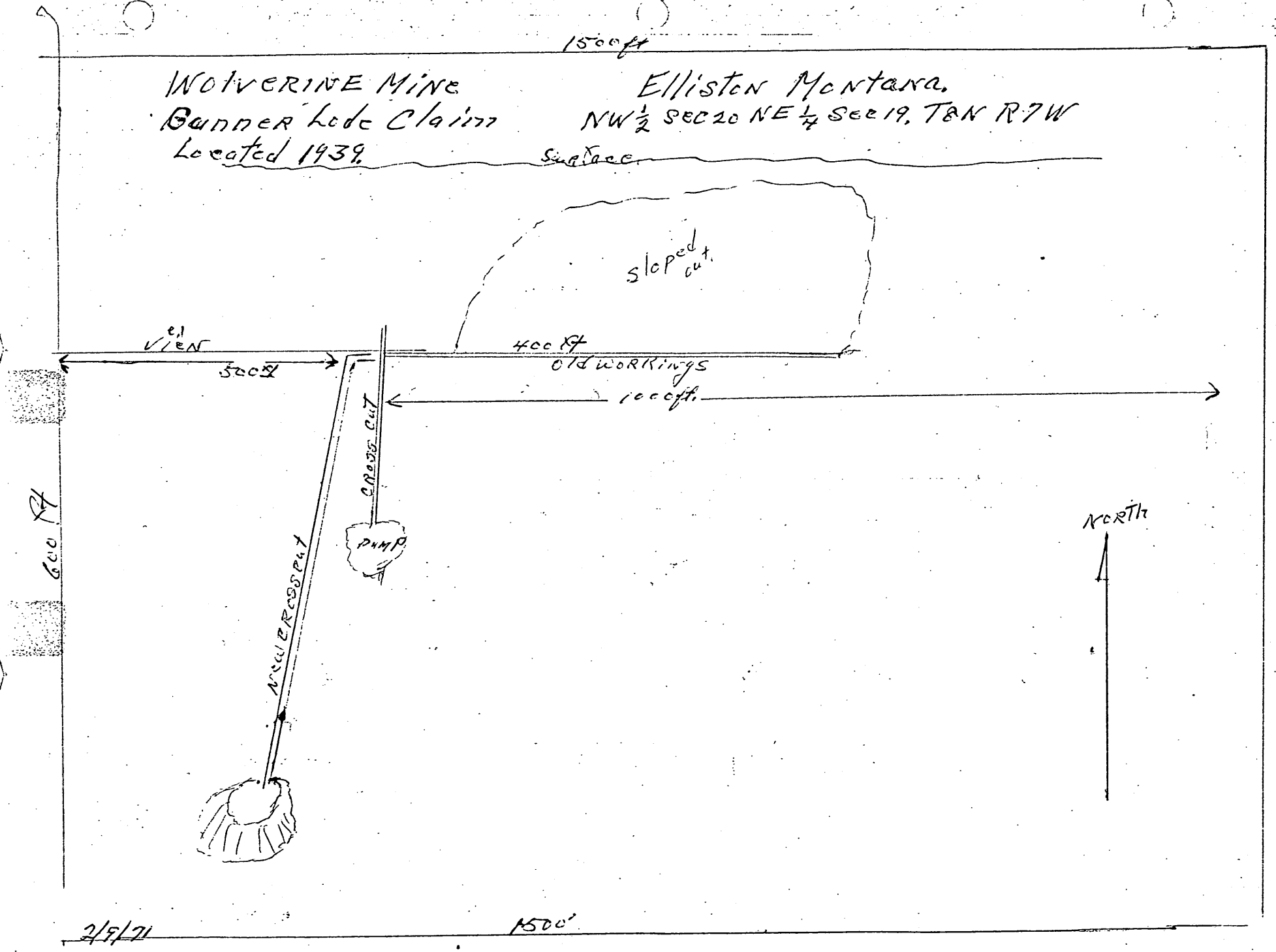
1. Gardener Denver Compressor
2. Gardener Denver Drill & Leg
3. Ingersol Rand Drill
4. Buzzey Stoper Drill
5. 200 feet of 12 lb rail
6. Ore Car
7. Assorted equipment such as air, water lines, etc.

It would be my intention to make repayment to you out of smelter receipts.

Thank you for your consideration.

Merlyn Butler

Merlyn Butler


1500 ft
WOLVERINE MINE
Banner Lode Claim
Located 1939.
Elliston Montana.
NW ½ SEC 20 NE ¼ SEC 19, T8N R7W
Surface
sloped cut
vein
500 ft
400 ft
old workings
1000 ft.
cross cut
pump
600 ft
North
2/5/71
1500'

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/6/71	Kirkemo	120
7/7	WPM	
		120M

AIRMAIL

JUL 7 1971

Mr. Merlyn M. Butler
1090 Sun Valley Road
Helena, Montana 59601

Re: OME-6849 (Silver-Gold)
Merlyn M. & Bernice Butler
Wolverine Mine
Powell County, Montana

Dear Mr. Butler:

Careful study of your application for financial assistance in exploring the referenced property and of other information available to us indicates that the probability of disclosing significant silver and gold ore reserves is not sufficiently promising to justify Government participation in the proposed exploration. Accordingly, we regret to inform you that your application is denied.

We wish to thank you for your interest in the minerals exploration program.

Sincerely yours,

Harold Kirkemo
gla

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's reading file
Mineral Resources
OME reading file
Region I
Mr. Kirkemo
130

HKirkemo/cac 7-6-71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code

July 6, 1971

Memorandum

To: The File

From: Chief, Office of Minerals Exploration

Subject: OME-6849 (Silver-Gold)
Merlyn M. and Bernice Butler
Wolverine Mine
Powell County, Montana

Justification for Denial of Application

The Applicant proposed to explore for gold, silver and lead ore shoots along a shear zone in or near a contact between quartz monzonite and younger volcanic rocks. About 550 feet of drift was planned on an adit level about 100 feet below older workings from which 90 tons of ore valued at approximately $55,000 had been shipped. Total cost of the proposed project was $25,075.

The Field Officer found no evidence for estimating the amount and grade of ore the Applicant expected to find by the proposed work. Though stoped areas above the upper level suggested that some ore had been mined, there were no shipment records to verify the production claims. A sample across the shear zone in the lower adit, which the Applicant considered to be high grade, assayed 0.01 ounce gold, trace silver, and nil lead. Material on the dump of the upper adit level contained lead and pyrite and little evidence of oxidation.

The Field Officer recommends denying the application because of the lack of evidence for projecting ore shoots to the level where exploration is proposed, sparse mineral content of the shear zone to be explored, and the improbability of enough ore being present between the two levels to warrant Government participation. I concur in this recommendation.

Harold Kirkemo

Harold Kirkemo

cc: Director's reading file
Mineral Resources
OME reading file
Region I
Mr. Kirkemo

HKirkemo/cac 7-6-71

United States Department of the Interior

GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION
656 U. S. Court House
Spokane, Wash., 99201

OFFICIAL COPY
JUL 2 1971

June 30, 1971

MEMORANDUM

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Application examination and recommendation
OME-6849 (Silver-gold)
Merlyn M. and Bernice Butler
Wolverine Mine
Powell County, Montana

INTRODUCTION

Mr. and Mrs. Butler have applied for OME assistance to explore the Wolverine Mine, about 11 miles south-southeast of Elliston, Montana, by drifting on a level about 100 feet lower than old inaccessible drifts. I examined the mine on Tuesday morning, June 15, 1971, in company with Mr. William M. Butler, father of Merlyn Butler, and inspected the accessible workings in the upper and lower adits, located a corner of the Gunner claim with respect to the lower adit portal, and collected two samples for assay. The examination took about two hours.

RECOMMENDATION

Irecommend that the application be denied. Most of the evidence about the former presence of ore in the old workings is hearsay and there are no maps, assay data, or production records that pinpoint the location or metallic content of ore that was mined. A drift about 42 feet long on the shear zone in the lower adit exposes only barren ground. Perhaps there were small, though rich, ore shoots near the surface and in the upper adit, but more evidence is needed to justify the Government participating in the proposed exploration.

ON-SITE EXAM. REPORT

APPLICANT

Merlyn M. and Bernice E. Butler, husband and wife
1090 Sun Valley Road
Helena, Montana 59601

Telephone: 406-458-5733

PROPERTY

Only one claim, the Gunner lode mining claim, is listed in the application. Other claims contiguous to the Gunner Lode owned by the applicant are the Deb, Lynn, and Babe, a placer claim (Fig. 1 - Composite plan, section, claim, and location maps, Wolverine mine, NW-1/4, Sec. 20, T. 8 N., R. 6 W., Powell County, Montana). The lode claims location notices are recorded in the Powell County courthouse, Deer Lodge, Montana as follows:

Claim	Book	Page
Gunner	7	629
Deb	9	427
Lynn	9	425

Merlyn M. Butler located the Lynn and Deb claims in 1964. Mr. Harry J. Schomberg located the Gunner claim on May 29, 1939. Mr. and Mrs. Merlyn Butler inherited the Gunner claim according to Mr. William Butler.

The application includes some production data from the Wolverine mine, which is presumably the name of the mine on the Gunner lode claim, that shows ore sold as early as June 28, 1905. I've searched our library unsuccessfully for some information about a Wolverine mine south of Elliston in Powell County, Montana. There are references to several other mines in the district but no reference to a mine near the confluence of Monarch and Ontario creeks.

The old mine was developed by surface work and by a drift from the upper adit crosscut (Fig. 1). Reportedly the drift followed the shear zone for 500 feet and from it a winze was sunk. There are many old ore chutes and obviously some material was stoped. A raise is in the upper adit crosscut near the intersection with the drift.

The applicant drove a crosscut to the shear zone in the lower adit in recent years and has drifted about 40 feet along the footwall of the shear zone (Fig. 1).

A compressor shed in fair shape is near the lower adit portal. Camp buildings on the Babe placer claim include a large cabin with bunkhouse for several people.

LOCATION AND ACCESSIBILITY

The lode mining claims are on a north-facing slope south of Ontario Creek and west of Monarch Creek in the NW-1/4 Sec. 20 and NE-1/4 Sec. 19, T. 8 N., R. 6 W. (application lists the property as being in R. 7 W.). One can reach the property from Elliston, Montana, by going south on the Little Blackfoot River road for 8.5 miles, then turn left and follow the Ontario Creek road for 2.5 miles. In good weather an ordinary passenger car can safely traverse the road to the camp. A steep road, requiring a truck or 4-wheel drive vehicle leads to the underground workings from the camp. Altitude at the camp is about 6,000 feet. The ground is generally snow-free from mid-May until November.

GEOLOGY

Ruppel (1963, Pl. I) shows the Wolverine mine area to be underlain by medium-grained Butte quartz monzonite near a faulted contact with Elkhorn Mountains volcanic rocks of Late Cretaceous age. Most of the underground workings are in fine-grained and siliceous rocks; I could not be certain if they are part of the volcanics or the monzonite. The ore minerals presumably occur in a shear zone 20-25 feet thick that is composed of chalky white rock (sheared monzonite?) with chloritic streaks. Perhaps the sheared rock marks the faulted contact between volcanic rock and quartz monzonite.

The applicant reports the presence of pyrite and galena in quartz gangue in the shear zone, but furnishes no details regarding thickness or grade of the ore. According to the shipping records, there was considerable silver in the ore. The applicant reports that the silver-lead ratio ranged from 1 ounce silver to one percent and up to 12.7 ounces silver to one percent lead. Perhaps the richer silver ore came from oxidized parts of the vein.

Ore samples in the dump near the upper portal included lead and pyrite, with little evidence of oxidation.

An OME sample across the face of the drift in the lower adit assayed 0.01 gold, trace silver, and nil lead. A sample of chloritic gouge, considered by Mr. Butler as being high-grade streak, assayed trace gold, trace silver, and nil lead. Pyrite is on some of the fractures in the drift.

According to the applicant, the ore shoots in the upper adit raked to the east. If this is true, the face of the drift in the lower adit should be in ore. However, the shear zone is about 25 feet thick, and the ore, if present, might be south of the drift.

APPLICANT'S PROPOSAL

The applicant proposes to drift 550 feet along the shear zone on the level of the lower adit. He calculates the cost per foot is $62.86 for timbered drift and $52.66 for untimbered drift. Total estimated cost of the work is $34,573.00. The applicant can furnish his share of the cost with cash.

APPRAISAL OF PROPOSAL

The Government's share of the proposed project is 75 percent of the total or $25,929.75. To be justified, the work should delineate reserves with a gross value of about $500,000.00 (20 x $25,000.00).

The total value of the recorded production, according to the applicant, is $55,000.00. Supposedly, records of ore shipped to the Timber Butte Mill and the Washoe Samples in Butte, Montana, are unavailable.

The total ore to be expected from the newly proposed work should have a gross value of about ten times that for which there is available records.

If there were ore shoots in the upper adit, then the applicant's proposal has merit. However, there is no basis for estimating the amount or grade of ore to be found.

CONCLUSIONS

The applicant's plan to explore by drifting along the shear zone in the lower level is justified if ore bodies were mined on the upper adit level. The reserves to be found will be somewhat limited for the interval between the upper and lower adit is only 100 feet. Perhaps sufficient ore can be found to repay the cost of the drifting and stoping. However, it is very doubtful that sufficient ore can be found to pay royalties, at 5 percent, that would equal the Government's share of the proposed drifting. Hence, it seems that the proposed work will not result in the discovery of a significant quantity of new ore, and the application should be denied.

REFERENCE CITED

Ruppel, E.T., 1963, Geology of the Basin quadrangle, Jefferson, Lewis and Clark, and Powell Counties, Montana: U.S. Geol. Survey Bull. 1151, 121 p.

Willard P. Puffett

Willard P. Puffett

Enclosure: Fig. 1 - Composite plan, section, claim and location maps, Wolverine mine, NW-1/4 Sec. 20, T. 8 N., R. 6 W., Powell County, Montana.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/26/71		120
		220
		120M

Puffett phone call 6/23/71 change of address

AIRMAIL

MAY 26 1971

Mr. Merlyn M. Butler
~~2711 Miles Avenue~~ 1090 Sun Valley Road
~~Billings, Montana 59102~~ Helena, Montana 59601

Re: OME-6849 (Silver-Gold)
Merlyn M. & Bernice Butler
Wolverine Mine
Powell County, Montana

Dear Mr. Butler:

Your application for financial assistance to explore the Wolverine mine has been reviewed by the Washington Office and referred to Mr. Willard P. Puffett, Field Officer, Region I, Office of Minerals Exploration, U. S. Geological Survey, U. S. Courthouse, Room 656, West 920 Riverside Avenue, Spokane, Washington 99201.

The Regional Office will notify you if additional information concerning the application is needed.

Sincerely yours,

Harold Kirkemo
gla

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources
OME docket
OME Reading File
OME Region I
Mr. Kirkemo

HKirkemo/gla 5-26-71

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
5/26/71		120
		220
		120M

MAY 26 1971

AIRMAIL

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6849 (Silver-Gold)
Merlyn M. & Bernice Butler
Wolverine Mine
Powell County, Montana

The subject application is referred to you for review, a field examination if warranted, and recommendations.

In his letters to the banks, the Applicant states that the money would be used to drift 400 feet on a vein, and that four mining claims and equipment are offered as security. In the OME application, however, the Applicant proposes to drift 550 feet on a vein, and mentions only one claim, the Gunner lode. The difference in extent of drifting at the same total cost, and the restriction to one claim for an OME contract should be explained. In view of the fact that OME-supported work should not be done within 100 feet of adjoining property, the balance of ground available for exploration may not offer enough area to warrant consideration for an OME contract.

Are the claims or claim patented or unpatented and, if unpatented, is the assessment work up to date? No claim map was submitted.

Were the old workings in a zone of secondary enrichment, and is there a possibility that the new lower level is below the enriched zone?

Harold Kirkemo
gla

Harold Kirkemo

cc: Director's Reading File
Mineral Resources
OME File
OME Reading File
Mr. Kirkemo
130

HKirkemo/gla 5-26-71

May 19, 1971

Mr. Merlyn M. Butler
2711 Miles Avenue
Billings, Montana 59102

Subject: OME-6849

Dear Mr. Butler:

Your application for exploration assistance, dated May 7, 1971, submitted to our office at Spokane, Washington, has been assigned Docket No. OME-684..

Please identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Harold Kirkemo
Chief, Office of
Minerals Exploration

Copy to Region I

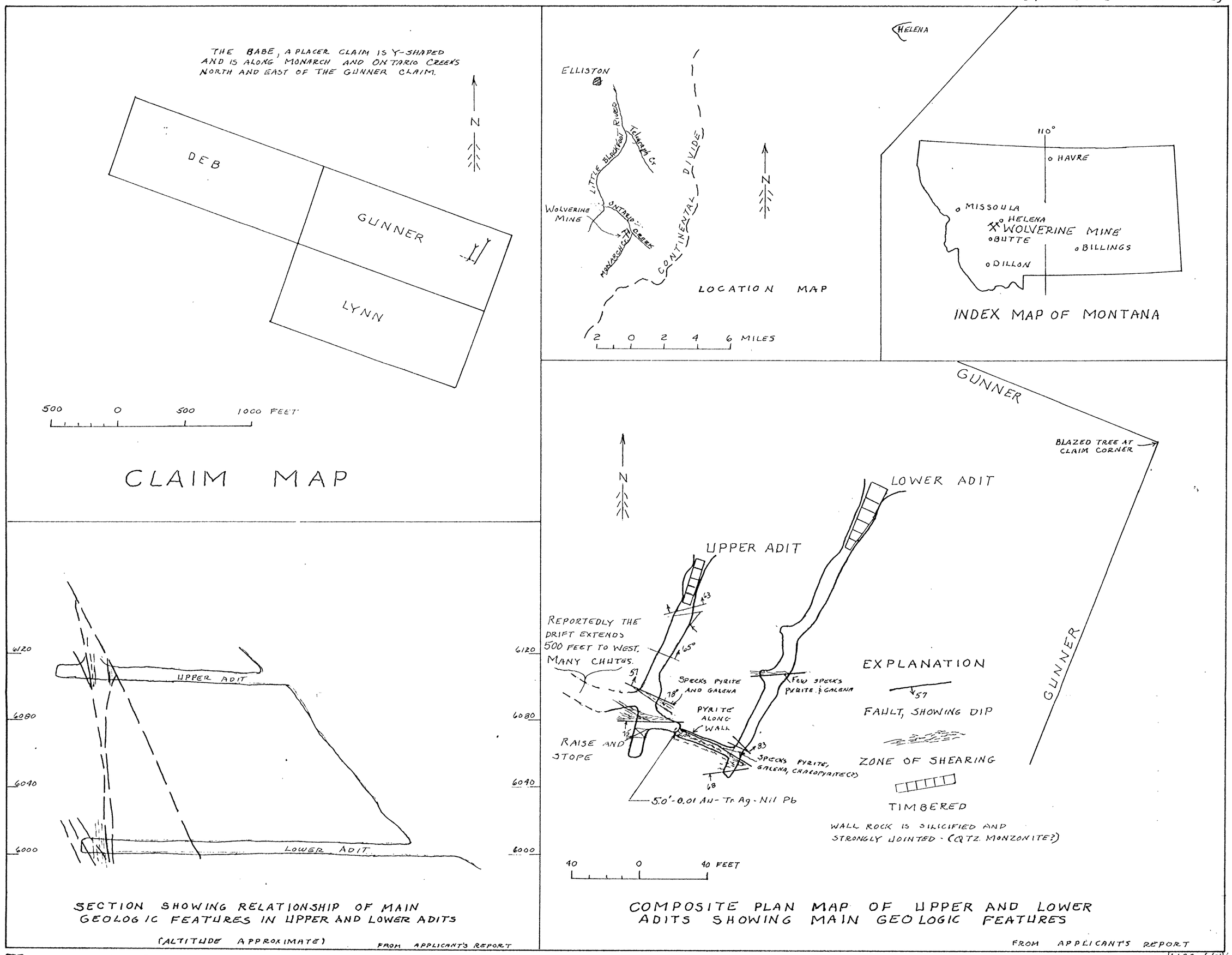


FIGURE 1- COMPOSITE PLAN, SECTION, CLAIM, AND LOCATION MAPS, WOLVERINE MINE, NW 1/4 SEC. 20, T.8N., R.6W., POWELL COUNTY, MONTANA

WPP 6/71