MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE

Contract No. _____ Docket No. 6836

Application
- [x] 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- [ ] Withdrawn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
- [x] 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)
- [x] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) 11/9/78
- [ ] 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

MME Form 40
(Revised Nov. 68)

RECEIVED
OCT 5 1970
O. M. E.
SPOKANE, WASH.

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.)*

Mohawk Lease
601 So. Division
Kellogg, Idaho 83837

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6826

DATE RECEIVED: 10/9/70

REGION: I

DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

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

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
James Salyer	601 So. Div. Kellogg 784-4435	Supervisor
Allen L. Sargent	Rose Lake, Idaho	
Carl E. Fisher	" " " Tel 682-2197	
Oiva A Ranio	" " "	
Gerald S. Johnson	Mullan, Idaho	
William P. Kopp	Pinehurst, Idaho 682-2178	Geologist

STATE IN WHICH FIRM IS ORGANIZED: Idaho

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

ESTIMATED COST OF PROJECT: $50,000

PROPERTY NAME	LOCATION COUNTY	STATE
Silver Peak Mines	Okanogan	Washington

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.

10/2/70
DATED

James Salyer
BY *(Signature)*

Supt.
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).]

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION
656 U. S. Court House
W. 920 Riverside Ave.
Spokane, Wash. 99201

October 6, 1970

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 9 1970

INITIALS	CODE

Memorandum

To : Chief, Office of Minerals Exploration

From : Field Officer, Region I

Subject: New application (Silver)
Mohawk Lease
Silver Peak Mines
Okanogan County, Washington

Enclosed is a new application from a partnership known as the Mohawk Lease, who is planning exploration at the Silver Peak or Sunny Peak mine near Conconully, Washington. The work proposed is to rehabilitate the Mohawk #2 tunnel, extend it as a drift for 500 feet, and diamond drill two core holes from underground in the #2 tunnel. The estimated cost for this work is $50,000.00. An alternate plan of work is to build a new portal site at the end of a new 610 feet of access road and drift 600 feet on the vein at an altitude of 4162 feet (120 feet lower than the #2 tunnel); estimated cost of this work is also $50,000.00.

Mr. James Salyer, Supervisor, first visited our office on May 28, 1970, to discuss the proposed work; I had earlier mailed him the application forms on April 27, 1970, in answer to a telephoned request. Subsequently Mr. Salyer wrote the Honorable James A. McClure, U. S. Representative from northern Idaho, for assistance in his application. Mr. Salyer returned to this office on September 1, 1970, to further discuss his proposed exploration but he did not leave an application. Mr. Carl Fisher brought a very incomplete application to this office on Friday, October 2, 1970, and was advised to obtain more documentation before leaving the application. Yesterday, October 5, Mr. Fisher returned with the application that is enclosed herewith.

The lease and the Lien and Subordination Agreements appear to be in good order. The geologic report is fair, although little other than general statements are included concerning the grade of the ore, other than mentioning one assay from the face of the upper tunnel, which contained 4 ounces silver per ton, 1.0 percent lead, and 0.6 percent copper over a vein width of 4.3 feet.

Claim maps seem to be in order, but there is no sketch of the proposed work that shows their relation to property boundaries.

There are no bids for the proposed diamond drilling or for the bulldozing. The applicant has not included a statement as to how he plans to furnish his share of the costs of the proposed work.

The geology of the area near Conconully is briefly discussed by E. L. Jones, Jr., in U.S.G.S. Bulletin 640. We also have some other information that was in a DMA application submitted by Sunny Peak Mining Company (DMA 992x). Smelter settlement sheets with the enclosed application indicate silver, lead, and zinc are in the ore; hand-sorted crude ore and concentrates of ore contain about 50 ounces silver per ton. The veins are not thick and it is doubtful that the proposed work will find more than a very modest tonnage of silver ore in relatively flat-lying thin veins that might be difficult to mine.

The evidence submitted by the applicant is not strong justification for the proposed work. The #2 tunnel should be rehabilitated for examination and sampling; I doubt that the applicant is able to do this for his own account. There seems little hope of obtaining more information by repeated requests to the applicant.

I suggest that we schedule a field examination that could take place on the same trip as an interim inspection of the Geo-Mineral Exploration contract work (assuming a contract is approved for the latter). Alternative proposals could be discussed with the applicant at the time of the field examination and perhaps some more factual data concerning the thickness and metal content of the veins could be collected.

Enclosure

Willard P. Puffett

Willard P. Puffett

RECEIVED
OCT 5 1970
O. M. E.
SPOKANE, WASH.

MOHAWK LEASE
601 So. Division
Kellogg, Idaho

Drifting

600',5'x7' clear of timber. Estimated rate of advance 5' per shift. One shift per day, 22 days per month, 5½ months required. 30 holes required per 5' round.

1. Labor and supervision (per shift).

2 miners at $40.00 per shift	= $80.00
1 helper at $28.00 per shift	= $28.00
1 engineer/ supervisor for one half of each month	= $440.00 per month
FICA and other insurance	= $14.32 per shift
Total cost per shift	= $142.32
Total cost per foot	= $28.46

2. Operating materials and supplys (per 5' round).

100 lbs. powder @ $25.00 per 100 lbs.	=$25.00
30 electric caps,0 through 10 delay @ $.35 ea.	=$10.00
5'x1" water line with fittings	=$ 2.00
5'x2" air line @ $.50 per foot	=$ 2.50
5'x½" water hose @$.60 per foot	=$ 3.00
5'x1" air hose @ $.75 per foot	=$ 3.75
25 gals deisel fuel @ $.20 per gallon	=$ 5,00
10 gal. gasoline@ $.40 gal.	=$ 4.00
3 qts. oil plus grease	=$ 1.50
5' vent pipe @ $2.00 per foot (Spunstran)	=$ 2.50
2 track ties @ $1.50 ea.	=$ 3.00
10' of 30# rail @ $2.00 per foot	=$10.00
Total cost per 5' round	=$42.50
Steel per 5' round @ $18.00 per steel	=$ 9.00
Repair parts per 5' round	=$20.00
Total supplys and repairs per 5' round	=$71.50

3. Operating equipment owned by leasees

Air Trammer valued at	$4500.00
3 muck cars valued at $250.00 ea.	$ 750.00
1 Generator and charger	$ 250.00
1 International crawler tractor with blade	$6000.00
1 Pickup truck	$2000.00
1 Drilling machine	$ 300.00
1 Mucking machine valued at	$2500.00
@ 1/60	$ 2.12.00 per ft.

4. To be Rented

1 315 cubic inch compressor for 6 months @ $500	$3000.00
2 Jackleg drilling machines for 6 months @ $250.00	$1500.00
4 Mine lamps	$ 250.00
Total cost of operatin equipment for 6 months	$4750.00
Divided by 600' of drift = $9.92 per foot	

RECEIVED
OCT 5 1970
O. M. E.
SPOKANE, WASH.

Timbering

We estimate that 50% of the drift will have to be timbered 300' or 60 standard 5' sets of drift timber. One shift will stand, block and lag 2 sets or 10' per shift. Time required, 30 shifts. At 22 shifts per month, total time required 1.363 months.

1. Labor and supervision
   2 timbermen at $40.00 per shift
   1 helper at $28.00 per shift = $2040.00
   FICA and other insurance = $ 318.00
   At 10 feet per shift the cost per foot = $ 7.86

2. Operating Materials and supplies
   120 8x8"x8' posts = 64 b.f.
   60 8x8"x6' caps = 48 b.f.
   120 collar braces 4x6"x4' = 8 b.f.
   120 lagging 2x12"x5' =12o b.f.
   This amounts to 19,720 b.f. at $115.00 per thousand plus 10% for blocks =$2271.25
   This amounts to $15.43 per foot

3. Operating equipment owned by applicant
   1 chain saw valued at $321.00
   1 Ford Pickup valued at $3000.00

RECEIVED
OCT 5 1970
O. M. E.
SPOKANE, WASH.

Diamond Drilling

270' of diomond drill hole at $10.00 per foot = $2700.00

Building Access Road and Dump and Portal sight.

As I assume it will take approximatley $4000.00 to build the road 610' and bulldoze for the dump and back to bedrock for the portal I have applied for $50,000.00.

James Salyer

James Salyer

RECEIVED
OCT 5 1970
O. M. E.
BOISE, IDAHO

MINING LEASE

THIS AGREEMENT, made this 22nd day of April, 1970, by and between SILVER PEAK MINES CORPORATION, a corporation organized under the laws of the State of Washington, qualified to transact business in the State of Washington, as the Lessor and party of the first part, and JAMES P. SALYER, ALLAN L. SARGENT, CARL C. FISHER, OIVA A. RAINIO and GERALD S. JOHNSTON dba MOHAWK LEASE, Cataldo, Idaho, as Lessee and party of the second part.

WITNESSETH:

That said Lessor, for and in consideration of One Dollar ($1.00) and the further considerations of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed and by said Lessee to be paid, kept and performed, does by the presents lease unto said Lessee all of that portion of the unpatented claims, named: Waterloo, Mohawk No.1, Nesperse, Swanee, Apache Amended, Windy, Jimmie, Weller, and Big Chief situated in the Salmon River Mining District, near Conconully, Okanogan County, Washington.

TO HAVE AND TO HOLD unto said Lessee for the term of ten years from and after the 22nd day of April, 1970, unless sooner terminated or forfeited thru the failure of the Lessee to pay the royalties herinafter specified to be paid, or by or through the violation of any covenant by the Lessee herein made, promised or to be performed.

And in consideration of such demise, said Lessee does covenant and agree with the Lessor as follows:

1. To enter upom said demised premises, and work the same in mine fashion, in manner necessary to good and economical mining so as to take out the greatest amount of ore possible with due regard to the development and preservation of the same as a workable mine, and to the special covenants hereinafter reserved.

2. It is understood and agreed that the Lessee, so long as he shall not be in default hereunder, shall have the sole and exclusive right to the use and possession of said premises and the property above described during the same in such manner as he may see fit. All such work, however, shall be performed in a good and miner like manner, and all drifts, tunnels and workings and upkeep of said property, and shall be kept clear of loose rocks and rubbish of all kinds, and thoroughly drained when necessary for continuous working.

3. Work on this lease is to start not later than Junel, 1970, and to perform at least forty man shifts per month. Any excess of this work allowance can be accummulated as a credit for future work. If weather and road conditions are too difficult to work during the mon ths of December, January, February and March no work will be required, but a total of 320 man shifts shall be performed from Junel, to the following June 1st.

4. The Lessee shall have the right to mill the ores mined from said premises, or to ship the same to a smelter and to ship the concentrates derived from said premises to a smelter and to ship bullion or metals derived from said ores to a United States mint, but in either event shall pay to the Lessor a royalty of fifteen percent until the price of silver is 2.00 dollars per ounce on the New York market. These royalties shall rise to 16% when the price of silver is $2.25 on the New York market
17% " " " " " " $2.50 " " " " "
18% " " " " " " $2.75 " " " " "
19% " " " " " " $3.00 " " " " "
20% " " " " " " $3.25 " " " " "
21% " " " " " " $3.50 " " " " "
22% " " " " " " $3.75 " " " " "
23% " " " " " " $4.00 " " " " "

The smelter, mint or other purchaser to which said ores or concentrates shall be sold shall transmit Lessor's share of the amount disclosed and reflected by said smelter or mint returns, with duplicate copies thereof, direct to Lessor at its office in Spokane, Washington. The terms "Net smelter returns" is hereby defined to mean the value at the smelter of all ores and concentrates delivered to the smelter, less freight and other smelter charges.

5. The said Lessee expressly agrees to fully pay and discharge all obligations the Lessee may incur for labor, materials and otherwise in the performance of said work carried on under this Lesse, and to save and protect the Lessor and said leased premises free and harmless from any and all claims, demands, and liens for labor and materials that may be furnished for or at the request of Lessee during the life of this Lease or that may be used in the prosecution of the work carried on hereunder. Said Lessee shall and will at all times keep posted in a conspicous place on said leased premises a notice that the Lessor and the property will not be liable for any debts incurred or obligations created by Lessee in the prosecution of work under this Lease.

6. To carry upon his employees compensation insurance under the Workmen's Compensation Act of the State of Washington, and otherwise in all respects hold Lessor harmless from all liability while said property being worked and developed by said Lessee during the life of this Lease, and to further comply with all Federal and State laws relating to social security, unemplyment and old age insurance, wages and hours, income tax on its employees and all other statutes, both Federal and State, affecting the operation of said property and conditions of employment of all persons in the employ of Lessee.

The Lessor, its agents or representatives, shall have the right, at its own risk, to inspect the premises and workings at all reasonable times, to inspect the time books and such records of the Lessee as the Lessor shall deem necessary to satisfy himself, or its representatives, that the provisions of this agreement are being complied with; and it is expressly understood and agreed that if the provisions of this agreement are not being complied with; the Lessor shall so advise the Lessee in writing, by registered mail, setting forth specifically the cause of complaint and the provisions hereof which have been or are being violated.

8. If Lessee defaults in the performance of any of the covenants and agreements herein contained on his part to be performed, and such default shall continue for a period of (30) days after written notice from Lessor to correct the same, stating specifically the nature or grounds of such default given by regestered mail addressed to Lessee at Route 1, Cataldo, Idaho or served personally upon Lessee, the term of this lease shall at the election of Lessor, terminate and this lease and the premised shall become forfieted to Lessor, and said Lessor or its agent may there upon, after demand for possession in writing, enter upon said premises and dispossess all persons occupying the same, and Lessee shall execute, ack nowledge and deliver to Lessor a written release of this Lease in due form for public record, if necessary. Likewise, if Lessee shall determine to voluntarily surrender and terminate this Lease at any time before the expiration of the term, he shall give thirty days written notice to Lessor by registered mail at the address of its Spokane office, or served person ally upon Lessor of such intention, and, upon expiration of said notice, if Lessor does not within the said time retake possession of said premises, the Lessee shall not be liable for damage to said demised premises.

9. It is further understood and agreed that the said Lessee shall have the right to take and use whatever timber may be required from said mining claims for the operations conducted thereon by said Lessee, but in no event shall the said Lessee be permitted to take and remove timber from said property for a use or purpose not connected to the operation or development of said property, and all such use shall conform to the rules and regulations of the B ureau of Land Management.

10. In the event of termination of this Lease by forfeiture or otherwise, Lessee shall have the right to remove any of his machinery, tools, and equipment placed upon said leased premises by him during the life if this Lease within a period of sixty (60) daysthereafter, but all buildings constructed thereon by Lessee shall remain on said premises and become the property of the Lessor.

11. It is understood and agreed that time is of the essence of this agreement, and should Lessee fail or neglect to make any royalty payment as hereinabove promised to make, or fail, neglect or refuse to carry out any of the terms or provisions herein contained on his part to be done, then this agreement, at the option of the Lessor, shall be null and void and of no further force or effect, and the said Lessee shall deliver to said Lessor peaceful possession of said premises and each and every party thereof; and in such event, Lessee shall relinquish all claims to any and all p arts or interests in said property, except as to machinery and equipment placed theron by him.

12. It is expressly understood that the terms and provisions of this agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the respective partys hereto.

This Lease cannct be assigned to any other parties without consent of the SILVER PEAK MINES CORPORATION.

IN WITNESSwhereof Lessor has hereunto caused these present to be signed by its president or vice president and secretary and its corporate seal to be hereto fixed, and Lessee has hereunto set his hand the day and year in this agreement first above written.

SILVER PEAK MINES CORPORATION

By Dale Lanphere President

or _____ Vice President

E H Wagoner Secretary

Lessors

James P Salyer

Allan F Sargent

Gerald S Johnson

Carl E Fisher

Oiva A. Raino

Lessees

The above Lessee signed this document before me May 26th 1970

E. M. Dommenwith
Notary Public
Cataldo, Idaho

STATE OF WASHINGTON)
)ss
County of Spokane)

On this 29 day of May 1970, before me personally appeared Dale Lanphere, President of the Silver Peak Mines Corporation and E. H. Wagoner, Secretary of the Silver Peak Mines Corporation, the corporation that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

H. K. Deering

Notary Public in and for the State of Washington residing at Cheney

RECEIVED
OCT 5 1970
O.M.E.
SPOKANE, WASH.

GEOLOGY OF THE MOHAWK LEASE
CONCONULLY, WASHINGTON

LOCATION

The Mohawk Lease consists of 13 unpatented quartz lode claims on the southeast side of Mineral Hill, two miles north of the town of Conconully, Okanogan County, Washington. The property itself is accessible by a good dirt road from Conconully.

OWNERS

The Mohawk Group of claims is under the ownership of Silver Peak Mines Corporation of Spokane, Washington. The property is presently under a 10 year lease to a partnership known as the Mohawk Lease of Kellogg and Cataldo, Idaho.

HISTORY

The Mineral Hill area is part of the Ruby and Conconully mining districts which saw considerable mining activity between the years of 1887 and 1893. Numerous rich silver, gold, and lead discoverys were made in the area during this period, especially on Ruby Hill just a few miles south of Mineral Hill. Fairly regular shipments of high grade, hand picked ore were made from the Arlington, First Thought, Last Chance, and Fourth of July mines, but all mining activity came to a halt with the collapse of the silver market in 1893. Most of this ore is reported to have run between 30 and 70 ounces of silver per ton after handsorting.

Since the silver crash of 1893, the area has seen only infrequent activity. The inaccessibility of the area as well as low metal prices, has hindered the development of the district over the past 75 years. Today, however, with far better transportation facilities and much more favorable metal prices, this region should see considerable exploration activity.

TOPOGRAPHY

The Mineral Hill area lies in a fairly mountainous, often rugged, region between the Okanogan Mountains on the west, and the more moderate Okanogan Highlands on the east. The present relief is the results of large glaciers which covered the area in the recent geologic past, as well as more recent stream erosion. In general, the mountains around Conconully rise 2,000 to 4,000 feet above the valley elevation of around 2,300 feet above sea level. Mineral Hill itself rises to an elevation of around 5,500 feet above sea level.

PREVIOUS WORK

Previous development work on Mineral Hill has consisted of an accumulation of over 5,000 feet of drifts, crosscuts, incline shafts, surface trenches, and dozer cuts. By far the most extensive workings are those of the Columbia and Frankie Boy Tunnels on the Mineral Hill Group of patiented claims, and commonly known as the Mineral Hill Mine. The Mineral Hill Mine contains over 2,000 feet of development work including an incline shaft from the surface to a point 400 feet in from it's portal. The veins exposed in these workings are similar to those on the Mohawk Lease, and are structurally related. These veins strike between N. 05° E. and N. 30° W., and dip on the average at an angle of 60° to the west. The veins range in width from 6 inches up to around 10 feet, and consist of a mixture of pyrite, galena, sphalerite, chalcopyrite, tetrahedrite, and stphanite in a gangue of white quartz. Numerous samples were taken from these veins by Samuel Aughey, a Spokane mining engineer, in 1906, and showed values as high as 175 ounces of silver per ton as well as significant values of copper and lead. Minor amounts of gold were also present in most of the samples taken.

The Mohawk Claim Group itself has been explored by two tunnels, the Mohawk #1 and #2, and several scattered trenches and short incline shafts. Both the upper Mohawk #1, and the lower and more extensive Mohawk #2 tunnels, were driven on the Mohawk Vein, a typical quartz-sulfide fissure filling type structure.

The upper tunnel extends into the mountainside a distance of 88 feeton a N. 30° W. bearing, and contains a strong vein structure in the face. Samples taken on this face showed a value of 4 ounces of silver, 1.0% lead, 0.6% copper, and a trace of zinc over a vein width of 4.3 feet. While these these are not commercial values, they are definitely encouraging.

The lower Mohawk tunnel has been the most extensively explored of the two tunnels, and has produced all the commercial grade ore thus far shipped from the property. This drift is over 500 feet in length, and as far as can be learned still has good ore in the face. A raise was driven up approximately 60 feet above the sill on the main ore shoot at a point 397 feet in from the portal. Stopeing off this raise to the northwest resulted in numerous small shipments of high grade, hand picked ore, mined between the years of 1936 and 1954. It is reported that a 250 foot strike length, with a vein width averageing 3 feet, was developed on this ore shoot. According to Silver Peak Mines Corp., the face of the stope was still in high grade ore when the operations were stopped.

The drift is now caved where this raise was started, and is inaccessible beyond this point. Smelter return sheets from ore shipped to the Bunker Hill Smelter in Kellogg, Idaho, indicate that at least 19 tons of ore was produced from the ore body, and contained an average grade of 61 ounces of silver, 11% lead, 7.5% zinc, and 2% copper per ton of ore. At todays metal prices this ore would have a gross value of over $180.00 per ton.

Another important development tunnel on Mineral Hill is the Gubser Tunnel. This crosscut tunnel located on the west bank of Salmon Creek at an elevation of 2,412 feet, was driven a distance of 880 feet on a westward bearing, into the side of Mineral Hill. This crosscut exposed two sizable vein structures called the #3 abd #4 veins, as well as several smaller weakly mineralized veins. The #3 and #4 veins both have similar strike and dip, as well as similar mineralization to the veins on the Mohawk and Mineral Hill properties, and are probably of the same origin.

PRESENT DEVELOPMENT

At the present time the only active development work underway on Mineral Hill is being conducted by the Mohawk Lease on the Mohawk Group of claims. This work has consisted of detailed geologic mapping, brunton and tape surveying of roads and tunnels, and rehibilitation of the caved portion of the lower tunnel. These steps comprise the first phase of a three phase exploration program outlined in this report. Much of the information gained by the first two steps is contained throughout this paper. The third step, rehibilitation of the lower Mohawk tunnel, has proved to be a slow and difficult task. This has consisted of "cleaning up" and timbering the caved portion of the drift. As of August 1, 1970, approximately 35 feet of this caved area had been reclaimed and timbered. Over 100 tons of rock was hand mucked and tramed from this small portion of the drift. With no end in sight and increasingly dangerous working conditions, this attempt has been abandoned. It is now planned to drive a runaround lateral around this caved area.

The rehibiliation work performed did reveal some important and encouraging information. Much of the rock removed contained moderate to rich sulfide mineralization. Also revealed was a small remaining portion of the main vein near the old raise, which consisted of a two foot quartz vein richly mineralized with galena, sphalerite, pyrite, chalcopyrite, and tetrahedrite. A sample cut on a one foot wide "high grade" portion of this vein assayed 73.5 ounces of silver, 9.9% lead, 13.5% zinc, and 4.2% copper per ton. Most of this vein above the sill has been mined out in the past, however,

all records indicate that no work has ever been done below the sill level. At the present time, there is no reason to believe that this ore does not extend below this level, and only further exploration will give the answer.

GEOLOGY

The rocks of which both Mineral Hill and Ruby Hill are composed of are part of an extensive granitic intrusion which is genetically related to the Similkameen batholith of northern Washington - southern British Columbia. The age of this intrusion has been assigned to be either late Mesozoic or early Tertiary Time.

These rocks vary somewhat from one area to another, but in general can be classified as a medium grained biotite-hornblende granite. This granite is composed mainly of quartz, feldspar, biotite, and varying amounts of hornblende. The bedrock exposed in and around the Mohawk tunnels is of this type. Numerous diabase and lamprophyre dikes are found within the intrusive body, and appear to have a general north-south orientation similar to the quartz-sulfide veins.

Immediately to the east of Mineral Hill and on the eastern flanks of Ruby Hill, the granitic intrusive comes in contact with older Paleozoic sedimentary rocks. These rocks where exposed consist of limestones, quartzites, and hornblende mica schists. The contact is steeply dipping, and appears to form the eastern boundary of the igneous intrusive. At one time these sediments probably covered the granite allowing the magma to cool slowly and form the well crystalized rocks now exposed on these two mountains.

ORE DEPOSITS

The veins exposed on Mineral Hill are typical quartz fissure filling type veins. Most of these veins show a strong overall north-south orientation although the individual veins vary in strike from N. 45° W. to N. 25° E. The angle of dip ranges widely from almost vertical to less then 35°, and in most cases is to the west. The overall strike of the veins roughly parallels the plane of contact between the igneous intrusive and the older Paleozoic rocks to the east, and are likely the results of fissures formed in the granite along the margins of the magma mass as it's temperature cooled down. These fissures were later filled with quartz, and at a still later date by sulfides of lead, silver, copper, iron, and zinc. The later date of the sulfide emplacement is suggested by the great irregularity at which these sulfides occure in the quartz veins. Several veins of quartz exposed on Mineral Hill appear to be completely barren of any sulfides. The sulfide mineralization is probably the results of low to moderate temperature hydro-

thermol solutions injected into fractures within the quartz itself.

The minerals pyrite, sphalerite, galena, chalcopyrite, and tetrahedrite make up the majority of the sulfide minerals present in these veins. Minor amounts of bornite, argentite and stphanite are also present in some of the ore. These minerals often make up 1/3 to 1/2 of the vein mass, with the remaining material white to colorless quartz and calcite. Small amounts of gold are present in most of the veins, and may be carried in the pyrite. With the exception of some minor alteration of sphalerite to hydrozincite and the copper sulfides to malachite and aurichalcite, the veins show little sign of oxidation, even close to the surface. It is therefore likely that no zone of secondary enrichment exists along these veins at depth.

As already mentioned, the sulfides present in these quartz veins have a fairly irregular occurance. These lenses and streaks of sulfide mineralization are occasionally up to 40 inches in width, but normally are less then 1 foot. The length and depth of the ore shoots has not been well established. The ore body discovered in the Mohawk #2 tunnel is reported to be about 250 feet in length along the strike. No length down the dip has ever been established since the vein has not been explored below the level. The Mohawk #1 drift was driven to the approximate upward projection of the ore shoot, and showed favorable but not commercial grade mineralization. This would represent a distance of about 260 feet along the dip of the vein. Judging from the strength of the vein structure and mineralization present, there seems to be good reason to believe that this ore body will extend well below the #2 drift elevation. Ore shoots on similar veins on Ruby Hill have been developed to a depth of 600 feet without bottoming of the ore. Some of the workings in the old Last Chance Mine were as much as 1200 feet lower in elevation then those of the Arlington Mine near by, and still showed high grade ore. Similarly, at least two strong veins were crossed by the Gubser Tunnel at the base of Mineral Hill. This represents a differance in vertical elevation of over 1800 feet from the Mohawk property. This mineralization could be the results of being located at a lower horizon in relation to the intrusive-sedimentary contact, or it could indicate mineralization at depth.

PROPOSED PLAN FOR EXPLORATION AND DEVELOPMENT

The following three phase plan for exploration of the Mohawk property is proposed.

Phase 1

A. Detailed geologic mapping and evaluation.
B. Brunton and tape survey of access roads and tunnels.
C. Rehibilitation of the Mohawk #2 tunnel.

Phase 2

A. Extend the Mohawk #2 tunnel a minimum of 500 feet northward along the strike of the vein.. In additiom a runaround lateral will be driven in the hanging wall around the cawed portion of the present drift.. This may include as much as 300 feet of additional drift..

B. Drill the following diamond core drill holes;

1. A 150'- 200' foot hole into the hanging wall from a point near the old raise in tunnel #2.
2. A similar hole into the footwall from the same location. These drill holes would be used to test for hanging wall and footwall splits as well as any other nearby veins.
3. A down-hole dilled on a steep incline on a eastward bearing from a drill station cut off the runaround lateral. This hole would be approximately 70 feet in length, and should cut the vein about 55 feet down the dip from the main drift. This would test the mineralization below the drift level.

C. Geologic mapping and control of all new development work, surveying of new development work, and geologic mapping of surface area.

Phase 3

Phase 3 will be a continuation and extension of phase 2. This work will depend on the results obtained from the steps above, and will be designed to carry the property up to the production stage..

SUMMARY

In conclusion, the Ruby and Conconully districts appear to have very favorable features for extensive exploration.. The area has had considerable sporatic development in the past, and under the present economic conditions appears ready to reveal it's true potential.. The property involved in the Mohawk Lease is one of the most favorable areas of this district, and contains excellent prospects for developing into a producing mine.. Extensive exploration will be necessary to determine whether a true commercial ore body is contained within the property.. At least a limited ore body is already known to exist on the Mohawk Claim. In light of this and other facts presented, the possibilities of uncovering a significant ore body seem highly favorable.

William P. Kopp
Geologist

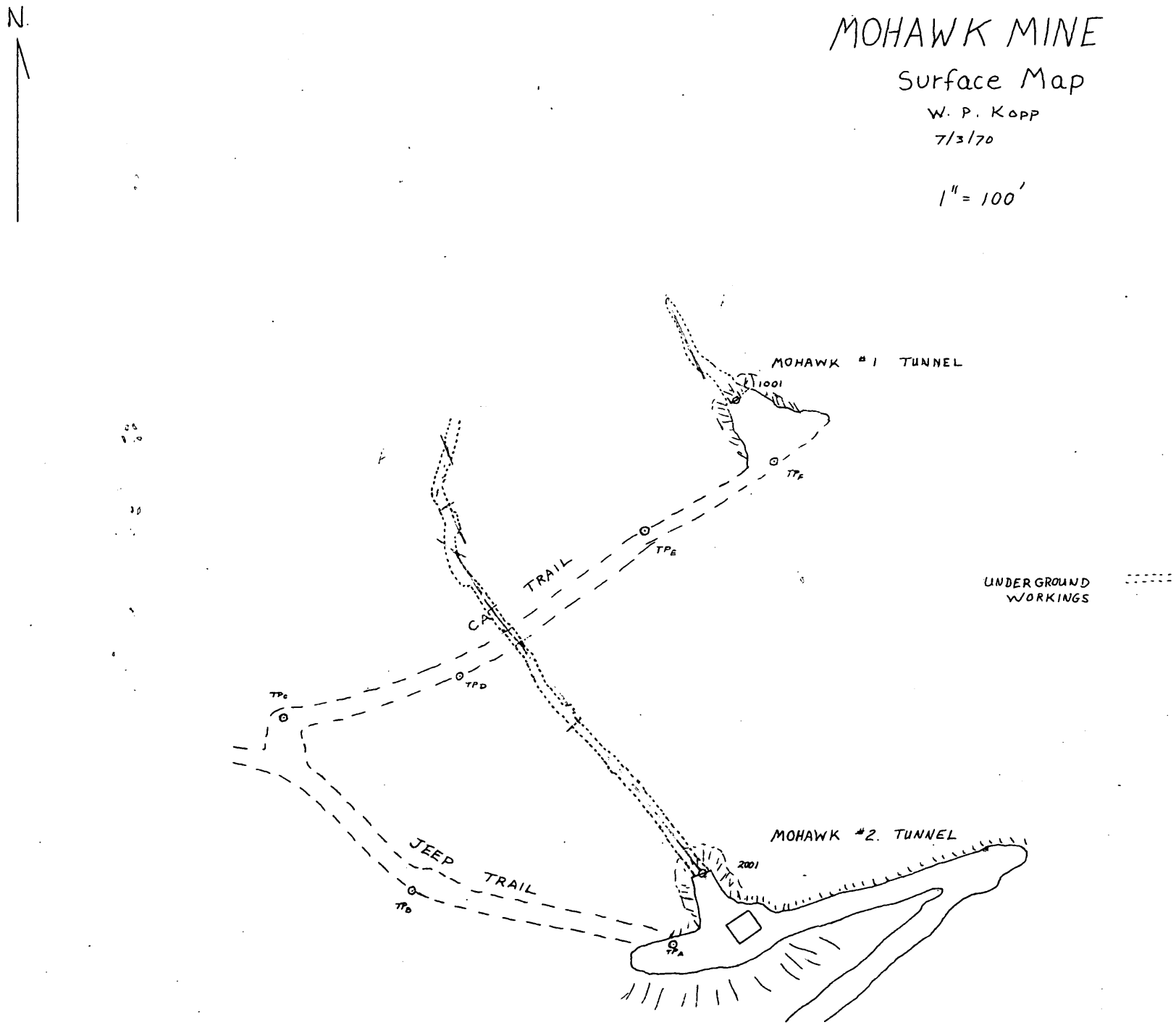
MOHAWK MINE

Surface Map

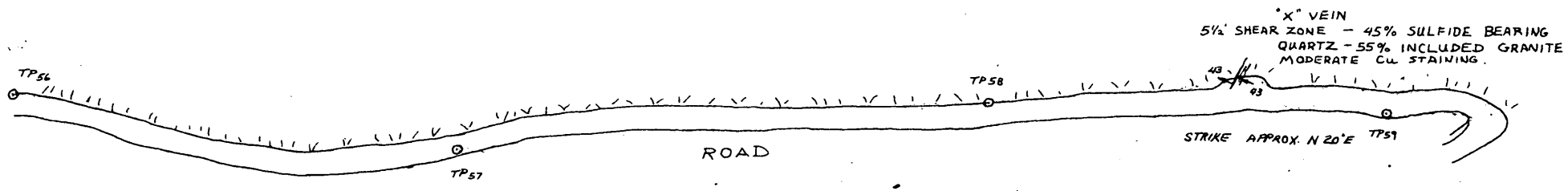
W. P. Kopp

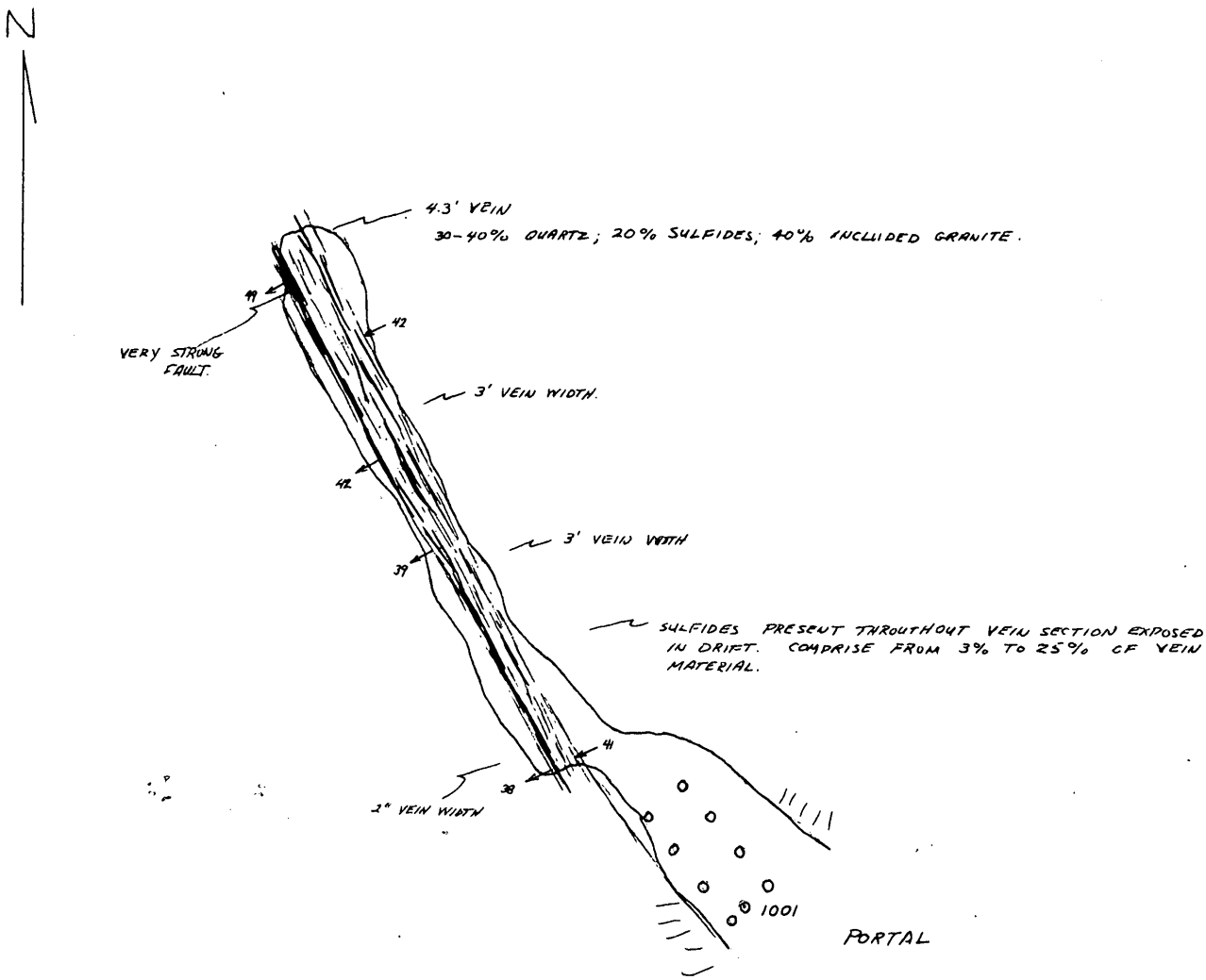
7/3/70

1" = 100'



SHEET # 3


"X" VEIN
5½' SHEAR ZONE – 45% SULFIDE BEARING
QUARTZ – 55% INCLUDED GRANITE
MODERATE Cu STAINING.
TP56
TP57
TP58
TP59
43
43
ROAD
STRIKE APPROX. N 20°E



MOHAWK MINE

No. 1 TUNNEL

7/3/70

W. P. Kopp.

1" = 20'

MOHAWK MINE

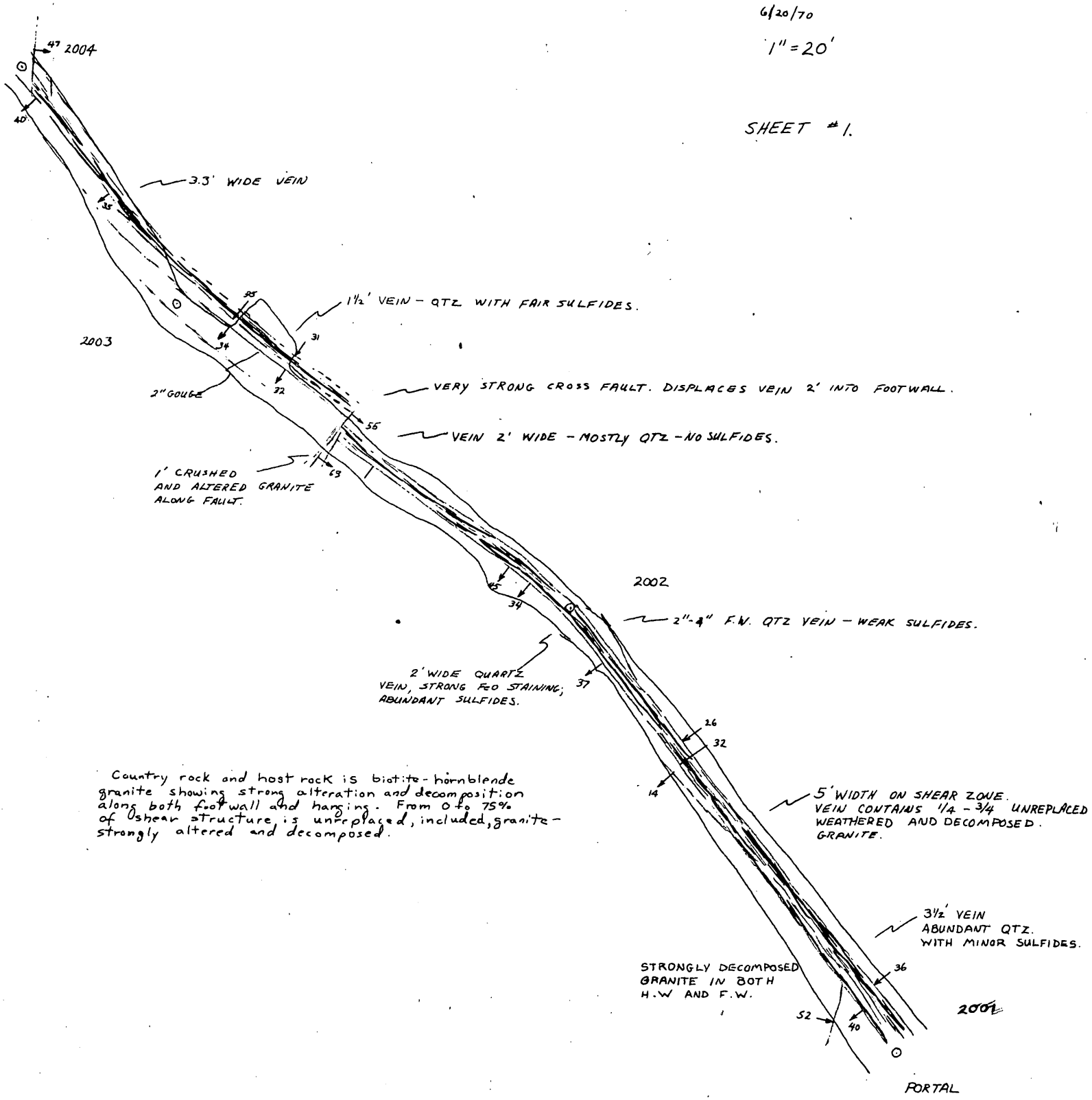
No. 2 TUNNEL

W. P. Kopp

6/20/70

1" = 20'

SHEET #1.



Country rock and host rock is biotite-hornblende granite showing strong alteration and decomposition along both footwall and hanging. From 0 to 75% of shear structure, is unreplaced, included, granite – strongly altered and decomposed.

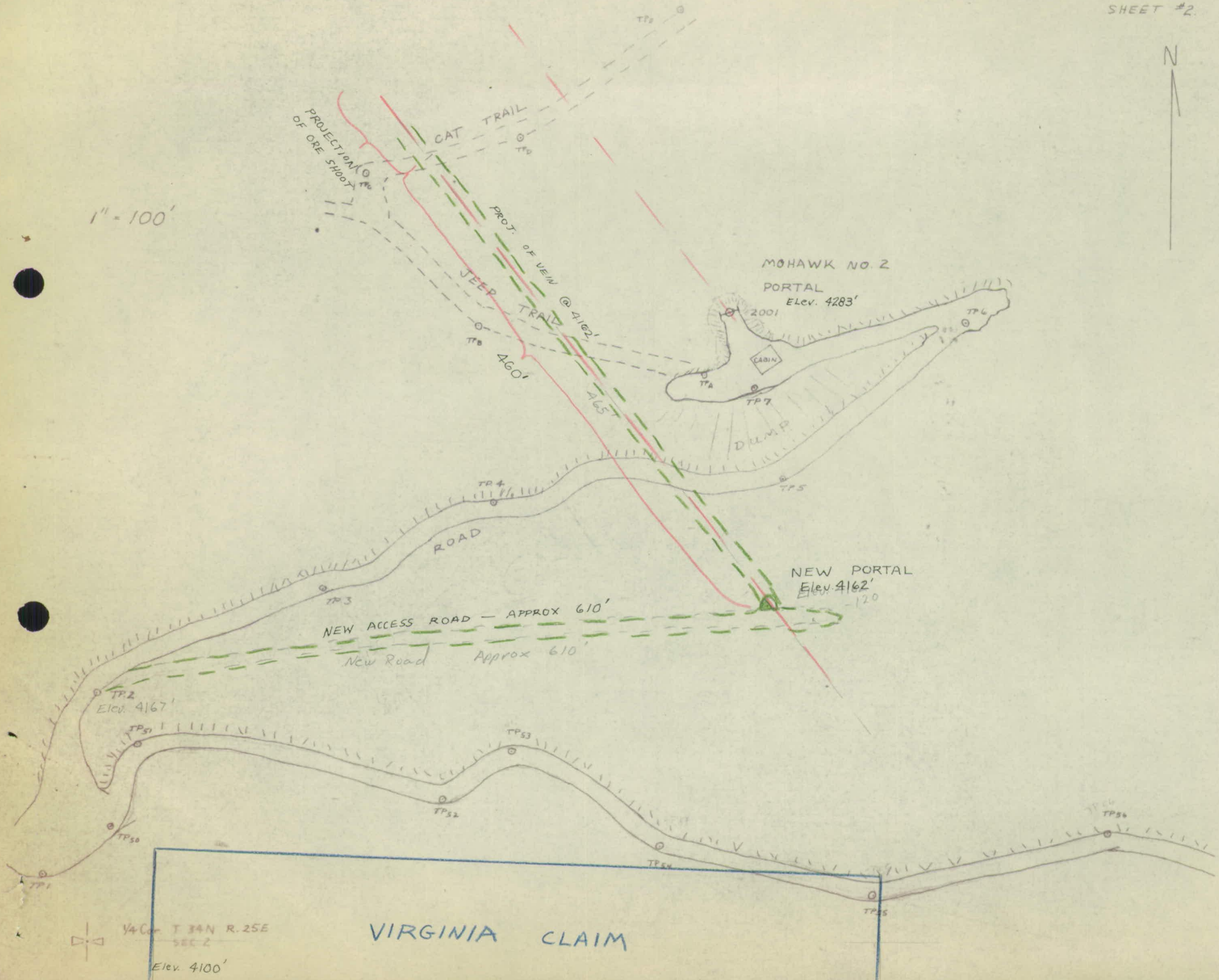
ALTERNATE PLAN FOR PHASE 2

A. Construct 610 feet of new access road and prepare a portal site and dump site,, as shown on the accompanying map..

B. Drive approximately 600 feet of drift on the Mohawk vein at an elevation of 4162 feet (120 feet vertically below the Mohawk #2 drift). This would necessitate and include 460 of drift to reach the downward projection of the ore shoot found in the Mohawk #2 tunnel, as well as 120 feet along this ore shoot projection.

C. Geologic mapping and control of all new development work, surveying of new development work, and geologic mapping of surface area..

SHEET #2.


N
1" = 100'
PROJECTION OF ORE SHOOT
CAT TRAIL
PROJ. OF VEIN @ 4162'
JEEP TRAIL
460'
465'
MOHAWK NO. 2
PORTAL
Elev. 4283'
2001
CABIN
DUMP
ROAD
NEW PORTAL
Elev. 4162'
NEW ACCESS ROAD — APPROX 610'
New Road Approx 610'
TP2
Elev. 4167'
TP1
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP50
TP51
TP52
TP53
TP54
TP55
TP56
1/4 Cor T 34N R. 25E
SEC 2
Elev. 4100'
VIRGINIA CLAIM

Return to Carl & Fennell

Property of Sunny Peak Company
J. Mohawk

BUNKER HILL SMELTER
BUNKER HILL & SULLIVAN MINING & CONCENTRATING COMPANY

In account with

E. KILLFEATHER

Name of Mine Chief Sunshine Group Smelter Lot No. 1

Location Conconully, Washington R.R.Shipping Point Omak, Wn. Class Crude

Date of Arrival 6/1/37 Date of Sampling 6/3/37 Date of Settlement 6/3/37

Car Initial	Car No.	gross wt. lbs.
GN	4195	21540

Total Gross Wt.	21540
Gross Weight of ore	
Moisture 0.3 % lbs.	65
Dry Wt. of ore	21475

Settlement Assays

Gold	.015	oz. per ton
Silver	49.95	"
Copper	2.4-1 1.4	per cent
Lead	9.2-1 25-7.95	percent
Iron	8.4	"
Insoluble	55.8	"
Lime 0.2 Bi	.002	"
Sulphur	13.4	"
Zinc	6.8	"
Antimony	.2	"
Arsenic	.06	"

QUOTATIONS

Silver @ E.& M.J.P. Price for 6/1/37 ..... .77 per oz.

Lead - 6/1/37 ..... 6.00 per cwt

Copper -6/1/37 ..... .1365.07 .0665 per lb.

PAYMENT FOR METALS	Val. per ton
Silver 49.95 oz. 95% @ .77 per oz.	$36.538
Lead 7.95% 90% @ .06 per lb.	$ 8.586
Copper 1.40 % 100% @ .0665 per lb.	$ 1.862
Gross value	$46.986
Less treatment	$10.839
Net val. per ton	$36.147

TREATMENT	PER TON
Treatment chg. (Based on)	$12.000
Less 42.05% PB under 50% @ .10	4.205
	7.795
Additional Refining Chge. on Silver over 35 oz. 14.95 oz. @ 1 cts. per oz.....	.150
Sulphur penalty over Max.	2.000
Freight on Lead to New York 143.1 lbs. @ $12.50 per ton	$ .894
TOTAL TREATMENT	$10.839

SETTLEMENT

Dry Weight	21475	pounds-	10.7375	tons @ $36.147 per ton equals	$38[illegible]
Gross Weight	Min.	pounds-	20	tons @ $ 4.75 " " "	95.00
				NET PROCEEDS	$2[illegible]

FORM S 104

BUNKER HILL SMELTER

P. O. Address: KELLOGG, IDAHO
R. R. Station: BRADLEY, IDAHO

BUNKER HILL & SULLIVAN MINING & CONCENTRATING COMPANY

In Account With

COMMONWEALTH MINES

Name of Mine: Mohawk Mine Lot No. ____ Smelter Lot No. 2

Location: Concrete, Idaho R. R. Shipping Point: Trout Class: [illegible]

DATE OF ARRIVAL: 5/10/54 DATE OF SAMPLING: 5/20/54 DATE OF SETTLEMENT: [illegible]

Car Initial	Car No.	H_2O	Weight, lbs.
1	Truck	8.8	3030

TOTAL GROSS WEIGHT	3030
____ Sacks. Weight of Sacks	
GROSS WEIGHT OF ORE	263
Moisture Pounds	
DRY WEIGHT OF ORE	2767

Metal Assay

Gold	.03	Oz. P. T.
Silver	59.8	Oz. P. T.
Copper	6.1	% P. T.
Lead	19.9	% P. T.
Iron	25.0	% P. T.
Insol.	4.2	% P. T.
Lime	0.0	% P. T.
Sulphur	35.6	% P. T.
Zinc	6.0	% P. T.
Antimony	1.0	% P. T.
Arsenic	.11	% P. T.
Bismuth	.007	% P. T.

QUOTATIONS Date 5-10-54

Silver .90 Per Oz.

Lead .14750 - .01750 = .12500 Per Lb.

Copper .20975 @ 60% - .14000 @ 30% = .17715 - .04200 = .13515 Per Lb.

Zinc .12500 @ 25% = .03125 Per Lb.

Antimony .32500 @ 50% = .16250 - .16000 = .00250 Per Lb.

SMELTING AND REFINING DEDUCTIONS

	PER TON
Base Smelting Charge	$ 14.00
Plus 39.1 % Wet Pb. under 50.0 % @ 10¢	$ 2.00
Credit 25.0 % Iron over (6.0 % Zinc x 1.8) @ 40c a unit	$ - 5.60
Debit ____ % Iron under (____ % Zinc x 1.8) @ 40c a unit	$
Credit ____ % Silica over (____ % Iron x) @ 8c a unit	$
Debit 6.2 % Silica under 25.0 % Iron x) @ 8c a unit	$ 1.24
Credit ____ % Lime over (____ % Iron x) @ 10c a unit	$
Debit 0.0 % Lime under 25.0 % Iron x .) @ 10c a unit	$ [illegible]
TOTAL SMELTING DEDUCTIONS	$ [illegible]
Silver charge over 50.0 oz. per ton @ 1.5 c per oz.	$ .75
Arsenic charge over ____ % @ ____ per unit	$
Bismuth charge over .007 % @ 50¢ per pound	$ .07
Moisture charges over ____ % @ ____ per unit	$
Sulphur charge over 16.0 % @ 10¢ per unit	$ 2.00
____ % @ ____ per unit	$
TOTAL SMELTING AND REFINING DEDUCTIONS	$ 11.02

PAYMENT FOR METALS

				VALUE PER TON
Gold .03 Oz.		@ 35.00 Per Oz.		$ .95
Silver 59.8 Oz.	95%	@ .90 Per Oz.		$ 51.15
Lead 19.9 %	90%	@ .12500 Per Lb.		$ 44.77
Copper 6.1 %	85%	@ .13515 Per Lb.		$ 9.41
Zinc 6.0 %	50%	@ .03125 Per Lb.		$ 3.75
Antimony 1.0 %	70%	@ .00250 Per Lb.		$ .05
			Gross Value	$ 107.97
LESS SMELTING AND REFINING DEDUCTIONS				$ 11.02
NET VALUE PER TON				$ 95.07

TOTAL OUNCES SILVER IN THIS SHIPMENT 63.10

SETTLEMENT

DRY WEIGHT 2767 POUNDS = 1.384 TONS @ $ 95.07 PER TON EQUALS $ 132.65

Less Freight from Shipping Point to Bradley, Idaho

Gross Weight ____ Pounds = ____ Tons @ $ ____ per ton equals	$	
~~Frt. on 4.9 Long Tons, gross @ (21.97-17.35)~~	$ 1.90	
~~Extra sampling~~	$ 10.00	11.90
~~10% Royalty to Sunny Peak Mng. Co. - 300 Columbia Bldg. Spokane, Wash.~~	$	13.27
	$	22.63
~~Set Commonwealth Mines - S/C A/C~~	$	
NET PROCEEDS	$	[illegible]

BUNKER HILL & SULLIVAN

CONCENTRATES

Name of Mine: Chief Consolidated Group Mine Lot No.

Station: Concoully, Washington N. P. Sta.

Entry Approved: 6/20/40 Date of Sampling:

Car Initial	Car Number	Gross Weight Lbs.
BN	Auto frt.	2733

Total Gross Weight	2733
27 Gross Weight of Sacks	32
Gross Weight of Ore	2701
Moisture 3.3 % Pounds	89
Dry Weight of Ore	2612

Gold .5
Silver .07
Copper 3.
Lead
Zinc
Insoluble
Sulphur
Zinc 2.
Antimony .5
Arsenic .12
Bismuth .036

Payment for Metals			Value per Ton
Lb. ... oz.	@ ...	per oz.	$
Lb. ... oz.	@ ...	per oz.	$
Au .065 oz	@ 31.81825	per oz.	$ 2.705
Ag 40.60 oz 95%	@ .70625	per oz.	$ 27.360
Pb 13.25 % 95%	@ .05	per lb.	$ 11.923
Zn 2.5 % 100%	@ .03638	per lb.	$ 1.819
		Gross Value	$ 43.809
Less Treatment			$ 12.101
Net Value per Ton			$ 31.708

Total Ozs. Gold in this Shipment .111
Total Ozs. Silver in this Shipment 53.02

Treatment Charge Deducted $
Less ... % or over $
Plus ... % or over $

Penalty Deducted:
Gold Penalty $
Silver Penalty $
Zinc Penalty $
Antimony and Arsenic Penalty $
Bismuth Penalty $
Freight on Road to Mill to ... 238.5 Lbs. @ ... per ton $
Total Penalty $

12 183

SETTLEMENT

Dry Weight 2612 Pounds — 1.306 Tons @ $ 31.708 per ton dollars

Less Freight from Shipping Point to Bradley, Idaho
based on Value of $ ... per gross ton.
Gross Weight ... Pounds — ... Tons @ $ ... per ton dollars $
Preliminary Payment $
Extra Carfling $
Inland Motor Freight, Spokane to Kellogg $
Duty on Lead $
Custom of Ages $

To Alfred Davidson, Concoully, Wn.

Agreed to ... without scale, factor or cost of sampling, or the cost of sampling and bags, or sampling all lots of less than one ton.

Bunker Hill & Sullivan ...

By

WM. H. STOWELL & CO., Chemists and Assayers
421 Sprague Avenue, Spokane, Wash.
Tel. Main 5924

COPY OF ASSAY

From a six foot channel sample across
the ore shute of the Mohawk vein in
No.2 tunnel

Memorandum of Assay of Rock made for

Sunny Peak Mining Company Spokane, Wash. August 20, 1949

ASSAY VALUE PER TON OF 2,000 POUNDS AVOIRDUPOIS

SAMPLE MARK	Copper 17½¢ per lb.			Silver at 90¢ per oz.			Gold at $35 per oz.	
	%	Dollars	Cents	Ozs.	10ths	Dollars Cents	Ozs.	100ths
No.1	17½	60.20		663	2	596.88	12	$4.20
							Total	$661.28

No. 141266
Charges $2.50

Signed: Wm. H. Stowell & Co.
Assayers

BUNKER HILL SMELTER

BUNKER HILL & SULLIVAN MINING & CONCENTRATING COMPANY
In Account With

P. O. Address: KELLOGG, IDAHO
R. R. Station: BRADLEY, IDAHO

SUNNY PEAK MINING CO FRED STORY LEASE

Name of Mine: Nohawk Mine Lot No.: Smelter Lot No.: I

Location: Concomully, Wash. R. R. Shipping Point: By Truck Class: Crude

DATE OF ARRIVAL: 11/9/51 DATE OF SAMPLING: 11/9/51 DATE OF SETTLEMENT: 11/16/51

Car Initial	Car No.	H_2O	Weight, lbs.
1	Truck	0.44	2630

TOTAL GROSS WEIGHT	2630
____ Sacks. Weight of Sacks	
GROSS WEIGHT OF ORE	
Moisture Pounds	12
DRY WEIGHT OF ORE	2618

Metal Assay

Gold	.02	Oz. P. T.
Silver	68.4	Oz. P. T.
Copper	1.9-1.0 = 0.9	% P. T.
Lead	13.6	% P. T.
Iron	12.6	% P. T.
Insol.	40.6	% P. T.
Lime	1.7	% P. T.
Sulphur	18.2	% P. T.
Zinc	7.1	% P. T.
Antimony	0.3	% P. T.
Arsenic	0.11	% P. T.
Bismuth	0.0	% P. T.

QUOTATIONS

			Per Oz.
			Per Oz.
Silver 11-9-51	=	.90	Per Oz.
Lead 11-9-51			
.19000-.01632	=	.17368	Per Lb.
Copper 11-9-51			
.24075-.06000	=	.18075	Per Lb.
Zinc 11-9-51			
.19500 @ 25%	=	.04875	Per Lb.

SMELTING AND REFINING DEDUCTIONS

	PER TON
Base Smelting Charge	$ 8.000
Credit ____% Iron over (____% Zinc x 1.7) @ 40c a unit	$
Debit ____% Iron under (____% Zinc x 1.7) @ 40c a unit	$
Credit ____% Silica over (____% Iron x .886 @ 8c a unit	$
Debit ____% Silica under (____% Iron x .886 @ 8c a unit	$
Credit ____% Lime over (____% Iron x .979) @ 10c a unit	$
Debit ____% Lime under (____% Iron x .979) @ 10c a unit	$
TOTAL SMELTING DEDUCTIONS	$
Silver charge over ____ oz. per ton @ ____ c per oz.	$
Antimony charge over ____% @ ____ per unit	$
Arsenic charge over ____% @ ____ per unit	$
Bismuth charge over ____% @ ____ per pound	$
Moisture charges over ____% @ ____ per unit	$
Sulphur charge over ____% @ ____ per unit	$
TOTAL SMELTING AND REFINING DEDUCTIONS	Min. $ 11.000

PAYMENT FOR METALS

						VALUE PER TON
Gold ____ Oz.			@ ____	Per Oz.		$
Gold ____ Oz.			@ ____	Per Oz.		$
Silver 68.4	Oz	95 %	@ .90	Per Oz.		$ 58.482
Lead 13.6	%	90 %	@ .17368	Per Lb.		$ 42.517
Copper 0.9	%	100 %	@ .18075	Per Lb.		$ 3.254
Zinc 7.1	%	50 %	@ .04875	Per Lb.		$ 3.461
				Gross Value		$ 107.714

LESS SMELTING AND REFINING DEDUCTIONS . . . . . $ 11.000

NET VALUE PER TON . . . . . $ 96.714

TOTAL OUNCES SILVER IN THIS SHIPMENT 89.54

SETTLEMENT

DRY WEIGHT 2618 POUNDS = 1.309 TONS @ $ 96.714 PER TON EQUALS $ 126.60

Less Freight from Shipping Point to Bradley, Idaho

Gross Weight ____ Pounds = ____ Tons @ $ ____ per ton equals $ ____

Frt. on 320 lead lbs. paid @ (23.84-17.35) $ 1.04

Extra Sampling $ 10.00 11.04

$ ____

$ ____

$ ____

$ ____

$ ____

$ ____

To: Sunny Peak Mng. Co. - 514 Columbia Bldg. - Spokane, Wash.

NET PROCEEDS $ 115.56

Return to Cecil G. Fennell

Property of Sunny Peak Co.

BUNKER HILL SMELTER
Bunker Hill & Sullivan Mining & Concentrating Company
In account with

Cheif Sunshine Group - Killfeather and Davidson

Name of Mine Chief Sunshine Group Mine Lot No. _____ Smelter Lot No. 2
Location Conconully, Wash. R.R. Shipping Point By Truck Class Crude

Date of Arrival 6/30/38 Date of Sampling 7-1-38 Date of Settlement 7-1-38

Car Number	Gross Wt. Lbs.
By Truck	8440
TOTAL GROSS WEIGHT	8440
74 sacks-wt. of sacks	74
Gross wt. of ore	8366
Moisture 0.2% pounds	17
Dry Wt. of ore	8349

SETTLEMENT ASSAYS

Gold	.035	oz. per ton
Silver	94.90	oz. per ton
Copper	4.5-1 3.5	per cent
Lead	16.3-1.25- 15.05	percent
Iron	11.5	per cent
Insoluble	34.0	per cent
Lime	.7	per cent
Sulphur	20.1	per cent
Zinc	8.8	per cent
Antimony	.8	per cent
Arsenic	.17	per cent

QUOTATIONS

Lead @ E.& M.J.P.Price for 6-30-38 ..... 4.75 per cwt.

Copper .....price. for 6-30-38 .0865-.07 .0165 per lb.

TREATMENT	PER TON
Treatment Chg. (Based on)	$12.000
Less 34.95% PB under 50% @ .10	$ 3.495
	$ 8.505
Additional Refining Chge. on Silver over 35 oz. 59.9 oz. @ 1 cts. per oz.	$ .599
Sulphur penalty over Max.	2.000
Zinc Penalty over Waived	
Freight on Lead to New York 270.9 lbs. @ $13.75 per ton	1.862
TOTAL TREATMENT	$12.966

PAYMENT FOR METALS			Value per ton
Gold .035 oz	@ 31.81825 per oz.		$ 1.114
Silver 94.9 oz. 95%	@ .64125 per oz.	$	$57.812
Lead 15.05% 90%	@ .0475 per lb.		12.868
Copper 3.5% 100%	@ .0165 per lb.		1.155
	GROSS VALUE		$72.949
	LESS TREATMENT		12.966
	NET VALUE PER TON		$59.983

TOTAL OZ. GOLD THIS SHIP.
" " SILVER " "

SETTLEMENT

Dry Weight 8349 pounds - 4.1745 Tons @$59.983 per ton equals $250.40
Extra Sampling $10.00 10.00
NET PROCEEDS $240.00

Return to Cecil G. Fennell

Property of Sunny Peak Co.

BUNKER HILL SMELTER
Bunker Hill & Sullivan Mining & Concentrating Company
In account with

Cheif Sunshine Group - Killfeather and Davidson

Name of Mine Chief Sunshine Group Mine Lot No. _____ Smelter Lot No. 2
Location Conconully, Wash. R.R. Shipping Point By Truck Class Crude

Date of Arrival 6/30/38 Date of Sampling 7-1-38 Date of Settlement 7-1-38

Car Number	Gross Wt. Lbs.
By Truck	8440
TOTAL GROSS WEIGHT	8440
74 sacks-wt. of sacks	74
Gross wt. of ore	8366
Moisture 0.2% pounds	17
Dry Wt. of ore	8349

SETTLEMENT ASSAYS

Gold	.035	oz. per ton
Silver	94.90	oz. per ton
Copper	4.5-1 3.5	per cent
Lead	16.3-1.25- 15.05	percent
Iron	11.5	per cent
Insoluble	34.0	per cent
Lime	.7	per cent
Sulphur	20.1	per cent
Zinc	8.8	per cent
Antimony	.8	per cent
Arsenic	.17	per cent

QUOTATIONS

Lead @ E.& M.J.P.Price for
6-30-38 ..... 4.75 per cwt.

Copper .....price. for 6-30-38 .0865-.07 .0165 per lb.

TREATMENT	PER TON
Treatment Chg. (Based on)	$12.000
Less 34.95% PB under 50% @ .10	$ 3.495
	$ 8.505
Additional Refining Chge. on Silver over 35 oz. 59.9 oz. @ 1 cts. per oz.	$ .599
Sulphur penalty over Max.	2.000
Zinc Penalty over Waived	
Freight on Lead to New York 270.9 lbs. @ $13.75 per ton	1.862
TOTAL TREATMENT	$12.966

20
20
1400

PAYMENT FOR METALS Value per ton

Gold .035 oz	@ 31.81825 per oz.		$ 1.114
Silver 94.9 oz. 95%	@ .64125 per oz.	$	$57.812
Lead 15.05% 90%	@ .0475 per lb.		12.868
Copper 3.5% 100%	@ .0165 per lb.		1.155
	GROSS VALUE		$72.949
	LESS TREATMENT		12.966
	NET VALUE PER TON		$59.983

TOTAL OZ. GOLD THIS SHIP. [illegible]
" " SILVER " " [illegible]

SETTLEMENT

Dry Weight 8349 pounds - 4.1745 Tons @ $59.983 per ton equals $250.[illegible]
Extra Sampling $10.00 10.[illegible]
NET PROCEEDS $2[illegible]

Standard Form No. 65
November 1961
General Services Administration
FPMR (41 CFR) 101-11.6

U.S. Government Messenger Envelope

INSTRUCTIONS FOR USE

1. Void Previously Used Block
2. Identify Agency of Addressee
3. Write Clearly
4. Send Surplus Envelopes to Supply Room for Reissue

Mohawk Claim Map

NAME (OR TITLE) OF ADDRESSEE, AGENCY, ORGANIZATIONAL UNIT, ADDRESS, AND ROOM		NAME (OR TITLE) OF ADDRESSEE, AGENCY, ORGANIZATIONAL UNIT, ADDRESS, AND ROOM	
~~Director, MBM~~	STOP	~~MBM Rm 2521~~	STOP
Mr. Porter Rm 338 - BLM	STOP	Rm Lowery Hum & Eisemo Rm 4460	STOP
~~Div. of Commercial Studies~~ ~~Attention Fuel Stdy~~ Att: Ann Allen Room 2759	STOP		STOP
[illegible]	STOP		STOP
~~S.A. Dickinson Room 2759~~	STOP		STOP
~~Mr. Weeks Rm 326 Roslyn Bldg~~	STOP		STOP
~~Kenneth More Room 4617 - Interior~~	STOP		STOP
~~R. B. Clement Rm 2521~~	STOP		STOP
AS/MR ~~6642~~	STOP		STOP

Use other side

Use STOP only when messenger service between Government buildings in Washington, D.C., is required or wherever a STOP system is used. Your mail room has STOP information.

65-107

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

January 21, 1972

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 24 1972

INITIALS	CODE
Cal	120
	~~130~~
HK	120

Mr. Carl E. Fisher
Cataldo
Idaho 83810

Re: OME-6826 (silver)
Mohawk Lease
Silver Peak Mine
Okanogan County, Washington

Dear Mr. Fisher:

In accordance with your request to our secretary when you visited our office yesterday, I am enclosing copies of the maps you submitted with your application for OME assistance. These maps consist of the following:

Sheet No. 1
Sheet No. 2 - 2 copies
Sheet No. 3

Mohawk No. 1 Tunnel
Mohawk No. 2 Tunnel Sheet No. 1
Mohawk No. 2 Tunnel Sheet No. 2

Mohawk Claim map

Sincerely,

Willard P. Puffett
Field Officer, Region I

Enclosures

cc: DRF
OME

WPuffett/at

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/16/70	Emerick	120
11/17/70	Kirkemo	120
11/17	Kilsgaard	
		220

AIRMAIL

NOV 17 1970

Mohawk Lease
601 South Division
Kellogg, Idaho 83837

Re: OME-6826 (Silver)
Mohawk Lease
Silver Peak Mines
Okanogan County, Washington

Gentlemen:

A careful review of your application for financial assistance to explore the subject property and other information available to us indicates that the probability of disclosing significant reserves of silver on your property is not sufficiently promising to justify Government participation in the proposed exploration. Accordingly, we regret to inform you that your application for assistance is denied.

We wish to thank you for your interest in the minerals exploration program and for bringing your property to our attention.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
OME Region I
Mr. Emerick

WLEmerick/bsl 11/16/70

MMI Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
11/16/70	Emerick	120
11/17	Kirkham	120
		220

November 16, 1970

Memorandum

To: The File

From: William L. Emerick, Assistant Chief
Office of Minerals Exploration

Subject: OME-6826 (Silver)
Mohawk Lease
Silver Peak Mines
Okanogan County, Washington

Justification for Denial of Application

The Applicant proposed to drive a by-pass drift around a caved area in an old adit and then continue to drift along a vein for 500 feet. The by-pass drift could be as much as 300 feet long. It would serve also as the site for two vertical drill holes drilled to test the down dip part of the vein. An alternate plan proposed 610 feet of access road to a new portal site about 120 feet below the above cited work, and 600 feet of drifting to explore the down dip part of the vein. Either proposal was estimated to cost about $50,000.

The vein to be explored averages about 2-1/2 feet thick, dips 30 to 50 degrees, and is offset by numerous faults. It contains scattered to abundant galena, sphalerite, and chalcopyrite, and sparse molybdenite. Abundant tetrahedrite has been reported in parts of the vein.

Assay data indicate that the richer parts of the vein ~~possess in tetrahedrite~~ contain 8 to 15 ounces of silver per ton, 3 percent lead, 2 percent zinc, and 1 percent copper. The ore is complex and probably silver and lead are the only metals for which a smelter would pay. Available shipping records indicate a total of 1,158 ounces of silver and 4,625 pounds of lead have been sold from the mine. At present metal prices the dollar value of the ore sold amounts to about $2,721.

Assay results of samples taken during the OME examination indicate that the vein in general contains much lower silver and lead values than in the ore that was sold. The Field Officer concludes that the metal content of the vein will be no better than presently shown in its exposed portions, and that any small, rich ore shoots found would be costly to mine because the vein is quite flat and offset by numerous faults. Caved areas resulting from heavy ground are present which suggests that timbering might be a necessary and expensive item. The low metal content and the relatively flat dip and thinness of the vein suggest that it does not contain a significant quantity of silver-bearing ore, therefore, the Field Officer recommends denial of the application.

I concur with his recommendation.

William L. Emerick

William L. Emerick

cc: Director's Reading File
Mineral Resources File
OME Docket
OME Reading File
Mr. Emerick

WLEmerick/bsl 11/16/70

UNITED STATES
DEPARTMENT OF THE INTERIOR

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

November 9, 1970

OFFICIAL COPY
O. M. E.
RECEIVED
NOV 13 1970
INITIALS | CODE

Memorandum

To : Chief, Office of Minerals Exploration

From : Field Officer, Region I

Subject: Application Examination Report
OME-6826 (Silver)
Mohawk Lease
Silver Peak Mines
Okanogan County, Washington

INTRODUCTION

The Mohawk Lease, a partnership, has applied for OME assistance to explore extensions of silver-bearing quartz veins at the Silver Peak, formerly called Sunny Peak, mine that is about 1½ miles northwest of Conconully, Washington. Shipping records show that sorted ore from the mine contained as much as 94 ounces silver per ton. On Friday morning, October 23, 1970, I inspected the records in the Okanogan County courthouse to learn where the applicant's unpatented claims had been recorded. That afternoon, I unsuccessfully attempted to examine part of the underground workings at the mine but found that the lower adit was locked. The next day, October 24, in company with William P. Kopp, geologist for the applicant, I examined the underground workings, collected 4 samples for assay, and inspected exposures along the road leading to the mine. In all, I spent about two hours at the courthouse and four hours at the property.

RECOMMENDATION

I recommend that the request for OME assistance be denied. The vein to be explored ranges from a few inches to about four feet thick, dips from 30 to 50 degrees, and contains scattered to abundant galena, sphalerite, and chalcopyrite. Molybdenite is present in sparse amounts. Tetrahedrite reportedly is abundant in the silver-bearing ore shoot, but exposures of this material are in an unsafe place to examine. Numerous faults offset the vein from a few inches to a few feet. Assay data indicate that the richer parts of the tetrahedrite-poor parts of the vein

FIELD ON-SITE REPORT

contain 8 to 15 ounces silver per ton, 3 percent lead, 2 percent zinc, and 1 percent copper. The low metal content, the relatively flat dip, and the thinness of the vein suggest that it does not contain a significant quantity of silver-bearing ore, and that it would be prohibitively expensive to mine that which is present.

APPLICANT

Mohawk Lease, a partnership
601 South Division
Kellogg, Idaho 83837

Partners include:

Name	Address	Telephone No.
James Salyer	601 So. Division Kellogg, Idaho	784-4435
William P. Kopp	Pinehurst, Idaho	682-2178
Allen L. Sargent	Rose Lake, Idaho	
Carl E. Fisher	Cataldo, Idaho	682-2147
Oiva A. Rania	Cataldo, Idaho	
Gerald S. Johnson	Mullan, Idaho	

PROPERTY

The applicant has leased several unpatented claims from Silver Peak Mines, a Washington corporation. The lease submitted with the application lists only 9 claims; however, Mr. Kopp's report, which accompanies the application, states that the property consists of 13 unpatented claims. The claims are in the Salmon River Mining District and are recorded in the auditor's office, Okanogan County Courthouse as follows:

Claim Name	Book	Page
Waterloo	9	86
Swanee	9	87
Nesperse	10	106
Mohawk #1	7	587
Apache Amended	9	166
Windy	12	195
Jimmie	12	196
Weller	9	167
Big Chief	12	211
(Mohawk) 1/	7	586

1/ Mohawk claim not listed on the lease; however, portal of No. 2 adit is on this claim and some of the proposed work is to be on the Mohawk claim.

There are two adits on the property (figure 1- Claim, composite, and geologic maps, Silver Peak mine, Salmon River Mining District, Sec. 35, T. 36 N., R. 24 E., Okanogan County, Washington), one of which is partially caved near the portal and the other is caved near a raise about 370 feet from the portal. The only building is a shed housing the compressor near the lower portal.

LOCATION AND ACCESSIBILITY

The claims are on the southeast-facing slopes of Mineral Mountain, and are about 1½ miles northwest of Conconully. The two adits are shown as the Sunny Peak Mine on the Tiffany Mountain, Washington, 15-minute topographic sheet. The claims cover parts of Sec. 35, T. 36 N., R. 24 E., and Sec. 2, T. 35 N., R. 24 E., (figure 1). Slopes are steep and sparsely timbered. Altitudes at the portals are approximately 4,250 and 4,470 feet. The top of Mineral Mountain is between 5,440 and 5,520 feet.

An unsurfaced road leads westward from Conconully, Washington, to the portal of the lower adit; a jeep trail extends to the upper portal. In good weather, a passenger vehicle can safely traverse the road to the lower portal, but in wet weather, a four-wheel drive vehicle is required.

HISTORY

The Salmon River Mining District was organized as early as 1886 and several claims were patented along the south slopes of Mineral Hill. The early work was done on the Columbia and Frankie Boy claims and included a long drift and crosscut. Docket DMA 992X contains a geologic report on the district written in 1907 by a Samuel Aughey.

Shipping records from the Mohawk group date back to June 1937 and the last shipments were some flotation concentrates in May 1954. Production data are as follows:

Date	Type ore	Pounds	Au oz/ton	Ag oz/ton	Cu %	Pb %	Zn %
6/1/37	Crude	21,475	0.015	49.95	2.4	9.2	7.8
6/30/38	Crude	8,349	0.035	94.90	4.5	16.3	8.8
6/20/40	Concentrates	2,612	0.085	40.60	3.5	14.5	14.1
11/9/51	Concentrates	2,618	0.02	68.4	1.9	13.6	7.1
5/10/54	Concentrates	2,782	0.03	59.8	4.1	19.9	6.0

Scarcely any information is available concerning the discovery or early mining of the vein on the Mohawk group of claims. The Sunny Peak Mining Company, an Idaho Corporation, acquired the Mohawk property in December 1948. This company was changed to Silver Peak Mines Corporation, a Washington Corporation, in July 1949, according to Mr. Dale Lanphere, President, Silver Peak Mines Corp. The mining done in 1954 was from the No. 2 adit and, according to Mr. Lanphere, the lessee, a Mr. Kaiser, stoped below the adit level for about 20 feet, extracting some rich silver-bearing ore. Some of the ore was concentrated in a mill near Omak, Washington. The Mohawk Lease gained control of the property in April 1970 and, since that time, has cleared and rehabilitated much of the No. 2 adit.

GEOLOGY

The ore deposits at the Silver Peak mine are in quartz veins, some associated with mafic dikes, that cut biotite-hornblende granite. The granite is part of the Similkameen batholith of Late Cretaceous or Early Tertiary age (Jones, 1917, p. 17). A north-trending contact between granite and metasedimentary rocks of Late Paleozoic age is about a mile east of the mine. The mafic dikes are biotite rich lamprophyres (kersantite or minette).

The veins are exposed in two adits and in the access road to the lower adit (figure 1). The veins in the adits strike a few degrees west of north and dip 30° to 50° W. The "X" vein, exposed in the access road, strikes about N. 20° E. and dips 43° N. Another vein, barren of ore sulfides and exposed in the access road, strikes about N. 30° W. and dips 30° to 35° S. The veins are quartz fillings in shear zones; locally a single vein occupies the full width of shearing; elsewhere the vein consists of a mixture of sheared granite and several thin quartz stringers. The full width of the vein ranges from a few inches to as much as 4.3 feet; average width is about 2½ feet.

The lamprophyre dike is adjacent to the vein in the lower adit (No. 2 adit), and is from 24 to 36 inches thick. It is either above, below, or encloses the quartz vein. Boulders of mafic dike are near the "X" vein exposed in the access road.

Fine-grained rock (silicified granite?) is adjacent to parts of the quartz vein in the No. 2 adit. This rock is commonly rich in fine-grained pyrite but does not contain visible sphalerite, galena, or chalcopyrite. It occurs on opposite sides of the vein from the lamprophyre. An assay of this rock yielded trace gold, 0.1 ounce silver per ton, 0.05 percent lead, 0.2 percent zinc, and 0.03 percent copper.

The granite near the vein is somewhat argillized and locally is stained with limonite. It is sheared adjacent to the quartz vein in contrast to the unsheared mafic dike.

Northeasterly and northwesterly striking faults have cut and offset the vein and lamprophyre in the No. 2 adit. Several faults have offset the barren quartz vein exposed in the adit road. The offset along all the faults is to the northeast; displacement ranges from a few inches to as much as four feet. No ore minerals are in the crosscutting faults.

The ore minerals, galena, sphalerite, and chalcopyrite, appear to have been deposited contemporaneously as in many places they are intimately mixed in stringers or clots in the vein. Molybdenite was seen in only one place. There is a wide variation in the quantity of ore minerals present; thinner parts of the vein probably carry as many sulfides as some of the thicker parts.

Tetrahedrite is reported to be in the ore mined from the now-caved part of the No. 2 adit. The Operator's sample of the tetrahedrite-rich ore assayed 73.5 ounces silver per ton. Jones (1917, p. 28) reports that tetrahedrite was in ore from mines near to the Silver Peak mine; therefore, tetrahedrite might be an important silver-bearing mineral in the district.

It is not certain as to which mineral contains the most silver. Ratios of ounces of silver to percent of lead range from 3 to 6 in the shipped ore and from 2 to 4 in the OME samples. Ratios of ounces of silver to percent of zinc range from 3 to 11 in the shipped ore and from 2 to 20 in the OME samples. Ratios of ounces of silver to percent of copper range from 12 to 36 in the shipped ore and from 4 to 20 in the OME samples. In general, the silver values are highest when the lead values are highest, and this suggests that the galena might be silver-bearing.

The metal content of the vein is low. Samples of the richer parts of the vein in the No. 2 adit (excluding the tetrahedrite-rich part which was unsafe to examine), contained 4.6 to 14.7 ounces silver per ton, 2.1 to 3.6 percent lead, 0.7 to 2.2 percent zinc, and 0.74 to 1.10 percent copper. The sample across the thickest part of the vein, some 35 inches, contained the higher values, however. This latter sample is the nearest to the mined area, and perhaps indicates an increase in metal values northward along the vein.

The mined part of the vein in the No. 2 adit is reportedly rich in tetrahedrite and, according to the shipping records, contained high silver values. The applicant reports that the ore shoot was 250 feet long and had been stoped to 60 feet above the adit. The president of Silver Peak Mines told me that a lessor in 1954 stoped for about 20 feet below the level of the No. 2 adit. This part of the mine was not safe to examine, and I cannot verify the existence of the rich ore reported.

APPLICANT'S PROPOSAL

The applicant proposes to drive a run-around drift past the caved area in the No. 2 adit and then to drift along the vein for at least 500 feet. The run-around drift might be as much as 300 feet long. This bypass will also serve as a location from which to drill two vertical holes to test the down dip part of the vein.

An alternate plan proposed by the applicant is to construct 610 feet of access road to a new portal site about 120 feet below the No. 2 adit, and then to drift along the vein approximately 600 feet to explore the area down-dip from the mined area in the No. 2 adit.

The cost of either of the two proposals is estimated by the applicant to be $50,000.

APPRAISAL OF PROPOSAL

The Government's share of the proposed exploration project would be 75 percent of $50,000 or $37,500. Therefore, one should reasonably expect the work to disclose an ore body worth at least $750,000 in order that the 5 percent due to the Government would repay its share of the exploration cost. The problem then is to determine if there is evidence of this much ore on the applicant's property.

Assay data and shipping records indicate that the ore is a complex base metal type with some silver. Probably the only metal for which the smelter will pay are silver and lead. The available shipping records, which are listed in another part of this report, show that a total of 1,158.16 ounces of silver and 4,624.6 pounds of lead have been sold. With silver at $1.75 per ounce and lead at $0.15 per pound, the dollar value of the ore sold is $2,721.48.

The assay results of samples taken on the OME examination, and shown on figure 1, indicate that the vein in general contains much lower silver and lead values than that in the ore that was sold.

Continued drifting along the vein might be successful in finding an ore shoot about which nothing is presently known. It seems more reasonable, however, that the metal content of the vein will be no better than that shown in the presently exposed portions.

There is no reason, therefore, to expect to find an ore body with an approximate value of $750,000 by completing the work proposed by the applicant. Small rich ore shoots that might be found will be costly to mine as the vein is quite flat, and is offset by numerous faults. Heavy ground has resulted in caved areas, and the extent of timbering necessary will be difficult to estimate.

It is recommended therefore, that the application for OME assistance be denied.

REFERENCE CITED

Jones, E. L., Jr., 1917, Reconnaissance of the Conconully and Ruby mining districts, Washington: U. S. Geol. Survey Bull. 640, p. 11-36.

Willard P. Puffett

Willard P. Puffett

Enclosure: Figure 1- Claim, Composite, and Geologic maps, Silver Peak Mine, Salmon River Mining District, Sec. 35, T. 36 N., R. 24 E., Okanogan County, Washington.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/15/70		120
		220
		120M

October 15, 1970

AIRMAIL

Mohawk Lease
601 South Division
Kellogg, Idaho 83837

Re: OME-6826 (Silver)
Mohawk Lease
Silver Peak Mines
Okanogan County, Washington

Gentlemen:

The application for assistance in exploring the subject property 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, 656 U. S. Court House, 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

GLAult/a 10-15-70

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/15/70		120
		220
		120M

October 15, 1970

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6826 (Silver)
Mohawk Lease
Silver Peak Mines
Okanogan County, Washington

We are referring the subject application to you for review and possible field examination, and your recommendation.

We agree with the comments in your transmittal memorandum of October 6, 1970, and with your suggestion to visit the property when in the district in connection with the Geo-Mineral contract, assuming that it may be executed.

In addition to the deficiencies you noted in the application, we note that the letters to the banks are undated as is the reply from the Idaho First National Bank. We are returning these to you for completion by the Applicant if the proposal is to be recommended by you. Otherwise, the matter can be dropped. Only two bank letters are required.

The Lien and Subordination Agreements is not signed properly. Mr. Dale Lanphere, President, should sign and enter his address in the spaces immediately below Item 6 on the form. All copies of the form are returned herewith.

A claim is identified as Nesperce on the L. & S. form, and Nesperson on the claim map and in the Mining Lease. What is the correct spelling, and are all of the claims in good standing?

The Mohawk claim is not included in either the Mining Lease or the Lien and Subordination Agreements, yet the proposed exploration would be from the No. 2 tunnel or from a new tunnel nearby, both on the Mohawk claim. Who owns the Mohawk claim and what are the Applicant's rights thereto?

Reference is made in the application to Salmon River mining district. As the property is near Salmon Creek, shouldn't the district be referred to as the Salmon Creek district?

Where is the Gubser tunnel with respect to the subject property, and is there a possibility that it may have cut the Mohawk vein at a lower level than is proposed by the Applicant? It probably is inaccessible, but if any significant veins were disclosed there may be some accounts or records of tenor and widths available some place. Perhaps some of the other mines mentioned in the application explored the Mohawk vein.

In summary, if the Applicant has no right or cannot obtain right to the Mohawk claim, the Government should not consider participating in the proposed exploration. If production would depend upon hand sorting ore from a narrow vein, are the chances good for making a significant discovery by the work proposed?

Harold Kirkemo (gla)

Harold Kirkemo

Enclosures

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

HKirkemo/gla 10-15-70

October 13, 1970

Mohawk Lease
601 So. Division
Kellogg, Idaho 83837

Subject: OME-6826

Gentlemen:

Your application for exploration assistance, dated October 2, 1970, submitted to our office at Spokane, Washington, has been assigned Docket No. OME - 6826.

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

Sincerely yours,

Harold Kirkemo
Chief, Office of
Minerals Exploration

cc to Region I

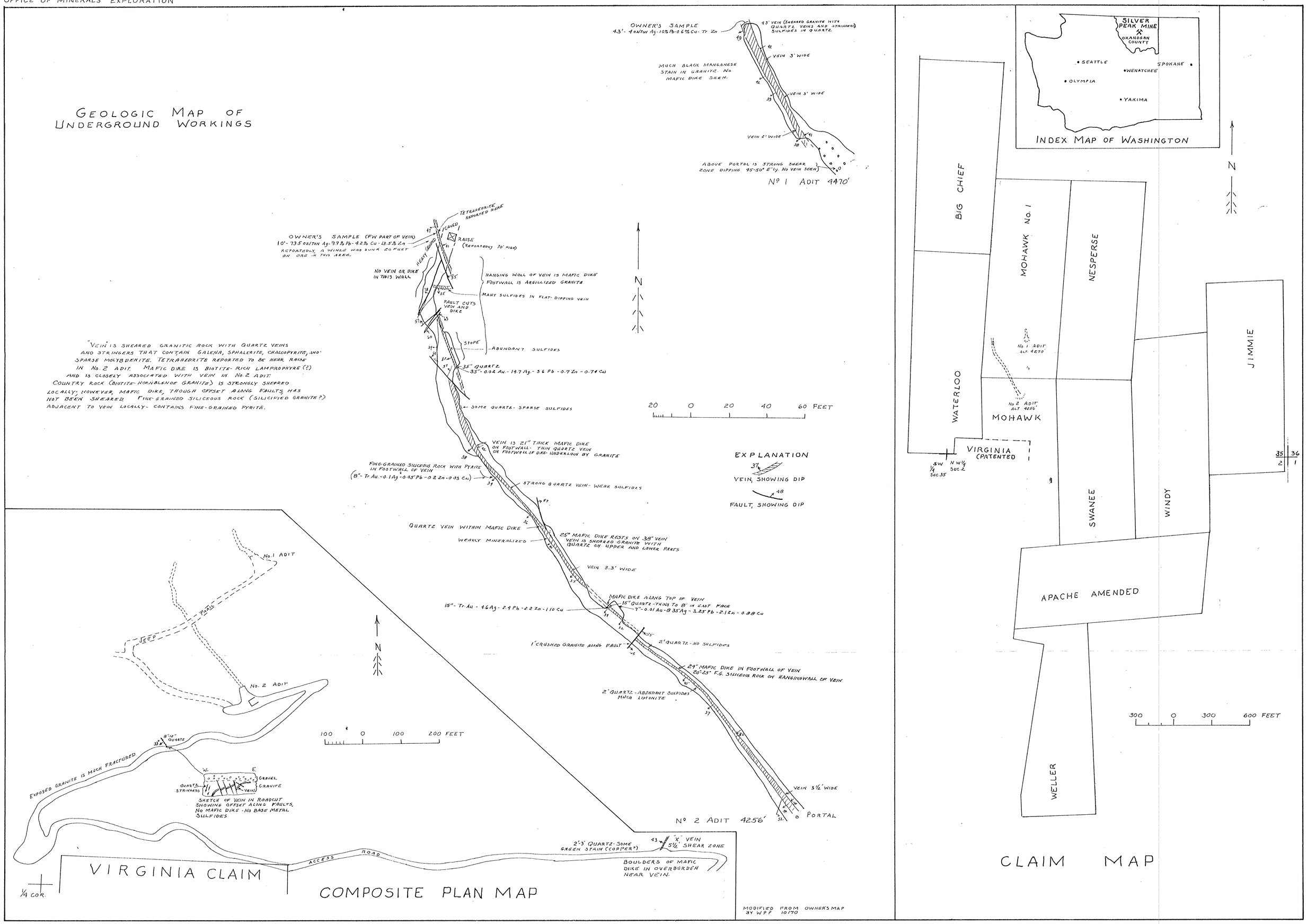
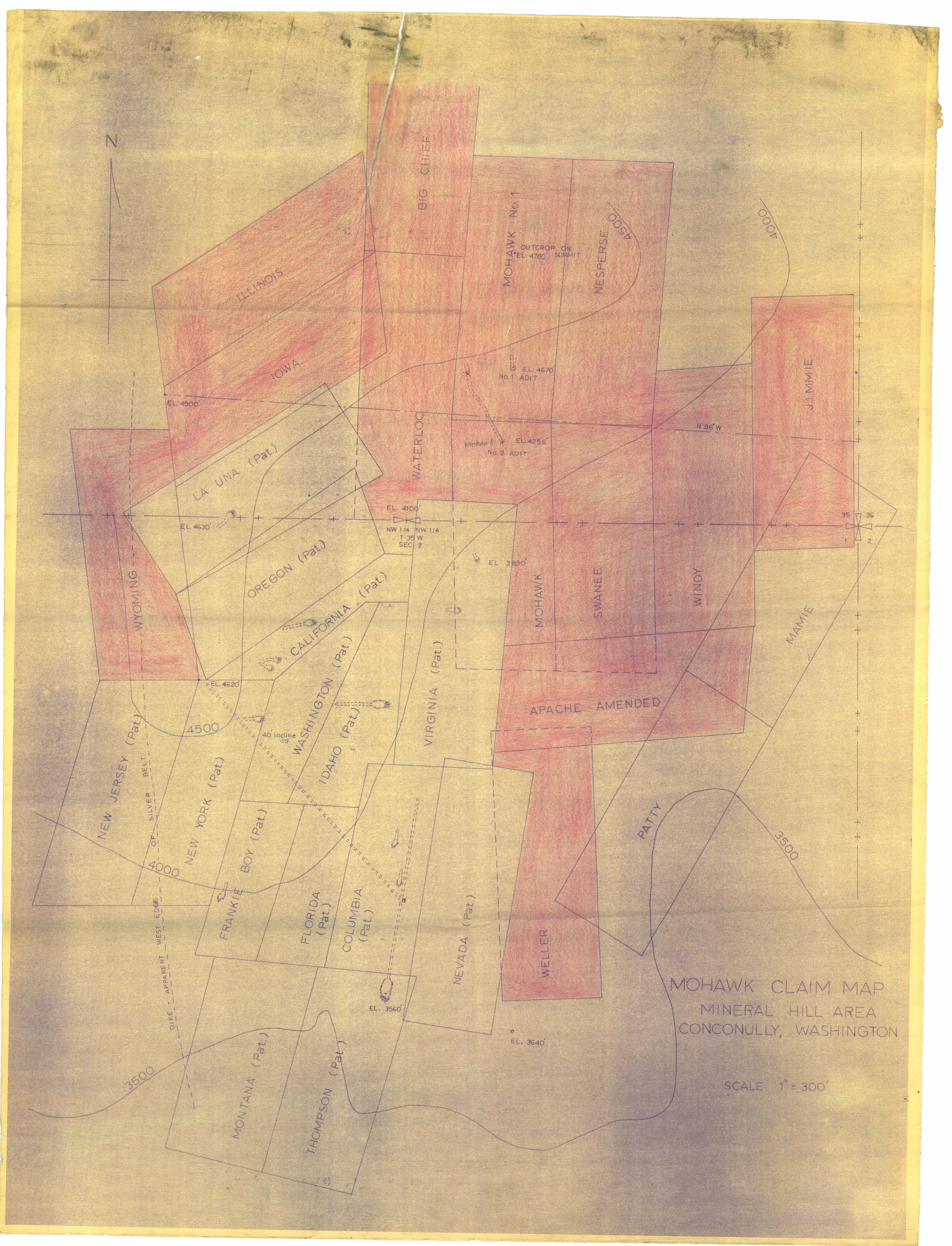


FIGURE 1.- CLAIM, COMPOSITE, AND GEOLOGIC MAPS, SILVER PEAK MINE, SALMON RIVER MINING DISTRICT, SEC. 35, T. 36 N., R. 24 E., OKANOGAN COUNTY, WASHINGTON


N
BIG CHIEF
MOHAWK No. 1
OUTCROP ON SUMMIT
EL. 4780'
NESPERSE
4500
4000
ILLINOIS
IOWA
EL. 4900'
EL. 4670'
No. 1 ADIT
EL. 4256'
No. 2 ADIT
N 86° W
JIMMIE
WATERLOO
LA UNA (Pat.)
EL. 4630'
EL. 4100'
NW 1/4 NW 1/4
T. 35 N
SEC. 2
35
36
1
2
EL. 3890'
OREGON (Pat.)
WYOMING
CALIFORNIA (Pat.)
WASHINGTON (Pat.)
VIRGINIA (Pat.)
MOHAWK
SWANEE
WINDY
MAMIE
EL. 4620'
APACHE AMENDED
4500
40' incline
IDAHO (Pat.)
NEW JERSEY (Pat.)
SILVER BELT
NEW YORK (Pat.)
BOY (Pat.)
PATTY
3500
4000
FRANKIE
FLORIDA (Pat.)
COLUMBIA (Pat.)
NEVADA (Pat.)
WELLER
WEST EDGE
DIKE - APPARENT
EL. 3560'
EL. 3640'
MONTANA (Pat.)
THOMPSON (Pat.)
3500
MOHAWK CLAIM MAP
MINERAL HILL AREA
CONCONULLY, WASHINGTON
SCALE 1" = 300'