All five of these Lien forms are to be sent in with OME. No. 1 set.

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 –
Contract Date

LIEN AND SUBORDINATION AGREEMENTS 1/

To the United States of America:

That certain land in the County of Granite, State of Montana, consisting of fifteen (15) patented quartz lode mining claims whose names and U.S. Patent Survey Nos. 2/ are: described as follows: Gold Bug #9407, Bulls Eye #4651, Bulls Eye Fraction #9405, Crescent #4510, Free Coin #4652, Lead King #4511, Red Cloud #5451, Parquet #5452, White Cloud 5631, Iowan #3614, San Jose #3615, Robert Emmet #3616, Fourth of July #5453, Honolulu #5632, Fairview #4548, all located in Sections 3, 10 & 11, T.12N., R.14W., M.P.M. hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

American Mining Company, a Washington corporation 3/

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same. 4/

2. Undertakes and agrees that property in which the Government may acquire an interest or equity under the Contract may be dismantled, severed from the land, and removed as may be provided in the Contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned.

3. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none". Do not leave blank.)

None

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated_____, and recorded in Book_____, Page____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

4/ Subparagraph 1(a) does not apply to the holder of a claim, lien, or encumbrance.

4. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land or any production therefrom, furnishing the Government with two true copies of such notice; and

5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this 21st day of May, 1968.

JGH	G S Haviland	(Seal)	Deer Lodge, Montana (Street) (City & State)
JPH	Jean P Haviland	(Seal)	Deer Lodge, Montana (Street) (City & State) Jean P Haviland
		(Seal)	(Street) (City & State)
		(Seal)	(Street) (City & State)
		(Seal)	(Street) (City & State)
		(Seal)	(Street) (City & State)

I, _____ (Name), certify that I am the _____ (Title—Secretary, etc.) of the corporation named herein; that _____ (Name), who signed this agreement was then _____ (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____ (Corporate Seal)

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 –
Contract Date

LIEN AND SUBORDINATION AGREEMENTS 1/

To the United States of America:

That certain land in the County of Granite, State of Montana, consisting of fifteen (15) patented quartz lode mining claims whose names and U.S. Patent Survey Nos. described as follows: 2/ are: Gold Bug #9407, Bulls Eye #4651, Bulls Eye Fraction #9405, Crescent #4510, Free Coin #4652, Lead King #4511, Red Cloud #5451, Parquet #5452, White Cloud 5631, Iowan #3614, San Jose #3615, Robert Emmet #3616, Fourth of July #5453, Honolulu #5632, Fairview #4548, all located in Sections 3, 10 & 11, T.12N., R.14W., M.P.M.
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American Mining Company, a Washington corporation 3/
hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same. 4/

2. Undertakes and agrees that property in which the Government may acquire an interest or equity under the Contract may be dismantled, severed from the land, and removed as may be provided in the Contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned.

3. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none". Do not leave blank.)

None

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated _____, and recorded in Book _____, Page ____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

4/ Subparagraph 1(a) does not apply to the holder of a claim, lien, or encumbrance.

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5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this 21st day of May, 1968.

JGH	J G Haviland (Seal)	Deer Lodge, Montana	(Street) (City & State)
JPH	Jean P. Haviland (Seal)	Deer Lodge, Montana	(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)

I, _____ (Name), certify that I am the _____ (Title—Secretary, etc.) of the corporation named herein; that _____ (Name), who signed this agreement was then _____ (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____ (Corporate Seal)

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 –
Contract Date

LIEN AND SUBORDINATION AGREEMENTS[1]

To the United States of America:

That certain land in the County of Granite, State of Montana, consisting of fifteen (15) patented quartz lode mining claims whose names and U.S. Patent Survey Nos. are: Gold Bug #9407, Bulls Eye #4651, Bulls Eye Fraction #9405, Crescent #4510, Free Coin #4652, Lead King #4511, Red Cloud #5451, Parquet #5452, White Cloud 5631, Iowan #3614, San Jose #3615, Robert Emmet #3616, Fourth of July #5453, Honolulu #5632, Fairview #4548, all located in Sections 3, 10 & 11, T.12N., R.14W., M.P.M. described as follows:[2] hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

American Mining Company, a Washington corporation[3]

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same.[4]

2. Undertakes and agrees that property in which the Government may acquire an interest or equity under the Contract may be dismantled, severed from the land, and removed as may be provided in the Contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned.

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None

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated _____, and recorded in Book_____, Page____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

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5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this 21st day of May, 1968.

JGH Jos Haviland	(Seal)	New Lodge, Montana	(Street) (City & State)
JPH Jean P. Haviland	(Seal)	New Lodge, Montana Jean P. Haviland	(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)

I, _____ (Name), certify that I am the _____ (Title—Secretary, etc.) of the corporation named herein; that _____ (Name), who signed this agreement was then _____ (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____ (Corporate Seal)

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 –
Contract Date

LIEN AND SUBORDINATION AGREEMENTS 1/

To the United States of America:

That certain land in the County of Granite, State of Montana, consisting of fifteen (15) patented quartz lode mining claims whose names and U.S. Patent Survey Nos. are described as follows: Gold Bug 5407, Bulls Eye 4681, Bulls Eye Fraction 5405, Crescent 4510, Free Coin 4672, Lead King 4511, Red Cloud 5451, Torquat 5452, White Cloud 5631, Iowan 3614, San Jose 3615, Robert Emmet 3616, Fourth of July 5453, Honolulu 5632, Fairview 4543, all located in Sections 3, 10 & 11, T.12N., R.14W., M.P.M.

hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

American Mining Company, a Washington corporation 3/

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same. 4/

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1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated_____, and recorded in Book_____, Page____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

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4. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land or any production therefrom, furnishing the Government with two true copies of such notice; and

5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this 21st day of May, 1968.

JGH	G. H. Haviland (Seal)	✓ (Street)	Deer Lodge, Montana (City & State)
JPH	Jean P. Haviland (Seal)	✓ (Street)	Deer Lodge, Montana (City & State) ~~Jean P. Haviland~~
	(Seal)	(Street)	(City & State)
	(Seal)	(Street)	(City & State)
	(Seal)	(Street)	(City & State)
	(Seal)	(Street)	(City & State)

I, _____ (Name), certify that I am the _____ (Title—Secretary, etc.) of the corporation named herein; that _____ (Name), who signed this agreement was then _____ (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____ (Corporate Seal)

MME Form 52
Jan. 1959

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

FOR GOVERNMENT USE ONLY
Operator
Docket No. OME –
Contract No. 14-23-090 –
Contract Date

LIEN AND SUBORDINATION AGREEMENTS[1]

To the United States of America:

That certain land in the County of Crook, State of Montana, consisting of Sixteen (16) patented quartz lode mining claims whose names and U.S. Patent Survey Nos. are described as follows: Gold Bug (3407), Bulls Eye (3401), Bulls Eye Fraction (3402), Crescent (3410), Red Coin (3409), Red King (3411), Red Cloud (3301), Parquet (3402), White Cloud (3301), Icuan (3316), San Jose (3315), Robert Bruce (3316), Fourth of July (3403), Honolulu (3402), Patrick (3403), all located in Sections 3, 10 & 11, T. 1S., R. 14E., B.P.M.

hereinafter called the "land", is the subject of a proposed exploration contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government" and

American Mining Company, a Pennsylvania corporation [3]

hereinafter called the "Operator". In consideration for and as an inducement to the Government executing the Contract, the undersigned:

1. (a) Being the owner of an interest in the land, hereby grants to the Government a lien upon all of his right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of the royalty on production provided for by the Contract, and agrees if the Operator's interest should be surrendered or terminated at any time prior to the expiration of the rights of the United States under said Contract to pay royalty to the Government according to the terms of said Contract; or

(b) Being the holder of a claim, lien, or encumbrance against the land, hereby subordinates his claim, lien, or encumbrance in or against the land and in any production therefrom to the rights of the Government under the Contract with respect to royalty on production and liens to secure same.[4]

2. Undertakes and agrees that property in which the Government may acquire an interest or equity under the Contract may be dismantled, severed from the land, and removed as may be provided in the Contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned.

3. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none". Do not leave blank.)

None

1/ Production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease /or contract, deed, or other document/ dated_____, and recorded in Book_____, Page____, official records of said county". If (b) is used, the book and page of recordation must be inserted above. If the space provided is insufficient, use an Annex and refer to the Annex in the space.

3/ Insert name exactly as it appears in the Application MME Form 40.

4/ Subparagraph 1(a) does not apply to the holder of a claim, lien, or encumbrance.

4. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land or any production therefrom, furnishing the Government with two true copies of such notice; and

5. Consents to all amendments (including an agreement of termination) and assignments of the Contract without notice thereof, and undertakes and agrees that this agreement shall extend and apply thereto.

6. Added provisions None (State "None" or "See Annex No. ____".)

Dated this 21st day of May, 1968.

JGH J G Haviland	(Seal)	Deer Lodge, Mont	(Street) (City & State)
JPH Jean P. Haviland	(Seal)	Deer Lodge, Montana Jean P. Haviland	(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)
	(Seal)		(Street) (City & State)

I, _____ (Name), certify that I am the _____ (Title—Secretary, etc.) of the corporation named herein; that _____ (Name), who signed this agreement was then _____ (Title—Pres., Vice-Pres., etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____ (Corporate Seal)

MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE Contract No. _____ Docket No. 6741

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
- [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)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] ~~Operator Team~~ Office Appraisal Report (Tab) 10/16/68
- [ ] 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

MMB FORM 6 REFERENCE SLIP

REV. 59 OFFICE OF MINERALS EXPLORATION

TO:		DATE	INITIALS
1.	Chief, OME		
2.	Re: Transmittal of application for assistance (Gold)		
3.	American Mining Co. Crescent, Lead King, Fourth of July, et al., Groups of Claims		
4.	Granite County, Montana		
5.	D. R. MacLaren DRM		
FROM:	D. R. MacLaren, Fld. Officer, Reg. I	INITIALS	CODE

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 11 1968

FOR: Check items for action desired

X Action ____ Reply for signature of
____ Approval ____ Investigate ____ Surname
____ Comment ____ Recommendations ____ Signature
____ Conference ____ Rewrite ____ File
____ Instructions ____ Your information

REMARKS:

This application appears to be complete but has not been reviewed in detail.

INT.-DUP. SEC., WASH., D.C. M56300-62

For O.M.E. The original, plus blue forms

MME Form 40
Jan. 65

RECEIVED
JUL 9 1968

Budget Bureau No. 42-R1508
Approval expires Dec. 31, 1968

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

OFFICIAL COPY
O.M.E.
RECEIVED
JUL 1 1968
INITIALS

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.)*

American Mining Company,
700 - Securities Bldg.
Seattle, Washington 98101

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER 6741

DATE RECEIVED 7/12/68

REGION 1

DIVISION CODE

BUSINESS ORGANIZATION *(Check one)*

INDIVIDUAL
CORPORATION X
PARTNERSHIP
OTHER *(Specify)*

STATE IN WHICH FIRM IS ORGANIZED Washington

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
William DeRuyter	700 - Securities Bldg., Seattle, Washington 98101	Vice-Pres.
Allan A. Bohn	3821-134th Ave. N.E., Kirkland, Washington	Secretary
L. J. Cummings	2021 Marine View Dr. S.W. Seattle, Washington	Treasurer

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE
Gold

ESTIMATED COST OF PROJECT
$ $85,000.00

PROPERTY NAME Crescent, Lead King, Fourth of July et al Gp. of Claims (See Appendix A)
LOCATION COUNTY Granite
STATE 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. III). 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 Office of Minerals Exploration, Department of the Interior,* ~~Washington 25, D. C., or with the nearest OME Field Office.~~ 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.

7-8-68
DATED

American Mining Company
BY *(Signature)*
Vice Pres.
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 true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the 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 on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

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 and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

(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) State your reasons for expecting to find ore, and 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.

(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 and address 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 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 cost 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).]

INT.-DUP. SEC., WASH., D.C

Item 1. Financial Eligibility

a. See attached true copies of letters from banks, identified by their letterheads, which were in reply to requests made (copies of requests also attached) for a loan of $85,000.00 to be used in mining exploration at Garnet, Montana. It will be noted that the requests for financial assistance were turned down.

b. Investment Exchange Corporation, 700 Securities Bldg., Seattle, Wn. (Affiliation through Officers only)

c. The applicant's share of the cost of the exploration work will be furnished by cash.

Item 2. Applicant's Rights in Land

a. Interest in Land The applicant's interest and rights in the patented mining claims, included in the subject property and listed in Appendix A, are based on a "Grant Deed and Assignment" executed July 24, 1965 by James F. Charlton of a "Purchase and Sale Agreement", dated June 12, 1963, granted to Robert M. Bielenberg and James F. Charlton by James G. Haviland and Jean P. Haviland, his wife, owners of the claims. Robert M. Bielenberg and Mary Brome Bielenberg, husband and wife, in a "Grant Deed", dated July 21, 1965, conveyed all their interests in said claims to James F. Charlton. Alice M. Charlton, in a "Grant Deed and Assignment", dated July 23, 1965, conveyed all her interests in said claims to James F. Charlton. True copies of these legal documents are attached.

The applicant's interests and rights in the three unpatented quartz lode mining claims, listed in Appendix A, are based on the "Right of Location". These claims were located by the American Mining Company, on June 28, 1965 and October 18, 1967, and are recorded as having been located by the applicant in the Office of the County Clerk, of Granite County, at Philipsburg, Montana.

The applicant is aware of no liens, mortgages or other encumbrances on the land.

b. Legal Descriptions: See legal descriptions of the patented claims, including patent survey number, section, township, range, county and state, set forth in Appendix A. In the cases of the unpatented claims, see book and page number and place where recorded also set forth in Appendix A.

Some of the patented mining claims, comprising the property, were included in the past in groups previously known by various names, the most common of which was "The Mitchell and Mussigbrod Mines". Also, they were once operated by a company known as "The First Chance Mining Co." During a ten-year period, beginning about 1897, the claims were developed and operated by a Dr. Peter S. Mussigbrod.

c. See "Lien and Subordination Agreement" (five copies) on M.M.E. Form 52 attached, for the patented claims listed in Appendix A which are being acquired under said "Purchase and Sale Agreement".

Item 3. Physical Description

a. Current or Previous Mining and/or Explorations on land: There is at present no mining or exploration activity being conducted on the land described in this application. Evidence of past mining operations and of previous exploration work is shown, in part, on Maps 1 and 2 which accompany this application. These maps reveal surface exploration in the form of numerous cuts, pits and trenches, and extensive underground work. The latter is mostly in the form of adits, but includes some shafts and inclines and the workings therefrom. All of the underground workings are caved and inaccessible.

Most of the underground work shown on Maps 1 and 2 was taken from the maps contained in U.S.G.S. Bulletin 660-F, by J. T. Pardee, entitled-- "Ore Deposits of the N.W. Part of the Garnet Range, Montana". But, some of the workings that have been put on the maps were obtained from other sources.

The entire surface was mapped in detail by Joe G. Irving, consulting geologist, over the past several summers, and in addition to the geology most of the pits and cuts shown were located in this manner. The portals of all the main adits and the collars of most of the shafts were also determined at this time by careful compass and tape survey, tied in frequently to patented claim corners and checked against old BLM plats.

In the summer of 1966, some drilling was done in the adjacent limestone areas to the northwest by the applicant, under OME Contract No. 2207. It should be stressed here and will be most definitely stressed again later that this previous work has practically no bearing on the exploration program laid out in the present application.

The work done previously and that now proposed are in entirely different areas, and in entirely different geologic environments. The vein and ore occurrences that were the objectives of the earlier work and those that are the objectives of the presently proposed work are also totally different. There will be much more comment on this under item 3 (f), when the reasons for expecting to find ore are discussed.

No usable, or modern production facilities are at hand, or available on the property.

b. With the exception of the work done, under the previous OME Contract No. 2207 mentioned above, the applicant had no interest in any of the previous operations.

c. Production Records: The overall production of the district and that of some of the individual mines, through 1916, are set forth in U.S.G.S. Bulletin 660-F. Later production figures for the district, through the year 1960, are tabulated in Montana State Bureau of Mines and Geology Memoir #39, June 1963. This tabulation also includes Pardee's (USGS Bulletin 660-F) estimate of lode production for the period 1867-1916.

Summarizing the production of the Garnet district from both of these sources, the following figures are obtained:

Placer production from Bear Creek, and its tributaries-Deep Cr. and First Chance Gulch----------$5,000,000 1/

Lode production from the vein mines of the Garnet district (Gold being about 90% of the total)------ 3,600,000

1/ Total placer production, including Elk Creek and other nearby gulches, is placed -"as up to $10,000,000".

Lode production of consequence began in the 1890s and continued, with practically no lengthy interruption until recent years. High grade ore in substantial quantities was produced in the 1893-1914 period. See U.S.G.S. Bulletin 660-F. Production continued during the 1915-1932 period but was relatively small. Then, production increased greatly, as shown in Montana Bureau of Mines Memoir 39, after gold was raised in price, in 1934. Following this, output was relatively heavy until the mines were shut down, at the onset of World War 11 by government Order L-208.

As shown in Memoir 39 referred to above, production for the period 1933-1942 approximated $1,450,000.00. Subsequent to the forced shutdown, in 1942, the production of the district dropped back to comparatively small amounts again.

A partial record of small-scale lessee shipments, from properties included in this application, for the period 1934-1941, was obtained from an inspection of actual smelter returns.2/ These were tabulated and identified as to source, as shown in Appendix B. In summary, this record of partial production from the claims indicated shows:

Claim	Dry Tons Shipped	oz./Au./ton
Fourth of July	730	0.89
Red Cloud	114	0.54
Lead King	1440	0.84
Crescent	37	1.01
Average from "Red Cloud" vein	2321	0.85 3/
San Jose Claim	1044	1.26

The total production from all of the claims submitted in this application is placed at $1,570,000. Gold accounts for about 90% of this total value. This production, as near as can be estimated and established, came from the following nine claims, in the quantities shown:

1.	"Red Cloud Vein" group (Crescent, Lead King, Red Cloud, Honolulu and Fourth of July)	$1,400,000
2.	San Jose claim	100,000
3.	Fairview claim	50,000
4.	Robt. Emmet and Iowan claims	20,000
	Total	$1,570,000

The other six patented claims in the group may have had some small, but relatively negligible, production and this also applies to the three unpatented claims submitted.

The overall grade of the $1,570,000 in gold ore estimated to have been produced from the property was probably of the order of 1.5 ounces gold per ton. The silver content may have averaged about one ounce per ton, and there were, ofcourse, minor amounts of copper, lead and zinc in the ore also. Some of the early production from the enriched oxidized zones, mined on the Red Cloud vein system averaged much higher, with some shipments and stoped areas of considerable size showing a gold content that ranged up to 3 or 4 ounces gold per ton. See U.S.G.S. Bulletin 660-F with regard to general average grade and some of the high grade shipments.

2/ The inspection and tabulation was made by Joe G. Irving, consultant.
3/ Included some low grade left by early miners, in stopes and on sills

The production from the San Jose claim, which was developed and mined in the 1930s from the outcrop down, according to incomplete records, averaged 1.26 ounces gold per ton. Such a grade might be an indication of the tenor of any new discoveries that might be made.

The production by lessees from the "Red Cloud Vein" shown on the previous page, and made during the 1930s, averaged 0.85 ounces gold per ton. But much of this (the various levels had been driven in previously) represented ore left in place by the earlier miners, and would include primarily lower grade material that was uneconomic at the time.

Based on all of the information available, it seems probable that the grade of the material that is expected to extend downward from the various old workings will probably average somewhat better than one ounce in gold per ton----perhaps 1.1 to 1.2 ounces. On page 175 and elsewhere, Pardee, in U.S.G.S. Bulletin 660-F, refers to the general average grade of the ore mined from the several workings on the Red Cloud vein. Here, he mentions $25.00 to $35.00 per ton for oxidized ore, and $15.00 to $25.00 a ton for the sulphide ore below. Both estimates are based, ofcourse, on the old price for gold, as the paper was published in 1918.

d. Ore Reserves: There are no available records that indicate known ore reserves exist on any of the claims submitted. And there are no records of bottom level widths and assays that would permit the possible downward extensions of the material mined above being classified as ore, or being placed in the category of reserves as such.

e. Geologic Features of the Property and Mineralogy: The geology of the Garnet district involves sedimentary rocks of Precambrian and early Paleozoic age, and later intrusives. The sedimentary rocks, comprising quartzitic sandstones, argillites and dolomitic limestones, with intercalated shale members, have been folded into a sharp and northwesterly-trending and plunging anticline, which has been intruded on its northeast flank by the granodiorite of the Garnet stock. The sedimentary rocks are highly altered at and near the intrusive contact, with the development of much garnet and epidote.

Some east-west-trending veins were found at the granodiorite contact and on one of these was located the famous Nancy Hanks mine which produced some extremely high grade gold ore, and had a total production of about $450,000.00. Several other, but lesser, veins were also developed nearby on this same contact.

In the core of the anticline, quartzitic rocks of the Belt series are revealed, and it is in these Precambrian formations that several of the more important veins of the area occur. One of these--the most productive of the district-- is exposed on the Crescent, Lead King, Red Cloud, Honolulu and Fourth of July claims, all included in the ground controlled by the applicant. This fissure zone lies in the bedding of the quartzite, according to Pardee, who refers to it as the "Red Cloud Vein". It is also reported to have a granodiorite sill in places for one of its walls, usually the hangingwall.

As shown on Map 2, accompanying this application, the Red Cloud vein may be traced by outcrop and shallow workings on the Crescent, Lead King and Red Cloud claims for a distance of more than 1,800 feet. This structure is probably also represented by the vein on the adjoining Honolulu and Fourth of July claims, which appears to be its faulted continuation. Plate 1X, in U.S.G.S. Bulletin 660-F, also shows this situation.

If the length of the vein as revealed on the Honolulu and Fourth of July claims is added, the Red Cloud vein has been exposed over a strike length of well over 2,000 feet and has been mined, with minor fault interruptions on its strike for more than 1,400 feet of this distance. And, as stated previously, the total production from the vein is placed at $1,400,000.

The width of the Red Cloud vein according to Pardee-"ranges between a mere seam to 3 or 4 feet, with considerable portions of it averaging 2 feet or more". Actually, some evidence exists, and it is supported by statements from the last operator in the 1930s, that the average width of the vein on the bottom levels of the Red Cloud, Honolulu and Fourth of July claims was 2.5 feet plus. The vein strikes in general southeasterly, but varies considerably within the fault blocks. This is well shown on Map 2, and Pardee's Plate 1X, in U.S.G.S. Bulletin 660-F. The general dip of the vein is 20 to 30 degrees to the northeast.

The Fourth of July vein is cut off by a large, easterly-trending fault in its southerly extension. An attempt to locate the vein's continuation beyond this fault is part of the exploration program, and if Map 2 is inspected it will be seen that several holes have been laid out for this purpose.

The geologic features briefed above are shown in somedetail for the area covered by the subject property on Map 2 accompanying this report. The general geology of the district as a whole, and the larger area surrounding it is illustrated on the several maps and plates that accompany USGS Bulletin No. 660-F.

The mineralization appears to be of the moderate to high temperature type. Its typical assemblage includes a gangue composed of quartz, barite, ankerite and calcite, carrying auriferous pyrite along with chalcopyrite and some tetrahedrite. While some shipments have shown from 1 to 3 percent in copper, and the ore contains some lead and zinc, its value lies in its gold content to an extent exceeding ninety percent.

<u>Item 3 (f) Reasons for Expecting to Find Ore</u>: Some exploratory work was done in 1966, at distances 2,500 feet and more to the northwest of the center of the area within which the new exploration work is now proposed. This work, comprising about nine holes, and somewhat more than 3,500 feet of drilling, was done under OME Contract No. 2207.

This previous drilling revealed no ore. It was carried out in an entirely different geologic envoronment, and was based on a set of totally different objectives, than the environment and the objectives involved in the new exploration program now being submitted. In this connection, reference should be made to the Final Report on Contract No. 2207, and particularly the last page of this report, which has been reproduced and is attached as Appendix E. Here it is pointed out that the possibilities of the district were far from exhausted by the limited work done in the limestone areas, and that further work was justified, in the areas of the Crescent, Lead King and Red Cloud mines. It is in these areas that the bulk of the presently proposed program is concentrated.

The previous drilling had for its principal objective the exploration for bedded ore in the limestones and in the various limestone-shale contacts that occur in the Cambrian formations of the area. Two holes were also designed to probe for extensions of the relatively small, but high grade, fissures that were found within the granodiorite, near its margin.

In further explanation of the rationale of the previous work the following is offered: In the district, ore occurred in the bedding of the Precambrian quartzites on the flanks and near the crest of the plunging anticline, which structurally dominates the district, and it seemed a good geologic gamble to explore the overlying limestones and shales, above these basement quartzites, for similarly occurring ore bodies. The concept seemed particularly appealing because, in addition to the structural set up, the limestone area which had been never adequately explored inthis respect contained the famous host-rock, dolomitic formations of lower Cambrian age that were so productive in the State.

The currently proposed exploration program is devoted entirely to the quartzitic rocks in the core of the anticline. This proposed work is located southeast of the prior drilling, and in a formation which contains the most productive veins of the area. See references to this matter and to the possibilities in the quartzite in Appendix E, which is a copy of the last page of the Final Report on the previous work.

The ore bodies in the quartzite are associated with flat-dipping fissures that generally follow the bedding, and are concentrated on the northeast flank of the fold. It is the northeast flank of the structure that has been intruded by the granitic stock, and if Map 2 and the sections shown on Maps 3 and 4 are inspected it will be seen that the igneous contact is not far distant. This could be an important factor in the possible occurrence of additional ore ~~ore~~ bodies, and their location---down dip from the previously mined zones and toward the granodiorite contact.

More than 70% of the drilling laid out is devoted to exploring below old workings for downward extensions of minable material. The bulk of this drilling (9 to 11 holes) is designed to penetrate ground below the various workings on the Red Cloud vein. One hole will explore ground below the Robert Emmet bottom level. ?

As stated previously, there are a number of reasons for believing that the old workings on the Red Cloud vein showed widths, within the mined areas, of 2.0' to 2.5', and the material mined on these lower levels probably averaged about 1.0 ounce in gold per ton. Indications of such a width and grade not only can be found in U.S.G.S. Bulletin 660-F, but are also suggested in conversations with some of the lessees of the 1930s. As a matter of fact, the vein on the bottom levels of the Red Cloud workings is said by a former lessee to have averaged a full 2.5 feet, and the same source claims the Fourth of July ore on its bottom level was approximately 3.0' wide, as was the case with the vein on the Honolulu claim.

But it must be pointed out, and the applicant wishes to stress it at this time, that there are no assay maps or verifiable information on the actual grade or width of any material exposed on the lowest levels that would permit downward extensions to be classified as ore under today's economics.

To be ore today, any mineralized material that may extend downward on the Red Cloud vein would probably have to show an increase in width, or size of oreshoot, or both. An increase in grade or the price of gold would, ofcourse, come into the picture. ?

The applicant feels, however, that the strength of the structure and the distance along its strike, and down its dip also, that it has been mined argue favorably for the possibility that significant sections of the vein could be encountered below having greater widths than the overall average. A change in the dip of the bedding, be it steepening or flattening, could be a factor promoting the deposition of thicker material of ore grade.

The fact that the beds, as they are projected down, approach the intrusive granodiorite is a plus factor. For example, it is quite conceivable that the rocks were more highly shattered and fractured in the vicinity of the intrusive contact, and this condition could have promoted thicker mineralization and ore.

Again, attention is going to be called to the possibilities in the quartzite areas that were expressed in the last three paragraphs[1] of the final report submitted on the work done, under Contract No. 2207. Then, as now, the conclusion is reached that further exploration of this district, particularly on the Red Cloud vein in the quartzite, is a highly justifiable project.

Other exploratory drilling includes one hole (and possibly two offset holes later) designed to investigate a relatively unprospected gap along the strike of the Red Cloud vein, in the southeast half of the Red Cloud claim. See hole 6, Map 2. Here is a segment of the vein, 500' long, inbetween old stoping at both ends. It should be prospected.

The productive San Jose vein seems to have been cut off by a fault, in its southerly extension. A vein on the south side of the fault, evidenced by four shallow adits and inclines, with a quantity of iron-stained and cellular vein quartz on their dumps, could be the faulted extension of the San Jose vein. Such a showing, in view of the recorded production from the San Jose workings nearby, merits at least one drill hole. See Hole 7, Map 2, designed for this purpose.

The Fourth of July workings are on a vein that is contained in a fault block of some size. There is much evidence that this structure is a faulted extension of the Red Cloud vein. It is again cut off, however, by the large fault that bounds the block on the south side. Although considerable work was done underground searching for the vein's continuation south of this cutoff, it was never found. Holes 4 and 5 (one based on shallow workings on obviously a vein of some sort, and the other based in part on a geochemical anomaly that lines up for the vein's possible faulted extension further south) are designed to explore this area for what may be the actual extension of the long-sought-for Fourth of July vein south of its cutoff. See Map 2 and Sections.

Hole No. 13, to explore for the Fairview vein beyond its fault cutoff is shown on Maps 2 and 7. This is listed as a possible additional hole, supplementary to the main program.

The remaining two holes (Nos. 11 and 12) shown on Maps 5 and 6 are offset holes on the Lead King claim that might be put down if Hole No. 10, the most westerly on the Red Cloud vein, is encouraging. Two other holes, not laid out, to be called Nos. 14 and 15, are suggested by the additional 900' of drilling requested. These holes, if warranted, would be laid out in areas indicated by the results of the drilling already done. All of the above mentioned holes are shown in cross section on Maps 3 - 7.

Item 3 (g) . Two copies of all maps, tabulations, legal documents, and other needed papers accompany this submittal and need not be returned.

Item 4 Accessibility of the Property

a. The property is readily accessible (except in winter months) and may be reached by turning off Highway 10 at Bearmouth, which is about 11 miles west of Drummond, Montana, and following a good mountain road northerly up Bear Creek for about ten miles to the old mining town of Garnet.

[1] Attached as Appendix E

Arrangements may be made, by O.M.E. representatives wishing to inspect the property, by contacting Joe G. Irving, 1233 Singing Wood Ct., No. 12, Walnut Creek, California, 94529. Telephone: 415-933-3654.

There is a ramp at Bearmouth, 11 miles from the property, which could be used in shipping ore by Northern Pacific R. R. to the smelter at Anaconda, Montana, about 65 miles distant, or to the smelter at East Helena, about 75 miles away. Normally, shipping ore would be trucked over these distances, rather than sent by rail.

Item 5 (a) Exploration Work

A total of 7,610' of core drilling, using BX (WL) or BQ(WL) bits is proposed. A BQ(WL) bit provides a core of 1-7/16" in size, and BX(WL) is believed to make a core of the same, or slightly larger, size.

Seven of the 20 holes laid out should probably be classified as offset, contingent or "additional" holes and might best be put into a Stage 11 section of the program. The other 13 holes are believed to be essential to the exploration program as laid out and will be considered as Stage 1 work. The broad objectives of the work were discussed in some detail under Item 3 (f) and will not be repeated here, particularly since the tabulation to follow again lists, in brief summary, the specific objective of each hole proposed.

The preparation of 17 drill station sites is required, ten for Stage 1 and seven for Stage 11. In two cases, more than one hole is to be put down from the same site in Stage 1. Access roads must be constructed from points along the fairly good roads that traverse the camp near the various drill sites. A total of 2,950' of access road will be needed for Stage 1, and 1,980' for Stage 11. The proposed access roads are shown, in red ink, on Map 1, which also shows property outlines.

The locations of the 20 proposed holes are shown on Map 2, with regard to their relationships to property lines, geology and nearby workings. They are also shown in cross section on Maps 3 - 7. For easy reference, the sections set forth the location of each hole, by coordinates, allowing quick determination of hole position on plan Map 2. All data pertaining to each hole, such as bearing, inclination, area of probable vein intersection and probable total depth are shown on both sets of maps.

A brief tabulation of the proposed work, broken up into the two proposed Stages, giving all needed data, and a condensed summary of objectives, follows below:

Stage 1

Hole No.	Location on Map 2 (Area, or Vein & Coords.)	Inclination	Prob. Depth Vein	Prob. Depth Total	Objectives
1-A	Fourth of July Vein Coords: 6237N 8678 E	-60	255-285'	350'	To cut vein, 250' below bot. level, and explore for extensions downward of minable material, at today's economics. Map 3
1-B	Honolulu Vein, in Fourth of July Area Coords: 6237N 8678E	vert.	165' ±	200'	To intersect Honolulu vein, 100' down dip below old workings, exploring for downward extensions of minable material. Sect. 1-1, Map 3

To accompany application of American Mining Co., 700 -Securities Bldg., Seattle, Wn.

Hole No.	Location on Map 2 (Area, or Vein & Coords.)	Inclination	Prob. Depths Vein	Prob. Depths Total	Objectives
1-C	Honolulu vein, adjacent to Fourth of July area Coords: 6237N 8678E	-58 degrees	260' ≠ -	315'	Same objective, as in 1-B, but cutting vein 250' down dip below bottom level. See Sect. 1-1', Map 3
2-A	Fourth of July Vein Coords: 6183N 8830E	-70	370' to 395'	420'	Exploring for downward extension of minable material. To cut F. of July vein 325' down dip, below old works, and 150' along strike to S.E. of intersection proposed in Hole 1-A. Sect.2-2' Map 3
2-B	" " "	Vertical	395' to 430'	445'	Same objective as in Hole 2-A but vein to be cut 475' below old bottom levels. See Section 2-2', Map 3
3	Robert Emmet Vein Coords: 6077N 9348E	-87	395' to 420'	460'	To explore downward extenion of Robt. Emmet vein for minable material, by cutting it 200' down dip below old workings. Sect. 3-3', Map 3
4	Robt. Emmet claim, but possible faulted ext. of Fourth of July vein Coords: 5832N 9202E	-60	245' ≠ -	300'	To explore at depth vein indicated by surface works. so. of Fault No. 1, and approx. 750' east of Fourth of July vein cutoff. Objective could be faulted ext. of F. of July vein. Hole to cut vein 200' down dip below its outcrop. See Sect. 4-4', and Map 3, also relative surface position & geology on Map 2
5	On Robt. Emmet claim, but possible extension of vein to be explored by Hole 4. See Map 2 Coords: 5495N 9215E	Vertical	160' ≠ -	200'	To explore for possible vein indicated by geochem. anomaly in Geochem. Line F-J-A, Samp. No. 27. Veim, if present could be further southerly extension (faulted to east) of vein to be explored in Hole 4, which is thought to possible be faulted extension of F. of July vein. Hole to cut postulated vein 200' down dip. See Sect. 5-5', Map 3. Also examine Map 2.
6	Red Cloud Vein, in its Southeasterly extension Coords: 6594N 8446E	-65	215' to 240'	275'	To explore Red Cloud vein in undevel. 500-ft section between its cutoff in Red Cloud workings by Fault #4, and its probable continuation in the Honolulu workings. See Map 2 for prob. pos. of o.c. Hole to cut vein 250' down dip fr. postulated sur. pos. Map 2, and Sect. 6-6'

To accompany application of American Mining Co., 700 Securities Bldg., Seattle, Wash.

Hole No.	Location on Map 2 (Area or Vein & Coords)	Inclination	Prob. Depths Vein	Prob. Depths Total	Objectives
7	San Jose Claim, Coords: 6486N 9537E	Vertical	160' to 190'	225'	To explore at depth an uncorrelated vein, indicated by surface workings south of Fault #3 in the San Jose area. Hole is designed to cut vein 275' down dip from its apparent surface position. Section 7-7', and Maps 2 and 4.
8	Lead King-Red Cloud vein. Coords: 7458N 8222E	68½	432' to 460'	520'	To explore for downward extensions of minable material, 400' down dip below bottom levels of old workings. See Sect. 8-8', Map 4, also Map 2 for geology
9	Lead King-Red Cloud vein. Coords: 7513N 8028E	53	406' to 433'	485'	Same objective as Hole No. 8, but cutting vein 200' further to northwest, and at a point 300' down dip below bottom level area. See Sect. 9-9', Map 4, and Sur. Geol. Map 2
10	Lead King-Red Cloud vein. Coords: 7428N 7842E	82½	390' to 423'	470'	Same objective as Hole 9, but designed to cut vein 150' further to NW, and at a point 400' down dip from bot. lev. area. See Sect. 10-10', ,ap 4, alos sur. geol. on Map 2
	Total probable Max. Feet (13 Holes, Stage 1)			4665'	

STAGE 11
(Offset, Contingent or Additional Holes)

6 West	Red Cloud vein, in S.E. Area Coords: (100' west of Hole 6, See Map 2)	-65	215' to 240'	275'	To cut Red Cloud vein in this area, 100' west of Hole 6, if results in Hole 6 encouraging See Map 2. No section, as the hole is similar to Hole 6, on Section 6-6'
6 East	Red Cloud vein, in S. E. area (100' east of Hole 6, See Map 2) Position: 100' east of Hole 6, See Map 2	-65	215' to 240'	275'	Same objedtive as outlined above, except that this hole would cut the vein, if warranted by Hole 6 results, 100' to the east No section, similar to Hole 6
11	Lead King Claim, Red Cloud Vein Coords: 7450N 7640E	-75	436' to 468'	525'	Offset hole contingent on results of Hole 10 (or Hole 12 if put down first, after 10) Hole to cut vein 350' down dip below Lead King works, 200' west of Hole 10. See Sect. 11-11', Map 5, also Map 2

Hole No.	Location of Map 2 (Area, or Vein & Coords.)	Inclination	Prob. Depths Vein	Prob. Depths Total	Objectives
12	Red Cloud-Lead King vein, on Bulls Eye Claim. Coords: 7668N 7217E	-69½	595' to 618'	670'	Offset hole, contingent upon results of Hole 11 (and/or possibly Hole 10) To explore for minable material on downward extension Red Cloud vein, this area. Designed to cut vein 300' down dip below bot. levels of Lead King-Crescent west workings, where vein was reported narrow and relatively low grade (possibly a temp. pinch ?) Intersection would be 465' NW of Hole 11. See Sect. 12-12', Map 6, and sur. geology on Map 2
13	Fairview Vein, and on Fairview claim. Coords: 4810N 9500E	-65	200' to 250'	300'	To explore for downward, faulted extension of Fairview vein, reported to be cut off along its strike at the north, by heavy E-W fault. Vein is credited with $50,000 in production from vein developed and mined for 400' along strike, before cut off. See USGS Bull.,page 194. See two possible faulted positions on Section 13-13', Map 7, and geology on Map 2.
14 & 15	Not specified yet, locations to be determined by prior drilling	? ?	? ?	450' + "	Requesting here two possible additional offset holes, for further delineation of any ore indicated by prior holes, if warranted.
Total Probable maximum feet of the seven (7) offset, contingent, or additional holes------				2945'	

TOTAL FOOTAGE IN PROPOSED PROGRAM, INCLUDING THE 13 SO-CALLED ESSENTIAL HOLES AND THE 7 SO-CALLED OFFSET, CONTINGENT OR ADDITIONAL HOLES------- 7610'
(STAGES 1 AND 11)

Item 5 (b) Access Roads: No "main access road" is necessary. See access roads to the various and individual drilling sites that will be required and which are shown in red ink on Map 1, which is also the PROPERTY Map.

Item 5 (c) Time of Start and Finish of Work and Progress

Drilling would be most difficult under deep-snow, winter conditions, in an abandoned camp such as Garnet. Drilling water and freezing pipe lines alone would be a serious problem. Consequently drilling should be planned to start in late spring. At Garnet this would mean not much earlier than June 10, for an average year, as some preliminary bulldozing for access roads and sites would be required beforehand.

Experience at Garnet, from the previous drilling done, indicated that progress at the rate of about 900' per month is a reasonable expectancy, per drill on a one-shift basis, and a 22-work-day month. This includes allowance for time in moving from hole to hole, plus some minimum time for reaming and casing, or cementing and re-drilling and breakdowns.

But to allow for additional contingencies and a possibly shorter drilling season, it would seem better to estimate progress at 850' per month, per dill, on a one-shift basis. Stage 1 of the proposed program involves 4665' of hole, and Stage 11 about 2945 feet. The total of the two Stages is 7610 feet of drilling.

With two drills, and a progress of 850' per month per drill, the total footage could be drilled in four and a half months. This rate could allow for a late start in the spring and an early winter. To do the work in one season two drills, ofcourse, would be required, but only one shift per day is suggested. This would leave room for night shift drilling later, if needed because of circumstances.

Item 6 Experience

The applicant has had such experience, having drilled at Garnet, Montana, during 1966 under OME Contract #2207 and having drilled also at Basin and Copper Cliff, Montana, during the past two years without an OME contract. However, the actual supervision of the entire job would be under Joe G. Irving, consulting mining geologist, who supervised the Garnet and other drilling mentioned and who has prepared this application. Irving's experience and qualifications are set forth in a "Personal Data Summary" which accompanys this application and is marked Appendix C.

Item 7 Estimate of Costs

Preliminary Statements

The speed of drilling and an estimate of the time required has just been discussed, and two drills are suggested for completion of the job in one drilling season. However, if drill contractors are hard to get, or drills and crews are scarce, the work may have to involve two summer seasons. It appears that the bid submitted by the E. J. Longyear Company is the lowest in most, if not all, categories and the estimates furnished by them will be used as the basis for the cost estimate to follow. A tabulation of assay charges is attached as Appendix D. The Montana Laboratory, in Philipsburg, Montana, is an old-time and most reliable firm. It should be noted that the unit bulldozer cost varies, depending on whether a D-6 is used or a D7 or 8.

The proposed program is broken down into two Stages. Stage 1 includes a set of holes (13) considered essential in determining the possibilities of the area. Stage 11 consists of some "offset, contingent of additional" holes (7) that might be advisable, depending on results of Stage 1 work. The offset holes would be put down primarily to verify and further delineate any ore indicated by Stage 1 drilling. Four offset holes are specifically laid out, and two more are implied by the request for an additional 900 feet of hole. The 900', if granted, would probably be used in two holes, designated in the tabulation as possible holes Nos 14 and 15.

In the cost estimate that follows, the numerals 1 through 7 are used for the various categories, but these are accompanied also by the lettered designations that appear for these categories in MME Form 40.

Estimated Cost of Project

Stage 1

Category 1 (Item 7a) Independent Contracts

(1) Bulldozing 2950' of access road and 10 drill hole sites:

Mobilization and demobilization 1 bulldozer (D-6 or larger)	$320.00	
D-6 @ $16.00/hour		
D-7 @ $20.00/hour		
D-8 @ $20.00/hour		
Bulldozing access roads at about 1,000'/day, plus preparation of 10 hole sites @ 2 hours per site, plus some moving around time:		
D-8 or D-7 @ $20.00/hr-48hrs)		
D-6 @ $16.00/hr -------60hrs)	$960.00	
	$1,280.00	$1,280.00

(2) Diamond core and overburden drilling, 13 holes, 4,665 feet

Depth, Feet	Rate, Foot NC	BQWL	AQWL
0 - 500	$7.85	$8.05	$7.30
500- 1000	[illegible]	$8.60	$7.85

Mobilization and demobilization, 2 surface drill units		$1,080.00
Tractor service, for moving between holes, provided by operator, or by drill contractor and billed to operator, 12 moves @ $100.00/move		$1,200.00
Drilling overburden, estimated to average 20' deep: 13 holes x 20': 260' @ $7.85/ft.	$2,041.00	
Drilling from bottom of OB to 500', all 13 holes total 4,385' 4,385 feet @ $8.05/ft. (BQWL)	$35,299.25	[illegible]
Drilling from 500' to 750',(Hole No. 8) --- 20 feet @ $8.60/ft.	172.00	
Total for Stage 1 core and overburden drilling (13 holes, 4,665 ft. ---	$37,512.25	$37,512.25
Reaming and casing, 500 feet @ $3.50/foot		$1,750.00
Cementing and redrilling, 135 hours @ $15.65/hr		$2,113.00

Casing lost in completed holes 140 feet @ $2.75/ft.	$ 385.00	
Surveying with in-hole instrument 6 days @ $65.00/day	$ 390.00	
Total for Category 1 (or 7a)		$45,710.25

Category 2 (Item 7b) Personal Services

Subcategory (a) Supervision and Technical Services

1 - Supervisor - geologist - engineer 3 months (for Stage 1) @ $750.00/month	$2,250.00	$ 3,500.00
1 - Outside consultant 25 days @ $50.00/day	$1,250.00	
Total for Category 2 (Item 7(b)		$ 3,500.00

Category 3 (Item 7(c) Operating Materials and Supplies

450 cardboard boxes @ $1.25/each	$ 562.50	
Cement, drill muds, additives etc. 170 sacks @ $8.40/sack	$1,428.00	
Sludge collecting and sampling supplies	$ 200.00	
Total for Category 3 (Item 7(c)		$ 2,190.50

Category 7 (Item 7 (g) Miscellaneous

Per diem, outside consultant 25 days @ $16.00/day		$ 400.00	
Accounting and office expense 3 months (for Stage 1) @ $50.00/mo.		$ 150.00	
Assaying, 220 samples			
Gold & silver combined, 104 @$3.00/ea	$312.00		
Lead, 58 samples @ $3.00/ea.	174.00		
Copper, 58 samples @$3.00/ea.	174.00		
Total	$660.00	$ 660.00	
Total for Category 7 (Item 7(g)			$ 1,210.00
TOTAL ESTIMATED COSTS, STAGE 1			$52,610.75

Stage 11

Estimated Costs, Stage 11

Category 1 (Item 7(a) Independent Contracts

(1) Bulldozing 1,980 feet of access road and 7 drill sites: Mobilization and demobilization 1 bulldozer (must bring back into camp, for this later Stage 11 work)	$320.00

Stage 11 (cont.)

Category 1 (Item 7a) Independent Contracts (cont.)

(1) Bulldozing 1,980 feet of access road and preparing 7 drill hole sites, plus some moving around time: (Rates shown in Stage 1)	$ 640.00	
Total	$ 960.00	$ 960.00

(2) Diamond core and overburden drilling, 7 holes, 2,945 feet in Stage 11

Depth, Feet	Rate, Foot NC	BQWL	AQWL
0 - 500	$7.85	$8.05	$7.30
Over 500	-----	$8.60	$7.85

Tractor service for moving between holes, provided by operator, or by drill contractor, and billed to operator, 6 moves @ $100.00/move		$ 600.00	
Drilling overburden, estimated to be 20' deep: 7 x 20': 140' x $7.85	$ 1,099.00		
Drilling from bottom OB to 500' 2,610 feet @ $8.05/foot	$21,011.00		
Drilling from 500' to 750 feet: 195 feet @ $8.60/ft.	1,677.00		
Total for Stage 11 core and O.B. drilling (7 holes, 2,945 ft.	$23,787.00	$23,787.00	
Reaming and casing, 300 feet @ $3.50/foot		$ 1,050.00	
Cementing and Redrilling, 85 hours @ $15.65/hour		$ 1,330.00	
Casing lost in completed holes, 90 feet @ $2.75/ft.		$ 247.50	
Surveying with in-hole instrument, 4 days @ $65.00/day		$ 260.00	
Total for Category 1 (7a), Stage 11			$28,234.00

Category 2 (Item 7b) Personal Services

Subcategory (a) Supervision and Technical Services

1 - Supervisor - geologist - engineer 2 months @ $750.00/month	$ 1,500.00	
1 - Outside consultant, 15 days @ $50.00/day	750.00	
Total for Category 2		$ 2,250.00

Category 3 (Item 7 c) Operating Materials and Supplies			
Cardboard core boxes, 285 @ $1.25/each		$ 356.00	
Cement, drill muds, additives etc. 105 sacks @ $8.40/each		$ 882.00	
Total for Category 3			$ 1,238.00
Category 7 (Item 7 g) Miscellaneous			
Per diem, outside consultant, 15 days @ $16.00/day		$ 240.00	
Accounting and Office expense, 2 months (for Stage 11) @ $50.00/month		$ 100.00	
Assaying, 112 samples,			
Gold & Silver combined, 56 samples @ $3.00/ea.	$ 168.00		
Lead, 28 samples @ $3.00/ea.	84.00		
Copper, 28 samples @ $3.00/ea.	84.00		
	$ 336.00	$ 336.00	
Total for Category 7			$ 676.00
TOTAL ESTIMATED COSTS, STAGE 11			$32,398.00

S U M M A R Y

Total Estimated Costs, Stage 1	$52,610.75
Total Estimated Costs, Stage 11	$32,398.00
Total Estimated Costs of the Project	$85,008.75

APPENDIX A

PROPERTY The property, held by the American Mining Company submitted with this application, and which is also outlined in purple on Map 1, consists of a group of fifteen patented and three unpatented claims situated in the Garnet (First Chance) mining district, Granite County, Montana. They are more specifically described and located as follows:

1. PATENTED QUARTZ LODE MINING CLAIMS:

Claim Name	Patent Sur. No.	Sec.	T.	R.	County	State
Gold Bug	9407	3	12N	14W, MPM	Granite	Mont.
Bulls Eye	4651	3	"	" "	"	"
Bulls Eye Fraction	9405	3	"	" "	"	"
Crescent	4510	3	"	" "	"	"
Free Coin	4652	3	"	" "	"	"
Lead King	4511	3	"	" "	"	"
Red Cloud	5451	3	"	" "	"	"
Parquet	5452	3	"	" "	"	"
White Cloud	5631	3	"	" "	"	"
Iowan	3614	3	"	" "	"	"
San Jose	3615	3&10	"	" "	"	"
Robert Emmet	3616	"	"	" "	"	"
Honolulu	5632	"	"	" "	"	"
Fairview	4548	10&11	"	" "	"	"
Fourth of July	5453	10	"	" "	"	"

2. UNPATENTED QUARTZ LODE MINING CLAIMS

Claim Name	Book and Page Number	County	State
Garnet No. 18*	Page 305, Book 24 of Lode Locations, Records of Granite Co., Montana	Granite	Mont.
Garnet No. 21*	Page 279, Book 25 of Lode Locations, Records of Granite Co. Montana	"	"
Garnet No. 22*	Page 280, " " " "	"	"

* Garnet No. 18 was located by the American Mining Co., on 6/28/65, and is in Section 3, T.12N., R. 14W, MPM

Garnet No. 21 was located by the American Mining Co., 10/18/67, and is in Sections 2,3,10 & 11, T. 12N., R. 14W, MPM.

Garnet No. 22 was located by the American Mining Co,, 10/18/67, and is in Sections 2,3,10 & 11, T. 12N., R. 14W., MPM.

1233 Singing Wood Ct., No. 12
Walnut Creek, Calif. 94529
July 29, 1968

Mr. Don R. MacLaren, Field Officer,
Office of Minerals Exploration,
656 United States Court House,
Spokane, Washington 99201

Re: OME Application (gold)
Garnet District,
Granite Co., Montana

Dear Don:

Enclosed are the original and one copy of our new application for government assistance, under the O.M.E., in connection with further exploration work at Garnet, Montana. All necessary papers, including legal documents, subordination forms, contractor's bids etc accompany the presentation. Also, a set of seven maps, illustrating the work proposed.

You will recall that some limited exploration was done in this district, two years ago, under O.M.E. Contract No. 2207.

The work done previously, and that which is now proposed, are in entirely different areas and in entirely different geologic environments. The veins and ore occurrences that were the objectives of the earlier work, and those that are the objectives of the presently proposed new work are also totally different.

The previous drilling had for its principal objective the exploration for bedded ore in the limestones, and at the limestone-shale contacts, that occur in the Cambrian formations of the area. The currently proposed program is devoted entirely to the quartzitic rocks in the core of the anticline, and is located southeast of the prior drilling, at some considerable distance, and in a formation which contains the most productive veins of the area.

With further reference to the above, see the attached copy of the last page of the "Final Report" on the work done, in 1966, under Contract No. 2207. Here, you will note that it is pointed out strongly that the possibilities of the district were far from exhausted by the limited exploration work done in the limestone area.

Two years of additional study has been carried out in the district and the findings and conclusions, relative to the attractiveness of the work now proposed in a totally different area, are contained in the subject application.

In this connection, please refer to the descriptions and discussions set forth under Items 3c, 3e and 3f, on pages two through seven of the application, also Appendix E.

I would be happy to come to Spokane, at any time, if you wished to go over the application, of the maps, with me personally.

RECEIVED
JUL 9 1968

Sincerely yours,

Joe G. Irving

Joe G. Irving, for
American Mining Co.
700 Securities Bldg.
Seattle, Wash. 98101

Enclosure: Complete O.M.E Application,
and attached to this letter
the last page of Final Report
on Contract # 2207

APPENDIX
E

(This is a re-typed copy of the final page (page 3) of the FINAL REPORT, on the work done previously in the Garnet District, under O.M.E. Contract 2207, Docket No. 6410, in 1966)

page 3

Discussion of Results

In summarizing the results of the work done, it can probably be said that the various so-called favorable horizons (comprising several limestone-shale contacts and including the upper contact of the quartzite with the overlying shale of Cambrian age) were fairly well explored near the crest and along the northeast flank of the plunging anticline, in a limited area along the axis of the structure that ranged from 600' to 2000' northwest of the productive workings in the underlying quartzite. But no encouraging evidence of the possible existence of bedded ore in this area, and in the horizons intersected, were found in the drilling done.

Hole No. 1 and Hole No. 2, put down prior to the execution of the contract, were laid out to probe for the extensions of the narrow, but high grade, veins found in the granodiorite in the old Dewey and Nancy Hanks mines. Both holes cut vein structures containing quartz and pyrite, but the material encountered, while gold-bearing, was not commercial. Further exploration for this type of ore could be undertaken, but the economic justification for it--in light of the results obtained in these two preliminary holes--is open to question.

Further exploration for bedded ore, of the type and extent found in the Crescent-Lead King-Red Cloud mines, however, seems justified. It could well be that a future search for this type of ore should be concentrated in the quartzite itself, below the known orebodies in this host rock, or to the southeast along the plunging anticline, rather than to the northwest, as was done. If the exploration is designed to explore the area down dip below the known ore bodies, the possibility of a southeast rake should be taken into account, and the holes might be laid out to cut the quartzite nearer to the granodiorite, where fracturing and permeability may be greater, thus giving promise of larger ore shoots.

The possibilities of the district should not be considered as having been exhausted, by the limited exploration work done, described in this report, The mineralization of the area is extensive, and the gulches that drain it produced extroadinary diggings over a wide area.

A further study is going to be made of the district, particularly along the anticline to the southeast of the Red Cloud and Fourth of July and Robert Emmet claims, with the thoughts expressed above of finding extensions of bedded ore that formed in the quartzite.

American Mining Company

by

Dated

Respectfully submitted,

Joe G. Irving

1966

PEOPLES NATIONAL BANK OF WASHINGTON
THIRD AVENUE BRANCH · 1903 3RD AVENUE · SEATTLE, WASHINGTON 98101

June 10, 1968

Mr. Douglas A. Robinson, President
AMERICAN MINING COMPANY
700 Securities Building
Seattle, Washington 98101

Dear Mr. Robinson:

Please be advised that your loan request for the American Mining Company has been discussed by our Executive Committee and they have decided that we would not, at this time, be interested in such a loan.

We are appreciative of the past business given us and hope that we will, at some future time, have an opportunity to be of assistance to you.

Sincerely,

M. R. Mastro

M. R. MASTRO
Vice President
and Manager

MRM:as

See our request attached

June 5, 1968

Peoples National Bank of Washington
Third Avenue Branch
1903 Third Avenue
Seattle, Washington 98101

Attention: Mr. Michael Mastro

Dear sir:

The American Mining Company is planning exploration programs on mining properties which it holds at Garnet, Montana. The project will include approximately 7,600 feet of diamond drilling, bulldozing, together with geological and engineering work.

It is estimated that the total project will cost $85,000.00.

The primary objective will be to explore the possible location of ore bodies containing a potential high gold content.

We are interested in securing a loan of $85,000 and would appreciate you advising us under what conditions and circumstances your bank would make such a mining exploration loan.

We will appreciate being advised at your earliest convenience.

Sincerely yours,

AMERICAN MINING COMPANY

Douglas A. Robinson
Chairman of the Board

DAR:ssy

Southside National Bank
OF MISSOULA, MONT.

D. E. NOLAN, President

AFFILIATED WITH FIRST BANK STOCK CORPORATION

P. O. Box 1446

MISSOULA, MONTANA

June 12, 1968

Mr. Douglas A. Robinson
American Mining Co.
700 Securities Building
1904 Third Avenue
SEATTLE, Washington 98101

RE: Your Letter of June 5, 1968.

Dear Mr. Robinson:

We infer that the $85,000 loan you are seeking is basically an unsecured loan and, unless such a loan was to be backed by substantial tangible assets or secured by liquid collateral, we would have no interest in such a venture.

We might also add that as we have a maximum legal lending limit of $40,000, we would not be in a position to originate such a loan.

NG

Thank you for your inquiry.

Sincerely yours,

W J Bohnhoff

W. J. Bohnhoff
Assistant Vice-President

WJB/vp

See our letter of request attached!

June 5, 1968

Southside National Bank
910 Brooks
Missoula, Montana 59801

Attention: Loan Department

Gentlemen:

The American Mining Company is planning exploration programs on mining properties which it holds at Garnet, Montana. The project will include approximately 7,600 feet of diamond drilling, bulldozing, together with geological and engineering work.

It is estimated that the total project will cost $85,000.00.

The primary objective will be to explore the possible location of ore bodies containing a potential high "gold" content.

We are interested in securing a loan of $85,000 and would appreciate you advising us under what conditions and circumstances your bank would make such a mining exploration loan.

We will appreciate being advised at your earliest convenience.

Sincerely yours,

AMERICAN MINING COMPANY

DAR

Douglas A. Robinson
Chairman of the Board

DAR:ssy

June 5, 1968

First National Bank
Butte
Montana

Attention: Loan Department

Gentlemen:

The American Mining Company is planning exploration programs on mining properties which it holds at Garnet, Montana. The project will include approximately 7,600 feet of diamond drilling, bulldozing, together with geological and engineering work.

It is estimated that the total project will cost $85,000.00.

The primary objective will be to explore the possible location of ore bodies containing a potential high gold content.

We are interested in securing a loan of $85,000 and would appreciate you advising us under what conditions and circumstances your bank would make such a mining exploration loan.

We will appreciate being advised at your earliest convenience.

Sincerely yours,

AMERICAN MINING COMPANY

DAR

Douglas A. Robinson
Chairman of the Board

DAR:ssy

To accompany application of American Mining Co., 700 - Securities Bldg., Seattle, Wash.

Longyear

E. J. LONGYEAR COMPANY
GENERAL OFFICES, 76 SOUTH 8th STREET
MINNEAPOLIS, MINNESOTA 55402, U.S.A.
TELEPHONE (612) 339-7631 • CABLE LONGCO 029-633

November 22, 1967

Mr. Douglas A. Robinson, President
American Mining Company
337 Securities Building
Seattle, Washington 98101

See page 3 for reference to costs on Cusset work

SUBJECT: PROPOSED DRILLING PROGRAM NEAR PHILIPSBURG, MONTANA

Gentlemen:

1. In response to your recent requests, we are pleased to set forth below for your consideration our proposal for the referenced drilling program.

2. We understand that the program as now planned will consist of a minimum of 2,400 lineal feet of drilling, and a maximum of approximately 3,000 lineal feet of drilling in four shallow holes, ranging in depths between 340 and 420 feet, and two deeper holes ranging in depths between 520 and 685 feet. The holes will vary in inclination between minus 55° and minus 70° as measured from the horizontal. It is understood that the material to be drilled is granite, and that the overburden is expected to be less than 20 feet in depth. Water is expected to be available from the waterline of the Town of Philipsburg, at a maximum distance of 2,000 feet, and a maximum lift of 300 feet. Water and connection charges will be paid for by you. You will at no expense to Longyear, construct access roads and necessary excavation and preparation for drill sites.

3. For this program we propose to furnish one truck mounted Longyear Diamond Core Drill of suitable size and capacity, together with necessary accessory equipment, and tools including Longyear AQ and BQ wireline tools, as required to complete the work as now planned. We further propose to operate the drill a minimum of one shift per day, six days per week.

4. We will pay public liability insurance covering personal injury and property damage, and workmen's compensation insurance and also all-risk insurance on the drilling equipment, protecting against loss by theft, fire, flood, landslide and other similar hazards. Certificates showing the above coverages will be furnished upon request.

5. Based upon the conditions as outlined above, we are pleased to quote as follows:

   a. Mobilization and Demobilization of personnel and equipment--lump sum . . . . . $ 540.00 per drill unit

b. Overburden drilling: 0 to 50 feet in depth $ 7.85 per foot

c. Diamond core drilling:

	AQ Wireline 1 1/16" core	BQ Wireline 1 7/16" core
Top of ledge to 500' in depth	$ 7.30 per foot	$ 8.05 per foot
500 to 1000' in depth	7.85 per foot	8.60 per foot

d. Reaming for casing if and when required:

	AX Casing	BX Casing
0 to 500' in depth	$ 3.25	$ 3.50
500 to 1000' in depth (this charge to include inserting and pulling casing)	3.75	4.00

e. Casing left in hole through normal drilling operations or at your request:

AX Casing	BX Casing
$ 2.50 ft.	$ 2.75 ft.

f. Cementing, waiting for cement to set and drilling out cement: $ 15.65 per hour
(plus cost of cement or substitute)

g. Standby time requested by you will be charged at $14.00 per hour per rig with two-man crew. Time lost due to breakdown of equipment will not be charged.

h. Drill mud, cement, substitutes and additives will be charged at cost plus handling charges, f.o.b. job site. Copies of invoices for these materials will accompany statements submitted to you.

i. Tractor service, if necessary, for building and maintaining roads, preparing drill sites, building sumps and moving equipment from one drill location to another will be invoiced at our cost. These services will be procured locally.

j. Core boxes (cardboard) 10 foot capacity will be charged for at $1.25 each.

6. Terms of payment: Upon the execution of an agreement and prior to the commencement of any operations under this project, you will deposit with the E. J. Longyear Company, the sum of $12,000.00 cash. Immediately after the fifteenth and last day of each month, Longyear will submit to you, invoices covering the work performed during the preceding half-month. Payment will be due from you for these invoices within 20 days from the date of the invoice. After the work has been approximately 50% completed, Longyear will continue to issue semi-monthly invoices but American will not be required to make cash payment for these invoices, the amount of which will be charged against the $12,000.00 deposit credit made initially by you. If at any time before the project is 50% completed, you become delinquent in payment of the semi-monthly invoices, and when such delinquency approximates or equals the $12,000.00 advance deposit, Longyear at that time will be priviledged to suspend all drilling operations. If it becomes necessary to suspend or terminate the work because of non-payment of charges on your part before the minimum footage of 2,400 feet has been drilled, Longyear shall be paid a sum equal to $1.00 per foot for all undrilled footage.

7. Drill cores will be turned over to your representative at the individual drill hole locations in core boxes furnished by E. J. Longyear Company, as quoted above.

8. We understand that American Mining Company contemplates a drilling program during the 1968 season in the vicinity of Garnett, Montana. This program will consist of approximately 3,000 feet of drilling in 10 or more holes, and the general conditions would be similar to those cited for the Philipsburg project.

   All terms and conditions contained in Paragraphs 3 through 7 inclusive herein, would also be applicable to the Garnett, Montana project. If it is the desire of the American Mining Company to have the Longyear Company perform either the Philipsburg or the Garnett programs, separate agreements incorporating all the terms and conditions contained herein would be drawn and executed for each of the desired programs.

9. We appreciate the opportunity to consider this work. If our proposal is accepted, we are prepared to commence drilling operations promptly after receipt of official notice to proceed, and after all other conditions herein are carried out.

Sincerely,

E. J. LONGYEAR COMPANY

MJGleason/ab

Vice President - Contract Drilling Division

copy to:
Mr. Joe G. Irving
1233 Singing Wood Ct. No. 62
Walnut Creek, California 94529

To accompany application of American MiningCo. 700 - Securities Bldg., Seattle, Wash.

Nichols Drilling Co.

Post Office Box 667
Osburn, Idaho 83849
Phone 753-5281
David M. Mason, Mgr.

September 27, 1967

Mr. Douglas A. Robinson
American Mining Company
337 Securities Building
Seattle, Washington 98101

Garnet district

Dear Mr. Robinson:

We would like to submit the following proposal for Diamond Drilling at Philipsburg, and Drummond, Montana, during 1968.

Garnet dist

It is understood that you will prepare the access roads and drill stations.

The following are the actual costs to be billed to you for BX drilling.

1. Mobilization and Demobilization for Philipsburg - $1000.00. Mobilization and Demobilization for the Garnet district at Drummond will be $500.00 extra.

2. Drilling at the rate of $8.75 per foot from 0' to 250', $9.60 a foot from 250' to 500', and $10.10 per foot from 500' to 750'.

3. Drilling overburden at $12.00 per foot.

4. Cementing the hole at $12.50 per hour.

5. Drilling cement at ½ the applicable drilling rate.

6. Casing placed in hole at 50¢ per foot.

7. Reaming casing at ½ the applicable drilling rate.

8. Casing lost or requested left in hole will be billed to you at our cost job site, plus 10% for handling.

9. Cement and drill additives will be billed at our cost job site, plus 10% for handling.

10. Cardboard core boxes will be supplied by us at our cost job site, plus 10% for handling.

11. Delay requested or caused by American Mining Company shall be billed at a rate of $10.00 per hour.

Thank you.

Yours very truly,

David M. Mason

David M. Mason, Manager

Hughes

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
QUARRYING
SHAFT SINKING
TUNNEL DRIVING
MINE PLANT DESIGN
AND FABRICATION

Boyles Bros.
DRILLING COMPANY

CONTRACTORS-ENGINEERS-GEOLOGISTS

1415 Riverside P.O. Box 4307
SPOKANE, WASHINGTON 99202
Phone (509) KE 4-0862

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY, UTAH 84110
Phone 487-7595

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
DENVER
SACRAMENTO
SANTIAGO, CHILE
LIMA, PERU

November 17, 1967

American Mining Company
337 Securities Building
Seattle, Washington 98101

Gentlemen:

The following terms are quoted for performing the 1968 drilling in the vicinities of Phiilipsburg and Garnet, Montana as per your letter dated September 18, 1967.

"TERMS"

1. Mobilization and demobilization, including set up on first hole: $750.00 each drill.

2. Drilling and casing unconsolidated overburden: $15.00 per foot.

3.

Diamond Core Drilling:	AXWL	BXWL
0.0 to 250 feet	$10.65 per foot	$12.00 per foot
250 to 500 feet	12.00 per foot	13.85 per foot
500 to 750 feet	13.85 per foot	16.20 per foot
750 to 1,000 feet	16.20 per foot	19.00 per foot

4. Reaming and casing: $6.50 per foot.

5. Cementing, waiting for cement to set during a regular drill shift, and drilling out cement: $19.25 per hour plus cost of cement, cement substitutes or drill mud and additives.

6. Casing lost in holes, destroyed through use or ordered left in place, List price less 15% f.o.b. the job site.

7. Delays for your convenience, drill hole surveys, etc.: $13.30 per hour.

8. Moving from hole to hole, tearing down, setting up, installation and recovery of water supply systems: $13.30 per hour each 2 man crew.

9. Cardboard core boxes: $1.00 each f.o.b. the job site.

10. Adequate roads will be furnished and maintained to level drill sites at no cost to Boyles Bros. Drilling Co..

11. Within 3 weeks after notice to proceed Boyles Bros. will furnish equipment of suitable design and capacity with all fittings, supplies and accessories to do the work. The drills will be operated 2 shifts per day of 8 hours each on a six day week basis. The project will be under the general supervision of an area superintendent.

Boyles Bros. Drilling Co.

E. G. Tucker

E. G. Tucker - District Manager

To accompany application of American Mining Co., 700 - Securities Bldg., Seattle, Wn. 4 copies

DIAMOND DRILLING & SUPPLY CO.

CONTRACTORS & CONSULTANTS

85 INDUSTRIAL STREET • SAN FRANCISCO, CALIFORNIA 94124 • VALENCIA 6-3919

QUOTATION

MR. JOHN G. IRVING
% American Mining Co.
337 Securities Building
Seattle, Washington 98101

See Garnet prices at bottom

DATE November 22, 1967

YOUR INQUIRY Mr. Irving Letter of November 20.

QUANTITY	DESCRIPTION	PRICE	DELIVERY
	The following quotation is for a MINIMUM OF 4,150' BX DIAMOND CORE DRILLING in granite formation in the general area of PHILIPSBURG, MONTANA.		
4,150' minimum	BX CORED HOLE to be drilled - Four holes drilled on 55° minum of verticle up to 420' depths. Two holes drilled verticle up to 685' depths.	CHARGE PER FOOT = $ 15.00 /ft.	
AS DRILLED	AX CORED HOLE TO BE DRILLED IF NECESSARY DUE TO DIFFICULTIES REQUIRING REDUCING OF HOLE SIZE - - -	CHARGE PER FOOT = $ 12.00 /ft.	
	MOBILITY CHARGE (Move In & Move out Equipment)	FLAT RATE 3,000.00	
	SET UP CHARGE & MOVE HOLE TO HOLE (per each move)	FLAT RATE $100.00ea	

TERMS & CONDITIONS:

1. Water to be available within 2,200' of drill sites at no charge to us.
2. Roads & Drilling Sites to be graded and maintained for easy accessability by AMER. MINING CO.
3. Any Stand by time required due to conditions beyond our control or upon request to be charged at $25.00 per hour.
4. Cardboard dore boxes can be furnished @ $3.50 ea.
5. Casing or Tool String lost in hole due to fissures or fractured rock torquing cause of breakage of drive (rod or casing) to be charged for at cost.
6. Prepaid (Advance) payment of $5,000.00 on approval of contract. Progress payments paid monthly.

WHEN PLACING ORDER FOR ABOVE MATERIAL REFER TO QUOTE NO. → No. 1184

QUOTATION FOR GARNET, MONTANA SITE WOULD TAKE SAME UNIT PRICES AS ABOVE QUOTED EXCEPT MOBILITY CHARGES CHARGES WOULD BE REDUCED TO $500.00.

ALL DELIVERIES QUOTED ABOVE COMMENCE AFTER RECEIPT OF YOUR ORDER.

DIAMOND DRILLING & SUPPLY CO.

Thank You for your inquiry

BY W. S. Cooper

SPECIALISTS IN DRILLING & CORING, MINERALS, DAMS, ETC. - FOUNDATION AND SOIL TESTING - MASONRY

DISTRIBUTORS FOR DRILLING EQUIPMENT, CARBIDE & DIAMOND PRODUCTS

To accompany application of American Mining Co., 700 - Securities Bldg., Seattle, Wn

WHINNEN DIAMOND DRILLING CO.
3306 COLUMBIA STREET
SPOKANE, WASHINGTON 99205

Mr. Douglas A. Robinson, President
American Mining Company
337 Securities Building
Seattle, Washington 98101

January 22, 1968

Dear Mr. Robinson:

Reference; Proposed drilling by American Mining Company at Garnet, Montana. 3000' minimum. We are pleased to quote as follows:

Mobilization $917.00

Demobilization $628.00

0	to	150'	BXWL	core	drilling	$9.21ft.	AXWL	core	drilling	@$8.21	
150'	to	500'	"	"	"	$7.81	"	"	"	"	6.81
500'	to	800'	"	"	"	$8.70	"	"	"	"	7.70
800'	to	1,000'	"	"	"	$9.80	"	"	"	"	8.80

Overburden ¢ $ 9.50

Reaming BX @$5.12 per ft. AX @ $4.03 per ft.

Drilling cement BX and/or AX @ $2.16 " ".

Casing, Cementing, Plugging, Mixing Chemicals @ $12.50 per plus cost of materials F.O.B. jobsite.

Waiting cement, Standby time, Delay time @ $10.00 per hour.

Moving from hole to hole @ $150.00

Cardboard core boxes BX @ $1.52; AX @ $1.43

Casing left in hole NX @ $3.40, BX @ $2.60, AX @ $2.10 per ft. respectively.

Penalty: for total footage less than minimum quoted, ¼ of price per ft listed above in o to 500' bracket for undrilled balance.

Sludge samples taken at no charge. Sample bags- you supply.

Thank you for this opportunity to make this quotation.

Yours very truly
WHINNEN DIAMOND DRILL COMPANY

W. J. WHINNEN
President

To accompany application of American Min. Co, 700 Securities Bldg, Seattle, Wash

OFFICIAL COPY
JUL 11 1968

GRANT DEED AND ASSIGNMENT

I, ALICE M. CHARLTON, hereinafter called Charlton, in consideration of love and affection, grant, assign, transfer and convey to JAMES F. CHARLTON all the realty and other rights and interests described as follows:

1. Thirty-two patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 2616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14, West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUDE Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONNIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided ½ interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the foregoing being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in the Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

The two above being situated in the County of Powell, State of Montana.

2. All rights and interests of any sort created in Charlton by that certain "Purchase and Sale Agreement" dated 12 June 1963 wherein James G. Haviland and Jean P. Haviland, his wife, sell to James F. Charlton and Robert M. Bielenberg said patented Lode Mining Claims described above and by those certain Grant Deeds dated 27 July 1962 and dated _____ 1965, given by said Robert M. Bielenberg to James F. Charlton and assigning and transferring to James F. Charlton all rights and interest of any sort created in said Robert M. Bielenberg by said "Purchase and Sale Agreement" dated 12 June 1963, and all rights and interest of any sort owned by Robert

M. Bielenberg in the thirty-two patented Lode Mining Claims above described.

WITNESS my hand this 23rd day of July, 1965.

Alice M. Charlton

STATE OF WASHINGTON
COUNTY OF KING

On this 23rd day of July, 1965, before me, the undersigned, a Notary Public for the State of Washington, personally appeared ALICE M. CHARLTON, Known to me to be the individual whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal, the day and year in this certificate first written above.

Notary Public for the State of Washington
Residing at Seattle

To accompany application of American Min. Co, 700 Securities Bldg, Seattle, Wn

RECEIVED
JUL 17 1968

GRANT DEED AND ASSIGNMENT

I, JAMES F. CHARLTON, a single man, hereinafter called Charlton, in consideration of One Dollar now paid and other valuable consideration, grant, assign, transfer, and convey to AMERICAN MINING COMPANY, a corporation, all the realty and other rights and interests described as follows:

1. Thirty-two patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

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The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10, and 11, Township 12 North, Range 14 West, M.P.M.

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The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

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The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 NOrth, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

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The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

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An undivided 1/2 interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M

All of the foregoing being situated in the County of Granite, State of Montana.

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The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

The two above being situated in the County of Powell, State of Montana.

2. All rights and interests of any sort created in Charlton by that certain "Purchase and Sale Agreement" dated 12 June 1963 wherein James G. Haviland and Jean P. Haviland, his wife, sell to James F. Charlton and Robert M. Bielenberg said patented Lode Mining Claims described above and by those certain Grant Deeds dated 27 July 1962 and dated 21 July 1965 1965 given by said Robert M. Bielenberg to James F. Charlton and assigning and transferring to James F. Charlton all rights and interest of any sort created in said Robert M. Bielenberg by said "Purchase and Sale Agreement" dated 12 June 1963, and all rights and interest of any sort owned by Robert M. Bielenberg in

the thirty-two patented Lode Mining Claims above described.

WITNESS our hands this 24th day of July, 1965.

James F. Charlton

STATE OF WASHINGTON:
: ss.
COUNTY OF KING :

On this 24th day of July, 1965, before me, the undersigned, a Notary Public in and for said county and state, duly commissioned and sworn and residing therein, personally appeared JAMES F. CHARLTON, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged to me that he signed the same as his free and voluntary act and deed, for the uses and purposes therein set forth.

GIVEN under my hand and official seal the day and year in this certificate first above written.

Notary Public in and for the State of Washington, residing at Seattle
My Commission expires 12-6-68

To accompany application of American Mining Co, 700 Securities Bldg, Seattle, Wash

GRANT DEED

THIS INDENTURE, made this 21st day of July, 1965, by and between ROBERT M. BIELENBERG and MARY BROME BIELENBERG, husband and wife, Parties of the First Part, and JAMES F. CHARLTON, Party of the Second Part,

WITNESSETH:

That the Parties of the First Part, for the consideration of the sum of One Dollar and other valuable consideration the receipt of which is hereby acknowledged and for the purpose of supplementing a previous Grant Deed dated 27 July 1962 from Parties of the First Party to Party of the Second Part and thereby clearing title to the below described realty in Party of the Second Part, have granted and conveyed and do hereby grant, convey, and assign unto Party of the Second Party and to his heirs and assigns all of the following described property, including all interest of any sort therein created in Parties of the First Party by the "Purchase and Sale Agreement" dated 12 June 1963 between James G. Haviland and Jean P. Haviland as Sellers and Robert M. Bielenberg and James F. Charlton as Buyers, consisting of thirty-two patented Lode Mining Claims, situated in Granite County and Powell County, Montana, described as follows, to wit:

The CRESCENT Quarty Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 3616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

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The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

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The WHITE CLOUD Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M..

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5812, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

LAW OFFICES OF
HECKENDORN & BEST
814 SECOND AVENUE
SEATTLE, WASHINGTON 98104
MAIN 3-2220

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M., in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided 1/2 interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the above being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

The two above being situated in the County of Powell, State of Montana.

Together with, all and singular, the tenements, hereditaments and appurtenances thereunto belonging or in any wise appertaining as usually had and enjoyed, including all dips, spurs and angles and all ores and minerals beneath the surface or on the surface, and including the surface of said premises, together with the right to mine for and extract the same.

TO HAVE AND TO HOLD, all and singular, the above described premises, together with the appurtenances, unto the said Party of the Second Part , and to his heirs and assigns, forever.

IN WITNESS WHEREOF, the Parties of the First Part have hereunto subscribed their names the day and year in this instrument first above written.

Robert M. Bielenberg
Robert M. Bielenberg

Mary Brome Bielenberg
Mary Brome Bielenberg
Parties of the First Part

STATE OF MONTANA :
: ss.
COUNTY OF :

On this 21st day of July, 1965, before me, the undersigned, a Notary Public for the State of Montana, personally appeared ROBERT M. BIELENBERG and MARY BROME BIELENBERG, husband and wife, known to me to be the persons whose names are subscribed to the above and foregoing instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this certificate first above written.

Notary Public for the State of Montana
Residing at Helena
My Commission expires 11-1-65

To accompany affidavit of American Min Co, 700 Securities Bldg, Seattle, Wash

OFFICIAL COPY
O. M. E.
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PURCHASE AND SALE AGREEMENT

THIS AGREEMENT made and entered into this 12th day of June, 1963, by and between JAMES G. HAVILAND and JEAN P. HAVILAND, his wife, whose Post Office address is 822 Missouri Avenue, Deer Lodge, Montana, hereinafter called "SELLERS", and ROBERT M. BIELENBERG, whose Post Office address is Avon, Montana, and JAMES F. CHARLTON, whose Post Office Address is 2633 S.W. 164th Place, Seattle 66, Washington, hereinafter called "BUYERS",

W I T N E S S E T H:

1. PROPERTY COVERED:

The Sellers, for the considerations and upon the terms and conditions herein expressed, agree to sell and by Grant Deed to convey to the Buyers merchantable title to the following-described property, and the Buyers agree to purchase said property from the Sellers for such consideration and upon such terms and conditions as are specified herein. Said property consists of thirty-two (32) patented Lode Mining Claims in Granite County and Powell County, Montana, described as follows:

√The CRESCENT Quartz Lode Mining Claim, Survey No. 4510, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

√The LEAD KING Quartz Lode Mining Claim, Survey No. 4511, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

√The BULL'S EYE Quartz Lode Mining Claim, Survey No. 4651, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

√The FREE COIN Quartz Lode Mining Claim, Survey No. 4652, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

√The FAIR VIEW Quartz Lode Mining Claim, Survey No. 4548, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

√The SAN JOSE Quartz Lode Mining Claim, Survey No. 3615, embracing a portion of Sections 2, 3, 10 and 11, Township 12 North, Range 14 West, M.P.M.

Range 14 West, M.P.M.

The ROBERT EMMETT Quartz Lode Mining Claim, Survey No. 2616, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The RED CLOUD Quartz Lode Mining Claim, Survey No. 5451 embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The IOWAN Quartz Lode Mining Claim, Survey No. 3614, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The PARQUET Quartz Lode Mining Claim, Survey No. 5452, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The BERLENE Quartz Lode Mining Claim, Survey No. 5454, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The FOURTH OF JULY Quartz Lode Mining Claim, Survey No. 5453, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The CAVE HILL Quartz Lode Mining Claim, Survey No. 5455, embracing a portion of Sections 10 and 11, Township 12 North, Range 14 West, M.P.M.

The WHITE CLOUD Quartz Lode Mining Claim, Survey No. 5631, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HONOLULU Quartz Lode Mining Claim, Survey No. 5632, embracing a portion of Sections 3 and 10, Township 12 North, Range 14 West, M.P.M.

The ARMISTEAD Quartz Lode Mining Claim, Survey No. 5633, embracing a portion of Section 10, Township 12 North, Range 14 West, M.P.M.

The GOLD BUG Quartz Lode Mining Claim, Survey No. 9407, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The BULL'S EYE FRACTION Quartz Lode Mining Claim, Survey No. 9405, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

The HAROLD Quartz Lode Mining Claim, Survey No. 5312, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The CONTACT Quartz Lode Mining Claim, Survey No. 5666, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The GROTTO Quartz Lode Mining Claim, Survey No. 5664, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The PYRAMID Quartz Lode Mining Claim, Survey No. 5663, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The BONIE LODE Quartz Lode Mining Claim, Survey No. 5665, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The MONTANA Quartz Lode Mining Claim, Survey No. 5662, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The NORTH STAR Quartz Lode Mining Claim, Survey No. 9404, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The KING SOLOMON Quartz Lode Mining Claim, Survey No. 9414, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The HIGH ROAD Quartz Lode Mining Claim, Survey No. 9413, embracing a portion of Section 11, Township 12 North, Range 14 West, M.P.M.

The INTERNATIONAL Lode Mining Claim, designated by the Surveyor General as Lot No. 3612, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. in the First Chance Mining District, in the County of Granite, State of Montana.

An undivided one-half (½) interest in the FREE COINAGE Lode Mining Claim, designated by the Surveyor General as Survey No. 9904, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M. of the First Chance Unorganized Mining District in Granite County, Montana.

PLACER LOT A & B, Survey No. 751, embracing a portion of Section 3, Township 12 North, Range 14 West, M.P.M.

All of the foregoing being situated in the County of Granite, State of Montana.

The HORNETT Lode Mining Claim, Survey No. 3672, in the Township 12 North, Range 13 West, M.P.M.

The HAPARANDA Lode Mining Claim, Survey No. 3613, in Township 12 North, Range 13 West, M.P.M.

2. PURCHASE PRICE AND PAYMENT:

The purchase price for all of said property is the sum of FIFTEEN THOUSAND ($15,000.00) DOLLARS, payable as follows:

TWO THOUSAND ($2,000.00) DOLLARS contemporaneously with the execution of this agreement, the receipt whereof is hereby acknowledged by the Sellers;

FIVE HUNDRED ($500.00) DOLLARS on or before September 15, 1963;

FIVE HUNDRED ($500.00) DOLLARS on or before March 15, 1964;

FIVE HUNDRED ($500.00) DOLLARS on or before September 15, 1964;

ONE THOUSAND ($1,000.00) DOLLARS on or before March 15, 1965;

ONE THOUSAND ($1,000.00) DOLLARS on or before September 15, 1965;

TWO THOUSAND ($2,000.00) DOLLARS on or before March 15, 1966;

And the balance of SEVEN THOUSAND FIVE HUNDRED ($7,500.00) DOLLARS on or before September 15, 1966.

All payments, excepting the initial payment of TWO THOUSAND ($2,000.00) DOLLARS, shall be made at the FIRST NATIONAL BANK OF BUTTE, Butte, Montana, for the account of the Sellers.

3. ESCROW BANK:

The FIRST NATIONAL BANK OF BUTTE, Butte, Montana, is hereby designated as the Escrow Bank. Promptly upon execution of this agreement, there shall be deposited with said Escrow Bank the following:

1) An executed copy of this agreement;

2) A grant deed properly signed and acknowledged by the Sellers, and entitled to record, conveying said premises to the Buyers.

The Sellers shall pay the opening escrow charge of said bank and the Buyers shall pay all subsequent escrow fees. Said Escrow Bank shall be authorized to deliver all of the documents held in escrow to the Buyers upon full payment of the purchase price upon the occurrance of any of those events specified in subparagraphs "2" and "3" of Paragraph "4" of this agreement, entitled "Abstract and Title". In the event of default in the payment of the purchase price, and upon expiration of the time hereinafter specified for remedying any default, if any default shall not then have been remedied, or upon rescission of the contract as provided in subparagraph "1" of Paragraph "4", said Escrow Bank shall be authorized to deliver all escrow documents to the Sellers. Proper revenue stamps shall be affixed to the deed before delivery to the Buyers and said Escrow Bank shall withhold the cost thereof from the final payment of purchase price.

4. ABSTRACT AND TITLE:

The Sellers warrant to the Buyers a merchantable and unencumbered title to said property, excepting the Hornett and Haparanda claims, as to which it is recognized Sellers have a tax deed title, which Buyers are willing to accept. It is recognized that the Sellers, as of the date of this agreement have a title to only an undivided one-half (½) of the property covered by this agreement excepting the FREE COINAGE Lode Mining Claim, Survey No. 9904, as to which Sellers have only an undivided one-fourth (¼) interest. Sellers covenant that within One Hundred Twenty (120) days from the date of this agreement, Sellers shall obtain all of the title to all of the claims mentioned in this agreement excepting the FREE COINAGE Lode Mining Claim, as to which they shall obtain an additional undivided one-fourth(¼) interest and excepting the fact that title to the Hornett and Haparanda claims will be based on a tax deed. In the event Sellers obtain such additional interest in said claim, the deed or deeds therefor shall be exhibited to Buyers or their agent designated in writing and recorded at Sellers' expense. In the event Sellers fail to obtain said additional title within said One Hundred Twenty (120) day period, Buyers shall be free to take any one of the three alternatives hereinafter specified in this paragraph as available to Buyers in the event of defect in title. Sellers have delivered to Buyers abstracts of title to said premises continued to 1939, which Buyers may retain without charge, unless this contract is rescinded or terminated for default, in which case, said abstracts shall be returned to Sellers without charge for any continuation thereof. As expeditiously as possible after the signing of this agreement, the Buyers at their own expense shall have said abstracts of title to all of said property continued by a licensed and bonded abstractor and, when completed, shall have the same

examined by an attorney of the Buyers' choice, at Buyers' expense. In the event said abstract examination discloses any defect in the merchantability of the title to any of said claims (other than the outstanding one-half (½) interest heretofore mentioned and excepting the fact that the title to the Hornett and Haparanda claims is based on a tax deed) which, in the opinion of counsel for the Buyers can be cured by a suit to quiet title or other proceeding, other than by purchase of some interest in said properties from persons other than the Sellers, a copy of such legal opinion shall be delivered to the Sellers, which legal opinion shall specify such defect or defects. Upon receipt of any such legal opinion disclosing defects in the merchantability of the title to said premises, the Sellers shall promptly take such action at Sellers' expense as may be necessary to cure any such defect and include a copy of any such instrument or copy of any such proceeding as may be necessary to cure said defects in the abstracts of title to said premises, at Sellers' expense, all within nine (9) months of the date of receipt of any legal opinion specifying any such defect. In the event the Sellers shall fail to cure any such defect and include the proceedings or documents pertaining thereto in said abstract or abstracts of title within said nine (9) month period, then and in such event the Buyers may proceed to take such action as may be necessary to clear said title and deduct the cost thereof, including attorneys' fees, from the next payment or payments due on the purchase price of said property. In the event Buyers wish to quiet the title to the Hornett and Haparanda claims , the cost thereof shall be the expense of the Buyers, unless a quiet title suit would not be successful and it would be necessary for the Buyers to purchase some interest in said claims from others, in which case, the Buyers would be entitled to elect one of the remedies hereinafter set forth. In the event Sellers shall fail

to obtain said additional one-half ($\frac{1}{2}$) interest within said One Hundred Twenty (120) day period, or in the event a legal opinion upon the examination of said abstracts reveals that there is any other defect in the title to any of said property which cannot be cured, except by purchase of some interest in said property from persons other than the Sellers in this agreement, then, and in such event, the Buyers shall have the right to take any of the following alternatives:

1) Rescind this contract and obtain from the Sellers any payments heretofore made on the purchase price.

2) Purchase any of such outstanding interests from any person holding the same and deduct the amount of such purchase price from the purchase price under this agreement.

3) Reduce the purchase price specified under the terms of this agreement by an amount equal to that portion of the purchase price that the acreage of any mining claim or claims having any such defect of title bears to the total acreage of mining claims covered by this contract. In such event, the Buyers shall deposit with the Escrow Bank a quitclaim deed to the mining claim or claims subject to such defect and, upon payment of the balance due upon the reduced purchase price, shall be entitled to possession of all documents held by the Escrow Bank excepting the quitclaim deed which shall be delivered to the Sellers.

5. TIMBER CONTRACT:

It is understood by the parties hereto that timber on said mining claims is subject to a contract for sale of timber, which contract is dated October 6, 1960, in which C. M. McDONALD, of Missoula, Montana, is the purchaser, a copy of which contract is attached hereto. It is further understood that said contract has been extended by oral agreement to October 5, 1963 and upon the same terms and conditions. Sellers herein and Buyers further agree that the Sellers shall have and be entitled to the proceeds of said timber contract as orally extended, but in consideration therefor, Sellers covenant as follows:

a. Sellers shall not further extend said timber

contract nor make any other or different timber contract or change or modify any of the terms or conditions of the existing contract without Sellers' written consent first obtained, except that the term may be extended to December 5, 1963.

b) Sellers shall, at their own cost and expense, enforce each and every term and condition of said timber contract as extended, for the benefit of Buyers herein, so that in the event the "Contractor" under said timber contract shall breach any term or condition of said timber contract so as to damage said premises or cause any lien or encumbrance thereon, Sellers shall bear all cost and expense of removing any such lien or encumbrance or collecting for any such damage, and the amount recovered for any such damage shall be for the account of Buyers, without reduction for the cost of collecting the same.

c) In the event Sellers shall not enforce the terms and conditions of said timber contract as provided in subparagraph "b)" above, Buyers herein shall have the right to do so, either in their own names or in the names of Sellers, and to deduct all costs and expenses incident thereto from the purchase price of the mining claims covered by this contract and shall be entitled to all damages collected for any damage to said premises.

d) Sellers shall hold Buyers harmless of and from any cost, expense or liability of any kind or nature arising from the existence, operation or performance or in any way connected with said timber contract.

6. RIGHT TO MINE AND POSSESSION:

Upon execution of this agreement by the parties hereto, the Buyers shall have the right to immediate possession of the property, and so long as this agreement is not terminated by default, or by rescission, may explore, drill, sink, construct and operate in and upon any and all of said mining claims such prospect holes, prospect shafts, air, water and hoisting shafts, and mine for and extract all ores and minerals upon and beneath the surface of said premises in any manner they deem expedient.

7. TAXES:

Buyers shall pay all taxes levied and assessed against said properties beginning with the year 1963, including taxes upon any and all structures, improvements and equipment or other property erected, constructed or installed upon or in connection with the operation of said premises.

8. DEFAULT:

The failure of the Buyers to make any payment of the purchase price at the time and in the manner herein specified, or to observe, abide by and perform all other covenants and conditions herein set forth, shall constitute a default, and shall be cause for termination of this agreement as follows:

1) In the event of any such default, Sellers shall mail a written notice by registered mail to the Buyers, with a copy to the Escrow Bank, the Buyers' copy to be addressed to Mr. James F. Charlton, at his address as herein provided, or such other address as the Buyers may specify by written notice to the Sellers and the Escrow Bank, setting forth the particulars of the default, specifying that this agreement shall be terminated at the end of sixty (60) days from the date of mailing of such notice unless such default shall have been cured within such sixty (60) day period. Such notice shall be deemed given and received when a copy thereof has been deposited in the United States Post Office addressed as hereinabove set forth, registered, with return receipt requested, and with proper postage thereon prepaid. In the event any such default is not cured within such sixty (60) day period, this agreement shall be at an end and all rights of the Buyers shall thereupon be terminated and the Sellers shall be entitled to delivery of all escrow documents and shall retain all payments theretofore made as agreed rental for the use and occupation of said property and as one of the considerations of this agreement.

9. SURRENDER OF PROPERTY:

Upon the termination of this agreement for any cause except the full payment of the purchase price, or reduced purchase price

as hereinabove provided, the Buyers shall promptly surrender to the Sellers the premises covered by this agreement, without delay or hindrance, provided that the Sellers shall have a period of ninety (90) days thereafter in which to remove from said premises all machinery, tools and other equipment, including pipe and rail, belonging to the Buyers or placed thereon by the Buyers, and no rentals shall be charged for the storage of any such machinery, tools or equipment so long as they shall be removed from said premises within ninety (90) days from the date of termination of this agreement.

10. ASSIGNMENT:

All of the terms and conditions of this agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have hereunto subscribed their names the day and year in this instrument first above written.

James G. Haviland

James G. Haviland

Jean P. Haviland

Jean P. Haviland
SELLERS

Robert M. Bielenberg

Robert M. Bielenberg

James F. Charlton

James F. Charlton
BUYERS

STATE OF MONTANA)
: ss.
County of Powell)

On this 21 day of February, 1963, before me, the undersigned, a Notary Public for the State of Montana, personally appeared JAMES G. HAVILAND and JEAN P. HAVILAND, his wife, personally known to me and to me personally known to be the persons described in and whose names are subscribed to the within and foregoing instrument and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

Barbara McAmber
Notary Public for the State of Montana
Residing at Helena Mont.
My Commission expires Sept 27, 1963

(Notarial Seal)

STATE OF MONTANA)
: ss.
County of Silver Bow)

On this 12th day of June, 1963, before me, the undersigned, a Notary Public for the State of Montana, personally appeared ROBERT M. BIELENBERG, personally known to me and to me personally known to be the person whose name is subscribed and who is described in the within and foregoing instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

James A. Poe, Jr.
Notary Public for the State of Montana
Residing at Butte, Montana
My Commission expires Oct. 20, 1963

(Notarial Seal)

STATE OF WASHINGTON)
: ss.
County of King)

On this 8th day of April, 1963, before me, the undersigned, a Notary Public for the State of Washington, personally appeared JAMES F. CHARLTON, personally known to me and to me personally known to be the person described in and whose name is subscribed to the within and foregoing instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my Notarial Seal the day and year in this instrument first above written.

(Notarial Seal)

Notary Public for the State of Washington
Residing at [illegible]
My Commission expires [illegible]

To accompany application of American Mining Co. 700 Securities Bldg, Seattle, Wn — Appendix B — 1

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Some GARNET SHIPMENTS (1937-41)[1]

From Garnet District, Drummond, Montana

SAN JOSE CLAIM

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return **
7/8/37	6252	Glen Hawe	31.8	0.80	$ 485.75
8/2/37	6643	"	36.2	0.85	595.67
9/17/37	7542	"	39.9	1.15	937.56
11/15/37	8506	"	32.5	1.36	919.35
12/22/37	9108	"	43.3	1.10	967.13
1/12/38	9356	"	6.4	0.34	11.69
4/26/38	632	"	31.9	1.76	1,241.59
5/11/38	847	"	4.3	3.87	406.78
6/25/38	1175	"	33.2	1.82	1,345.75
9/7 /38	2	"	40.1	1.98	1,786.33
9/23/38	2066	"	40.2	0.53	360.95
10/15/38	3	"	32.7	2.29	1,726.77
10/27/38	2628	"	34.0	0.76	476.97
11/10/38	2823	"	16.8	0.65	201.47

[1] Tabulated from actual smelter return sheets, by Joe G. Irving

SAN JOSE CLAIM (cont.)

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
12/10/38	4	Glen Hawe	18.9	1.68	$ 697.30
12/10/38	5	"	20.6	0.75	239.05
12/16/38	3278	"	43.6	0.63	480.69
12/22/38	3376	"	14.3	1.04	298.88
12/22/38	3377	"	10.6	0.77	150.90
1/3/39	3525	"	10.9	1.87	452.44
2/3/39	3932	"	11.8	1.50	369.86
3/6/39	4307	"	9.3	1.30	242.12
3/21/39	4523	"	36.3	1.49	1,148.45
4/28/39	5135	"	25.3	1.77	980.77
5/9/39	5294	"	63.6	1.53	2,040.41
6/9/39	5839	"	28.7	1.96	1,264.75
6/19/39	5965	"	33.4	1.18	796.69
7/19/39	6427	"	14.4	1.88	591.43
7/24/39	6353	"	32.9	2.28	1,736.72
9/21/39	7517	"	33.8	0.82	554.65
10/7/39	7760	"	18.4	0.87	329.06
10/26/39	8071	"	37.2	1.37	1,121.13

SAN JOSE CLAIM (cont.)

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
12/1/39	8696	Glen Hawe	28.1	1.30	$ 801.68
12/19/39	9022	"	12.3	0.67	153.88
12/20/39	2	"	8.9	0.86	130.27
1/13/40	1	"	3.5	0.78	39.24
1/27/40	2	"	6.0	1.03	116.08
3/8/40	3	"	10.9	0.60	83.00
10/7/40	3668	"	29.5	0.82	489.68
10/25/40	5	"	3.9	1.27	101.10
10/25/40	6	"	7.2	0.82	95.65
12/9/40	4752	"	26.8	0.63	312.05
12/12/40	4838	"	20.1	1.14	491.41
Totals and Weighted Average			1,044.5	1.26	$27,773.10

FOURTH OF JULY CLAIM

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return**
9/10/34	1512	Howell & Howe Brothers	39.6	1.04	$ 632.96
10/31/39	8132	Glen Hawe	12.8	1.22	346.77
11/10/39	8483	"	10.0	2.06	444.78
1/11/40	93.82	"	12.0	0.67	158.86
8/16/39	12	J. A. Gunn	5.5	0.99	88.50
10/7/39	7759	Howard Gunn	20.2	1.62	414.73
10/24/39	8010	"	13.4	0.60	41.26
10/24/39	8009	"	18.3	1.54	353.50
11/10/39	8482	"	18.7	2.64	424.10
12/1/39	8760	"	18.2	0.64	210.26
12/19/39	9021	"	16.4	2.85	405.43
1/21/41	5473	Gunn & McDonald	44.5	0.38	238.30
1/27/41	5578	"	39.6	0.63	442.24
2/7/41	5748	"	46.9	0.70	603.28
2/25/41	6027	"	45.5	1.36	1,306.64
3/10/41	6266	"	37.2	1.20	943.16
4/12/41	6838	"	38.5	0.77	560.08
5/7/41	7346	"	39.2	0.36	192.91

FOURTH OF JULY CLAIM (cont.)

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
5/23/41	7728	Howard Gunn	37.8	0.50	$ 200.67
6/11/41	8005	"	34.0	0.52	117.15
6/26/41	8367	"	30.2	0.56	116.58
7/10/41	8608	"	36.8	0.48	111.08
8/5/41	9039	"	20.7	0.69	263.19
9/10/41	9707	"	26.0	0.61	177.36
10/9/41	141	"	32.3	0.61	224.76
6/27/41	1	Jack Kohr	5.7	1.53	173.37
5/14/41	7463	Richard Heard	30.3	1.00	304.68
8/14/41	2	Jack Kohr			
Totals & Weighted Average			730.3	0.89	$9,496.60

ROBERT EMMETT CLAIM

5/12/37	5337	Glen Hawe	26.3	0.32	$ 110.99
5/26/37	5585	"	37.8	0.42	247.25
6/7/37	5781	"	31.1	0.71	422.10
Totals & Weighted Average			95.2	0.48	$ 780.34

HONOLULU CLAIM

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
2/9/39	3999	Glen Hawe	21.2	0.34	$ 86.50
3/6/39	4308	"	6.1	0.43	25.55
3/25/38	144	"	30.0	0.36	147.17
4/15/38	495	"	28.8	0.48	219.10
5/10/38	836	"	26.4	0.62	282.98
6/10/38	1238	"	24.7	0.61	255.75
7/1/38	1	"	5.7	0.39	---
Totals & Weighted Average			142.9	0.48	$1,017.05

FAIRVIEW CLAIM

6/22/38	1	Glen Hawe	11.1	0.56	$ 50.05
8/24/39	1	Fred Schmook	2.0	1.73	67.98
Totals & Weighted Average			13.1	0.74	$ 118.03

RED CLOUD CLAIM

9/25/39	7546	Chris Johnson	29.8	0.43	$ 185.53
10/9/39	7810	"	10.8	0.39	42.17
10/17/39	7900	"	9.8	1.70	377.71
10/17/39	7901	"	15.6	0.39	78.03
11/8/39	8299	"	10.0	0.47	61.43

RED CLOUD CLAIM (cont.)

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
11/27/39	8570	Chris Johnson	24.3	0.63	$ 266.71
12/4/39	8700	"	14.0	1.24	350.68
Totals & Weighted Average			114.3	0.54	$1,362.26
CRESCENT CLAIM					
1/11/40	9381	Glen Hawe	20.6	1.04	$ 461.64
1/31/40	1	"	10.5	0.94	180.98
8/23/39	1	V. I. McDonald	5.8	1.16	125.58
Totals & Weighted Average			36.9	1.01	$ 768.20
LEAD KING CLAIM					
10/31/39	8131	Glen Hawe	16.9	0.86	$ 300.88
12/19/39	9023	"	34.5	0.54	345.84
3/4/40	95	"	21.8	0.87	377.05
6/10/41	1	J. M. McIntyre	4.9	0.96	64.24
8/1/41	2	"	4.5	0.63	26.87
8/17/39	2	D. Elliott	20.0	0.82	129.29
8/21/39	3	"	10.7	1.40	311.39
8/21/39	1	"	13.5	1.62	477.38
10/19/39	7957	"	31.5	0.98	618.03

LEAD KING CLAIM (cont.)

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
11/8/39	8255	D. Elliott	27.2	0.99	$ 529.74
11/8/39	8293	"	15.6	0.58	135.65
11/22/39	8531	"	21.6	2.56	1,167.91
11/28/39	8645	"	18.6	0.76	262.75
1/2/41	5170	"	31.6	1.01	656.17
1/17/41	5435	"	34.5	2.30	1,776.92
1/30/41	5619	"	17.7	0.58	183.87
1/30/41	5618	"	14.3	0.72	187.31
3/7/41	6241	"	30.9	1.35	886.74
3/7/41	6242	"	22.8	1.28	627.82
4/24/41	7118	"	18.5	0.99	374.47
4/24/41	7119	"	18.4	0.63	209.84
5/21/41	7636	"	13.6	1.15	312.32
6/16/41	7637	"	20.4	0.90	356.18
6/16/41	8131	"	22.3	0.40	127.51
6/19/41	8130	"	21.8	1.18	547.54
6/18/41	8131	"	14.7	0.40	83.93
7/8/41	1	"	8.0	0.60	53.12
8/22/41	4	"	4.0	2.46	191.02

LEAD KING CLAIM (cont.)

Date	Lot No.*	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return
9/10/41	9711	D. Elliott	12.1	0.96	$ 225.01
9/10/41	9712	"	16.0	0.33	54.09
10/9/41	140	"	13.2	1.89	519.74
11/7/41	655	"	26.9	0.53	243.75
12/9/41	1101	"	13.8	0.31	46.10
12/26/41	1355	"	13.5	0.24	17.34
2/26/41	6063	V. I. McDonald	33.9	0.87	592.25
3/13/41	6319	"	11.6	1.34	335.31
5/26/41	7803	"	34.4	1.02	733.83
5/26/41	7760	"	18.8	0.94	354.06
6/16/41	8130	"	14.3	1.18	361.18
6/20/41	8229	"	41.4	0.38	243.46
6/30/41	8399	"	43.3	0.37	251.79
7/3/41	8500	"	32.1	0.52	294.51
7/1/41	8431	"	30.8	0.83	515.02
7/25/41	8866	"	13.1	0.93	287.73
7/25/41	8865	"	14.1	1.01	287.65
8/5/41	9042	"	44.7	0.90	822.56
8/29/41	9469	"	33.7	0.72	472.29

LEAD KING CLAIM (cont.)

Date	Lot No. *	Shipper or Lessee	Approx. Dry Tons	Oz. Au. Per Ton.	Net Smelter Return **
9/15/41	9713	V. I. McDonald	37.6	1.01	$ 782.40
10/1/41	26	"	41.8	0.58	439.88
10/21/41	349	"	36.5	0.97	726.24
10/21/41	289	"	33.9	0.88	600.34
11/4/41	537	"	26.7	0.33	126.22
11/10/41	680	"	55.6	0.49	472.76
11/26/41	925	"	40.6	0.51	386.85
12/2/41	966	"	34.4	0.48	289.82
12/12/41	1159	"	31.8	0.76	477.68
12/18/41	1240	"	42.7	0.80	674.93
12/22/41	1282	"	27.6	0.50	247.23
12/22/41	1283	"	34.7	0.77	529.21
Totals & Weighted Averages			1,440.4	0.84	$23,733.21

* Shipments made mostly to Anaconda Co.; some to A.S. & R. Co.

** After paying Haul, Frt and 15% Royalty to owners

2) Assayed 3.45 oz. Ag; 0.3% Pb; Tr. Cu, 0.3% Zn; 89.4% Insol.

To accompany application of American Mining Co
700 Securities Bldg, Seattle, Wn.

Appendix C

JUL 14 1958

PERSONAL DATA SUMMARY

Education, Background and Experience

Name: Joe G. Irving, Mining Geologist

Address: Office / Residence: 1233 Singing Wood Ct. No. 12
Walnut Creek, California 94529

EDUCATION

1. Graduated from Erasmus Hall High School, Brooklyn, N.Y., with Board of Regents Diploma. Courses were those of regular high school curriculum leading up to engineering work in college.

2. Attended Columbia College, Columbia University, New York City, for four years, graduating after taking general arts and pre-engineering courses.

   Received Bachelor of Arts Degree in 1924

3. Attended Columbia School of Mines, Columbia University, New York City, for two years of post-graduate work in Mining Engineering and Mining Geology, wrote thesis and received the following additional degrees:

   Bachelor of Science Degree in 1926

   Engineer of Mines Degree in 1927

4. Later, in 1938-40, attended Harvard University, Cambridge, Massachusetts, and spent two more years in post graduate work, studying exclusively Mining and Economic Geology, and completed all courses, requirements and and oral and written examinations for a Doctor's Degree, except for writing a thesis, which for various reasons was never done.

   Received a Master of Arts Degree in Mining and Economic Geology in 1940

EXPERIENCE AND BACKGROUND

Since graduation from Columbia University in 1927, experience as a Professional Mining Geologist, covering a period of thirty-seven years, has included:

1. ANACONDA COPPER COMPANY. Seven and a half years with the Anaconda Copper Mining Company as mining geologist, at the Butte mines, and in doing outside examination and valuation work throughout the West.

   Work during this period included being mine geologist at several of the larger units, in Butte, Montana, with the usual underground and office

duties of mapping, development recommendations and ore calculations. Also included was much field and outside examination work in which many prospects, mines and districts were studied, examined and reported upon throughout the West from British Columbia to West Texas. Numerous reports on this work are on file with the Company. Part of the work was out of the Salt Lake office of the International Smelting & Refining Company, an Anaconda subsidiary.

2. WAR PRODUCTION BOARD. One and a quarter years in Washington, D. C., in 1945-46, with the War Production Board and its successor Agency as engineer-analyst for the Copper Division.

   This work included being Alternate Member of the Quota Committee, and involved the carrying out of the objectives of the Premium Price Plan, as it applied to mining. Quotas were calculated for many companies -- large and small, including some of the largest.

3. ATOMIC ENERGY COMMISSION. Over four years with the Atomic Energy Commission in Grand Junction, Colorado and in Las Vegas, Nevada, as (successively) Geological Engineer, Mining Engineer and Project Engineer. Work during the first three and a half years as Geological Engineer and Mining Engineer included mine appraisal, ore reserve calculations, production and cost analyses, forecasts and other related duties.

4. CO-MANAGER OF NORWICH MINE. Was occupied for six years as co-manager of the Norwich manganese mine at Butte, Montana. This property was selected, acquired and managed by the undersigned and his former partner for six years during which period a production of over 57,000 L.D.T. of manganese ore for the government stockpile was achieved.

   After much negotiation, a General Services Administration loan of $107,000 was obtained and all was repaid in full, including interest. Gross value of ore produced was over one million and five-hundred thousand dollars.

   The activities embraced in this work included almost everything that would go with a mining operation involving from ten to twenty men, both at the mine and in the office. Included were finance, planning, geology, geologic mapping and maps, supplies, trucking, payrolls, reports and much business with the G.S.A. and other government agencies. (As noted elsewhere, some consulting work was done at the same time.)

5. MINE MANAGER - VARIOUS PROPERTIES. Over seven and a half years as manager of small and medium-sized mines (this was in addition to the work described in the paragraph above) and engaged in exploration and development work at various properties.

   This work, among other things, included selecting and organizing from the start three mining exploration ventures - the Quartz Hill, Pyrenees and Spar mines, all located in Montana. All produced some ore. The work entailed all kinds of duties that go with the management of such ventures. Included were organization, financial details, management, geologic work, trucking, supply procurement, planning, payrolls and reports of all kinds.

6. MINING CONSULTANT. During a period covering approximately sixteen years, and including the intervals described in Sections 4 and 5 above and 7 below, did considerable consulting work in the field of mining geology. Such consulting work comprised mostly mine examination, the evaluation of various districts, properties and prospects, and the submittal of specific recommendations. In the course of this work, a variety of metal deposits were examined throughout the West, some for large clients, or major mining companies.

   Occupation since June 1, 1964 has been that of consulting mining geologist, and has consisted principally of the geologic investigation, including detailed mapping, of four mining districts in Montana. A drilling program was subsequently laid out and supervised. This work is still being followed.

   Also, during this period, served as Chairman of a Commission of Three on the Mouat case, in connection with the chromium property near Nye, Montana. This complicated hearing grew out of condemnation proceedings at the start of World War 11.

7. THE GALIGHER COMPANY. Two and a quarter years with the Galigher Company, of Salt Lake City, Utah, as their mining geologist and part-time sales engineer. In this capacity examined a number of properties - brought in by the company or the undersigned- and also acted as geologist at two Galigher-controlled properties, the Broadway and Toledo mines. These mines were either under development or in production. As sales engineer, visited many mines, mills and plants and became familiar with milling and mill equipment.

8. In June 1966, completed a short course in Geochemical Exploration, at the Colorado School of Mines, at Golden, Colorado.

9. CIVIL SERVICE RATINGS HELD.

   As Mining Engineer GS-13
   As Mining Geologist GS-12
   As Valuation Engineer (Mining)GS-11

10. SOCIETIES, CLUBS, ORGANIZATIONS, ETC.

   Member of: American Institute of Mining Engineers
   Society of Economic Geologists
   American Institute of Professional Geologists
   Society of Sigma Xi

   Columbia Alumni Association
   Harvard Alumni Association
   Christ Church Episcopal

   Formerly
   Member of: While in Butte, Montana, was a member of
   The Butte Exchange Club and
   The Butte Chamber of Commerce

11. PROFESSIONAL REGISTRATION.

   Registered as Professional Engineer in the States of Utah, Colorado, Montana and Washington.

   Registered Professional Geologist in Arizona.

December 1, 1966

Joe G. Irving

To accompany application of American Mining Co, 700 Securities Bldg, Seattle, Wash Appendix D

Appendix - D

[illegible]

Price List for Assaying Hand Samples

		Price Per Sample
Aluminum Oxide	(Al_2O_3)	$ 9.00
Antimony	(Sb)	10.00
Arsenic	(As)	9.00
Barium Sulphate	($BaSO_4$)	9.00
Bismuth	(Bi)	12.00
Copper (Iodide)	(Cu)	3.00
Chromium	(Cr)	12.00
Gold - Total - Fire	(Au)	3.00
Gold - Free	(Au)	7.00
Gold - Fineness	(Au)	7.00
Iron - Acid	(Fe)	3.00
Iron - Fusion	(Fe)	7.00
Insoluble	(Insol)	3.00
Lime	(CaO)	7.00
Lead	(Pb)	3.00
Magnesium Oxide	(MgO)	10.00
Manganese	(Mn)	4.00
Manganese Dioxide	(MnO_2)	4.00
Mercury	(Hg)	10.00
Molybdenum	(Mo)	9.00
Moisture	(H_2O)	3.00
Phosphorus	(P)	7.00
Phosphorus Pentoxide	(P_2O_5)	7.00
Platinum	(Pt)	25.00
Silicon Dioxide	(SiO_2)	9.00
Silver	(Ag)	3.00
Sulphur	(S)	9.00
Tungsten	(W) (WO_3)	9.00
Zinc	(Zn)	3.00

Other assays made by special arrangement, including Spectrographic work.

Certain combinations of elements at lower prices.

A charge of $1.00 per sample will be made for drying, crushing, pulverizing etc., unless pulps are furnished for assaying.

A reduction in cost per sample can be made for a guaranteed amount of work. Consult us for prices.

Special handling of samples or special methods of analysis, at increased price.

See over also.

Office Samples

Silver	$ 8.00
Gold	8.00
Silver & Gold	10.00

Most additional metals assayed for $8.00 each.

Mineral Dressing

BATCH TEST WORK

Flotation
Jig
Table
Magnetic Separator

Leaching and other work by arrangement.

Written reports made on all test work.

Costs [illegible] per hour, includes labor, equipment and supplies.

Assaying costs for test work charged separately.

Special monthly rates for daily customers.

Samples and pulps will not be saved unless requested.

Payment must accompany samples unless credit has been established.

Mark samples plainly and send instructions.

All Work Strictly Confidential

Montana Laboratory Company
Philipsburg, Montana

P. O. BOX 306 — ZIP CODE 59858

OFFICE PHONE 406 859-3772 — HOME PHONE 406 859-3578

PRICES EFFECTIVE JUNE 1, 1968
Prices Subject to Change Without Notice

APPENDIX
E

(This is a re-typed copy of the final page (page 3) of the FINAL REPORT, on the work done previously in the Garnet District, under O.M.E. Contract 2207, Docket No. 6410, in 1966)

page 3

Discussion of Results

In summarizing the results of the work done, it can probably be said that the various so-called favorable horizons (comprising several limestone-shale contacts and including the upper contact of the quartzite with the overlying shale of Cambrian age) were fairly well explored near the crest and along the northeast flank of the plunging anticline, in a limited area along the axis of the structure that ranged from 600' to 2000' northwest of the productive workings in the underlying quartzite. But no encouraging evidence of the possible existence of bedded ore in this area, and in the horizons intersected, were found in the drilling done.

Hole No. 1 and Hole No. 2, put down prior to the execution of the contract, were laid out to probe for the extensions of the narrow, but high grade, veins found in the granodiorite in the old Dewey and Nancy Hanks mines. Both holes cut vein structures containing quartz and pyrite, but the material encountered, while gold-bearing, was not commercial. Further exploration for this type of ore could be undertaken, but the economic justification for it--in light of the results obtained in these two preliminary holes--is open to question.

Further exploration for bedded ore, of the type and extent found in the Crescent-Lead King-Red Cloud mines, however, seems justified. It could well be that a future search for this type of ore should be concentrated in the quartzite itself, below the known orebodies in this host rock, or to the southeast along the plunging anticline, rather than to the northwest, as was done. If the exploration is designed to explore the area down dip below the known ore bodies, the possibility of a southeast rake should be taken into account, and the holes might be laid out to cut the quartzite nearer to the granodiorite, where fracturing and permeability may be greater, thus giving promise of larger ore shoots.

The possibilities of the district should not be considered as having been exhausted, by the limited exploration work done, described in this report, The mineralization of the area is extensive, and the gulches that drain it produced extroadinary diggings over a wide area.

A further study is going to be made of the district, particularly along the anticline to the southeast of the Red Cloud and Fourth of July and Robert Emmet claims, with the thoughts expressed above of finding extensions of bedded ore that formed in the quartzite.

American Mining Company

by

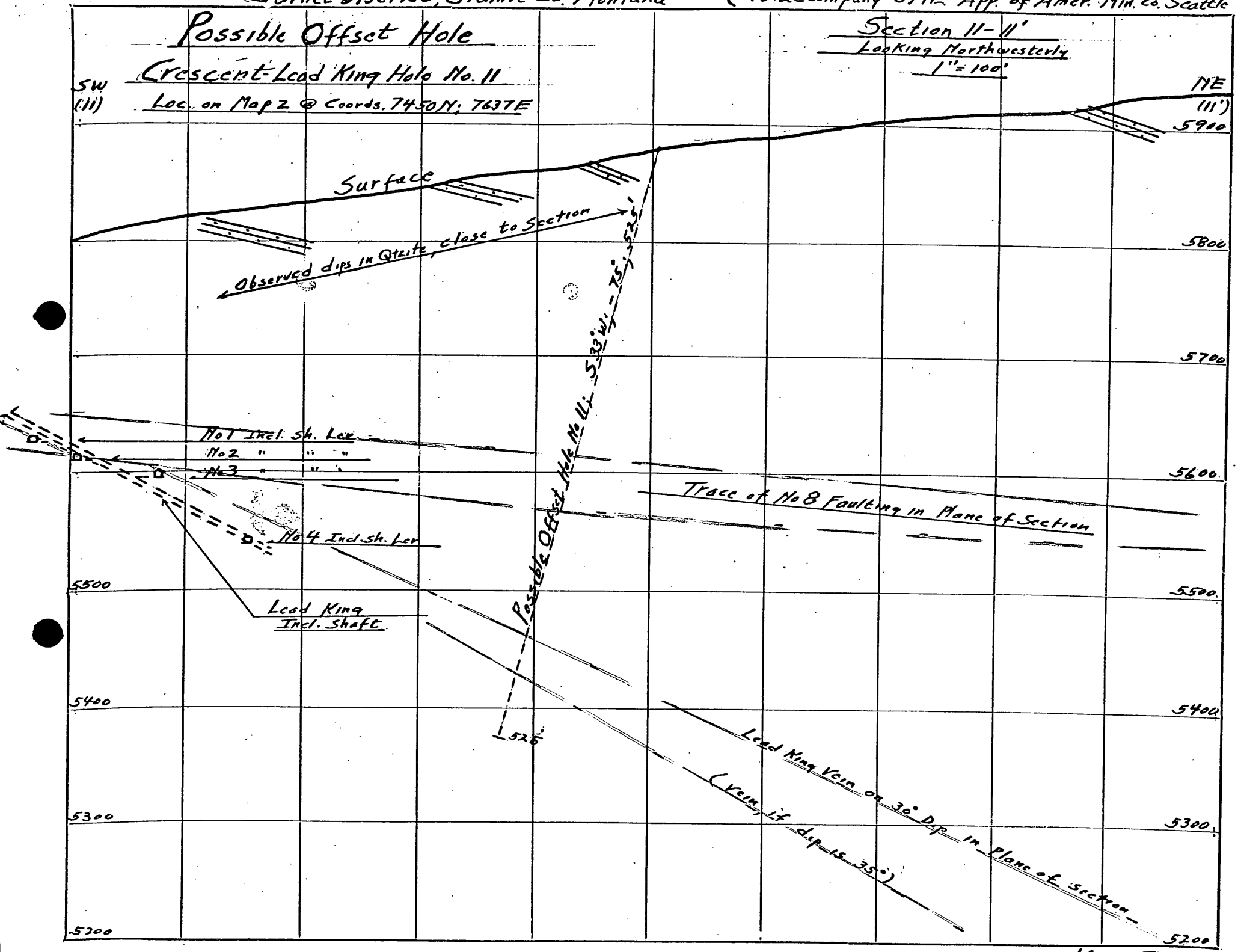
Dated

Respectfully submitted,

Joe G. Irving

1966

Garnet District, Granite Co. Montana (To accompany OME. App. of Amer. Min. Co. Seattle Wn)



Map 5

Garnet District, Granite Co. Mont. (To accompany OME application of the Amer. Min. Co. - 700 Securities B'ldg, Seattle, Wash.

Possible Offset Hole

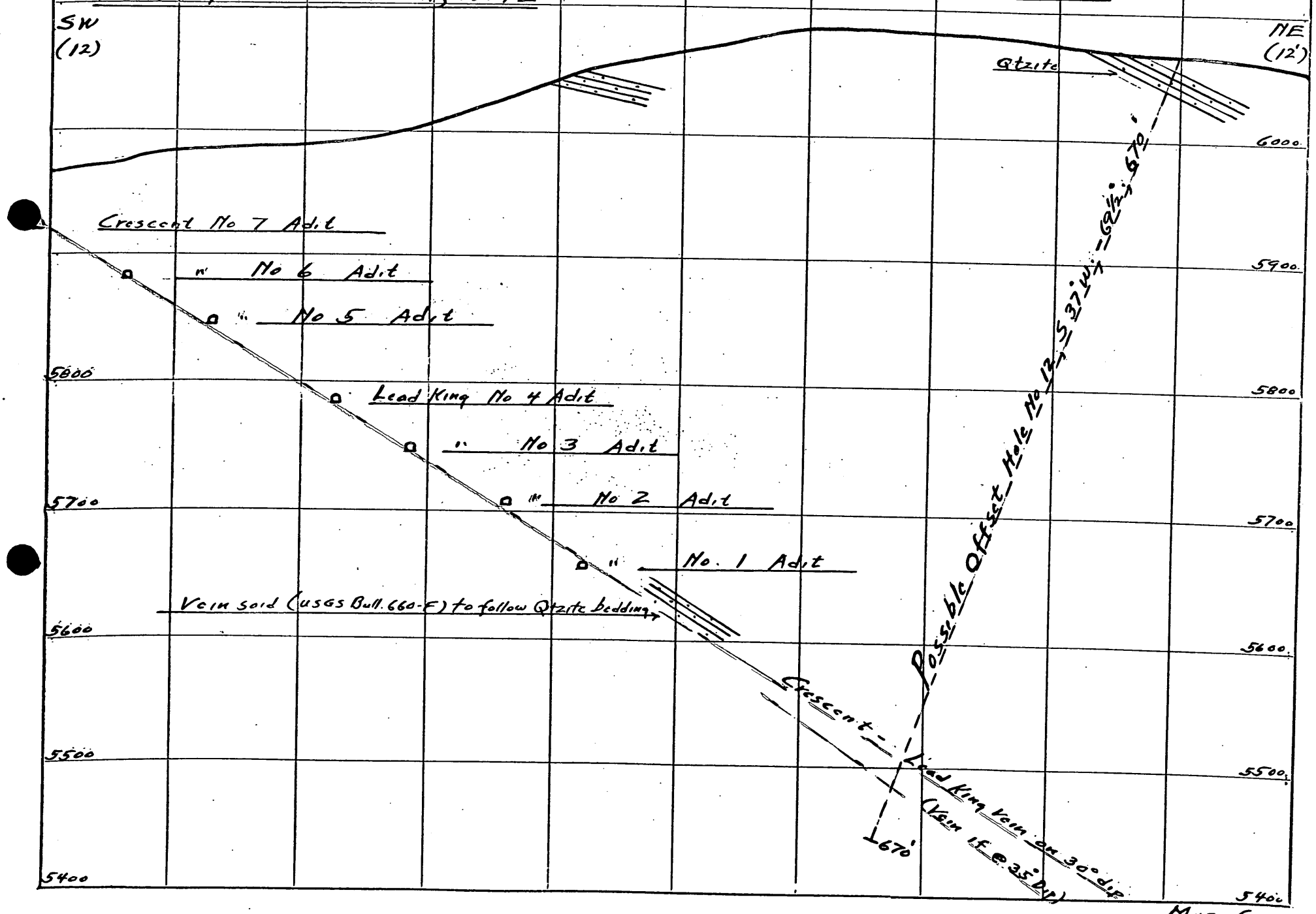
Crescent-Lead King Hole, No. 12

Loc. on Map 2: @ Coords. 7666 N; 7224 E

Section 12-12'

Looking Northwest

1" = 100'



Map 6

Garnet District, Granite Co., Montana (To accompany O.M.E. applic. of Amer. Min. Co 700 Securities Bldg Seattle, Wash.

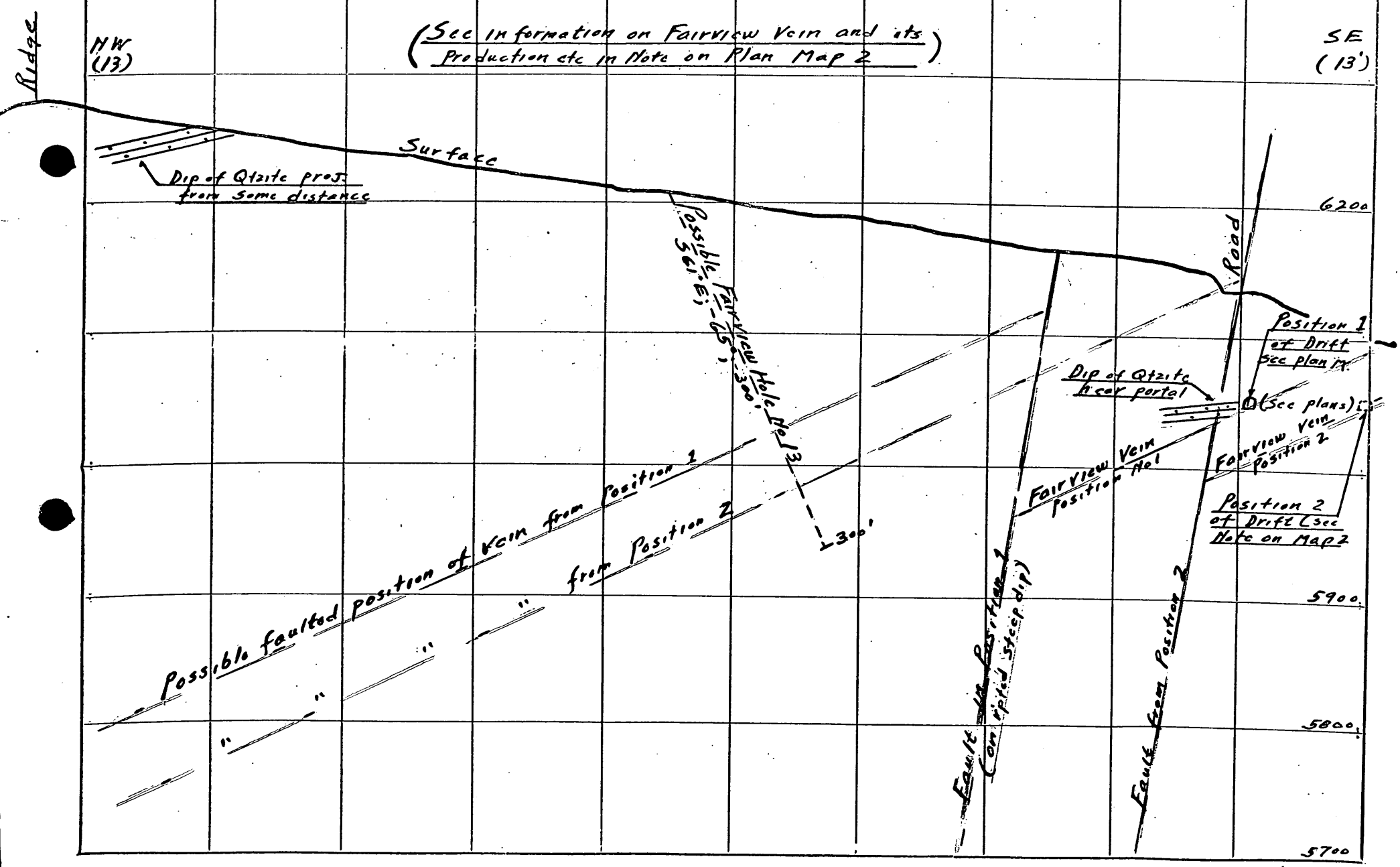
Possible Hole on Fairview Claim

Fairview Hole No 13

Loc. on Map 2: @ Coords: -4810N; 9500 E

Section 13-13'

Looking Northeasterly
1" = 100'



Map 7

6941

Maps - next file drawer

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/23/68	E. Peterson	120
	(on leave)	120
10/23	Johnson	110
10/24	Wilgoos	220
10/24	Kupp	
		110
		220

AIRMAIL

OCT 28 1968

American Mining Company
700 - Securities Building
Seattle, Washington 98101

Re: GME-6741 (Gold)
American Mining Company
Lead King, Fourth of July,
et al., Group of Claims
Granite County, Montana

Gentlemen:

A careful study has been made of all the information available to us relating to your application for financial assistance to explore the cited property. Although small bodies of ore-grade material may occur, our study indicates that the probability of disclosing significant reserves of eligible minerals on the property is not sufficiently promising to justify Government participation in the proposed work. 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,

FRANK E. JOHNSON (gls)

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
OME Region I
130
Mr. Peterson

ECPeterson/bsl 10/23/68

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/23/68		120
	(on leave)	120
10/23	[illegible]	110
		220

October 23, 1968

Memorandum

To: The File

From: E. C. Peterson

Subject: OME-6741 (Gold)
American Mining Company
Lead King, Fourth of July,
et al., Group of Claims
Granite County, Montana

Justification for Denial of Application

The Applicant proposes to explore for gold on the subject property by diamond drilling 12 holes from surface sites to test targets below known areas of production, and drilling 6 holes to test targets in probable faulted segments of productive veins at a total estimated cost of $85,000.00.

Available information suggests that any reserves that may exist on the property are small, low grade bodies of ore having little economic potential. In addition, the lack of geologic evidence to identify many of the proposed exploration targets (faulted segments of veins) indicates that some of the proposed work is considered prospecting.

Under these circumstances, it is concluded there is less than a fair chance of discovering any significant gold reserves with the proposed work.

I concur with the Field Officer and recommend that the application for assistance be denied.

Edward C. Peterson

Edward C. Peterson

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File - Mr. Peterson

ECPeterson/bsl 10/23/68

October 23, 1968

Memorandum

To: The File

From: E. C. Peterson

Subject: OMC-6741 (Gold)
American Mining Company
Lease King, Fourth of July,
et al., Group of Claims
Granite County, Montana

Justification for Denial of Application

The Applicant proposes to explore for gold on the subject property by diamond drilling 12 holes from surface sites to test targets below known areas of production, and drilling 6 holes to test targets in probable faulted segments of productive veins at a total estimated cost of $85,000.00.

Available information suggests that any reserves that may exist on the property are small, low grade bodies of ore having little economic potential. In addition, the lack of geologic evidence to identify many of the proposed exploration targets (faulted segments of veins) indicates that some of the proposed work is considered prospecting.

Under these circumstances, it is concluded there is less than a fair chance of discovering any significant gold reserves with the proposed work.

I concur with the Field Officer and recommend that the application for assistance be denied.

Edward C. Peterson

cc: Director's Reading File
Economic Geology File
OMC Docket
OMC Reading File - Mr. Peterson
ECPeterson/bdl 10/23/68

OME

UNITED STATES
DEPARTMENT OF THE INTERIOR

OFFICE OF MINERALS EXPLORATION
GEOLOGICAL SURVEY
U. S. Court House, Rm. 656
W. 920 Riverside Avenue
Spokane, Washington 99201
October 16, 1968

OFFICIAL COPY
O. M. E.
RECEIVED OCT 17 1968
OCT 21 1968 (Dispatched)

INITIALS	CODE
gla	130
bel	120
[illegible]	110
	120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region I

Subject: Office Appraisal
OME-6741 (Gold)
American Mining Company
Lead King, Fourth of July, et al., Group of Claims
Granite County, Montana

INTRODUCTION

American Mining Company has applied for OME aid in the cost of exploring for gold in secs. 2, 3, 10 and 11, T. 12 N., R. 14 W., MPM, Garnet or First Chance Unorganized Mining District, Granite County, Montana. The applicant proposes to explore by diamond drilling from the surface 20 holes, 12 of which are directed to targets in quartzite below old mine workings or surface exposures of vein material, 6 are directed to projections of faulted segments of veins in quartzite, and 2 will be offset holes dependent upon the results of the first 18 holes.

The applicant in 1966 explored by trenching and diamond drilling a nearby area in secs. 3 and 4, T. 12 N., R. 14 W., MPM, under the terms of Contract 2207, Docket OME-6410. The targets were based on vein projections and were ". . . ore bodies occurring in veins and/or replacement deposits in, along, or cutting across folded strata of carbonate rocks, shale, and quartzites . . ." Carbonate rocks and shale are missing in the exploration area of this proposal and at least 12 of the proposed holes are closer to known ore-bearing veins.

It is concluded that 3 of the drill holes, nos. 4, 5, and 7, are in the nature of prospecting, that the target for 1 drill hole, no. 13, is ill-defined, and that the targets for 9 other holes, 1A, 1B, 1C, 2A, 2B, 3, 6, 6E and 6W, are small ore bodies of little economic significance offering a less than fair chance of a significant discovery being made. Hence, the drilling of these 13 holes is not recommended.

Office Appraisal Report

There are five holes, nos. 8, 9, 10, 11, and 12, that are planned to test the downward extension of the Crescent-Red Cloud vein. Production records show that near the surface in the oxidized zone this vein was fairly rich but that in the sulfide zone the grade decreased to about 0.75 ounce gold per ton. Although the best results that could be hoped for is about 20,000 tons having an average grade of 0.75 ounce gold per ton or 15,000 ounces gold worth some $525,000, it is concluded that there is no better than a fair chance that more than one-quarter of this tonnage or 5,000 tons containing 3,750 ounces gold worth about $130,000 will be discovered. Because the target of these holes is between 300 and 600 feet vertically below the surface and will require a shaft to that depth before mining can be started, it is concluded that, for all practical purposes, such a discovery is insignificant.

It is therefore recommended that the application be denied.

PROPERTY AND ACCESSIBILITY

The property consists of 15 patented claims owned by James G. Haviland and Jean P. Haviland and 3 unpatented claims located by the applicant as follows:

Patented claims

Claim	U.S. Patent Survey No.	Claim	U.S. Patent Survey No.
Crescent	4510	Iowan	3614
Lead King	4511	Parquet	5452
Bull's Eye	4651	Fourth of July	5453
Free Coin	4652	White Cloud	5631
Fair View	4548	Honolulu	5632
San Jose	3615	Gold Bug	9407
Robert Emmett	3616	Bull's Eye Fraction	9405
Red Cloud	5451		

Unpatented claims

Claim	Book	Page
Garnet No. 18	24	305
Garnet No. 21	25	279
Garnet No. 22	25	280

By a Purchase and Sale Agreement dated June 12, 1963, the Havilands transferred their interest in the patented claims to Robert M. Bielenberg and James F. Carlton. Robert M. Bielenberg and Mary Brome Bielenberg transferred their interest to James F. Charlton by a Grant Deed dated July 21, 1965, and Alice M. Charlton conveyed

her interest to James F. Charlton by a Grant Deed and Assignment dated July 23, 1965. The applicant company acquired control of the patented claims by a Grant Deed and Assignment dated July 24, 1965, by James F. Charlton.

It is noted that the Survey No. for the Robert Emmett claim is shown as 2616 in the Purchase and Sale Agreement dated June 12, 1963, in the Grant Deed and Assignment dated July 23, 1965, and in the Grant Deed and Assignment dated July 24, 1965. In the Grant Deed dated July 21, 1965, in Appendix A and on Maps 1 and 2 of the application the Survey No. for this claim is shown as 3616. As the claims Iowan and San Jose are numbered 3614 and 3615, respectively, 2616 for Robert Emmett is undoubtedly a typographical error.

Apparently, there is an irregularly shaped area not controlled by the applicant bounded on the south by Fairview, northeast and north by Garnet 21 and San Jose, and on the west by Robert Emmett. The applicant proposes an access road across this area. The applicant's Map 1 also shows two sections of access road and one drill location within the Grant and Hartford claim which he does not control (Applicant's Map 1).

The property may be reached by following a fair county road northerly from Bearmouth for about 10 miles to the old town of Garnet. Bearmouth is on U. S. Highway 10 about 39 miles east of Missoula or 11 miles west of Drummond. There are still a few people living in Garnet who know the way to the various mines. In the last 2 miles or so the road is steep and in wet weather is extremely slippery; during the winter months it may be closed by snow at times, but it could be kept open fairly easily.

GEOLOGY

The geologic setting of the Garnet area is summarized in a memorandum dated June 28, 1965, in Docket OME-6410 and need not be repeated here. Pardee (1918) describes the geology and some of the mines more fully. Kauffman (1963) presents a brief description of the area.

The principal rocks in the area are quartzite and schist, both somewhat micaceous, that have been folded into a broad northwest-plunging anticline. The northerly limb of the anticline has been intruded by granodiorite that underlies much of the region and crops out in several knobs. Small dikes of fine-grained gray porphyry have also intruded the quartzite and schist at places (Pardee, 1918, p. 172-174). The veins are flat-dipping fissure fillings subparallel to the bedding and consist of quartz, barite, ankerite, calcite, pyrite and oxidation products.

Faults are found in all the mines, but they are difficult to trace on the surface. All the larger faults strike northeasterly and most of them dip steeply to the northwest. Small northeast faults are numerous locally, but parts of the veins are undisturbed for lengths of several hundred feet. Faulted segments of veins cannot be correlated with certainty, but the applicant has attempted to correlate several of them on his Map 2. According to Pardee (1918), the Fourth of July vein appears to be a segment of the Red Cloud vein that has been faulted down several hundred feet. The Honolulu vein could be another down-faulted segment of the Red Cloud vein. However, the applicant's section 6 shows the beds dipping northeasterly, but his sections 1 and 2 show them dipping southwesterly. How faults can change the dip of the beds without causing a corresponding change in the dip of the offset veins is difficult to comprehend.

On his map the applicant shows two persistent veins, each faulted into several segments. The one that has produced the most ore is developed by the Crescent-Lead King, Red Cloud, Honolulu, and Fourth of July mines; the other by the Grant and Hartford, Magone and Anderson, and San Jose mines. A third vein, the Robert Emmett has been traced for a much shorter distance than the first two, but it also has been segmented by faulting (Applicant's Map 2).

The vein in the Crescent-Lead King mine has been developed by seven adit levels that range in length from 600 to 1,000 feet and represent a vein dip distance of about 600 feet. One ore shoot has a stope length of 700 feet or more. In a few places the ore body is less than a foot wide, but for the most part it ranges from 1 to 3 feet wide. Oxidation is complete above the No. 4 level (Alt. 5,783) and in the outer portions of levels 1, 2, and 3, the lower limit rises slowly from the level of the creek in First Chance Gulch as the hill is entered.

The vein in the Red Cloud mine has been developed by 4 long adits and an inclined shaft from which several levels have been run, at least 2 of them far enough to develop ore found in the adits. This ore shoot is about 700 feet easterly of the Lead King shoot. It is in general 1 to 3 feet wide, but in places pinches to little more than a stringer. As nearly as can be determined, this ore shoot is about 600 feet long with a vein dip depth of at least 500 feet. Oxidation is complete above the lowest adit level (Alt. 5,670).

The Fourth of July mine has developed a third ore shoot by four adits over a length of 300 feet and a vein dip distance of 450 feet. Practically, all of the vein so far developed (Pardee, 1918) is 1 to 4 feet wide, but only a small portion had been stoped by 1918.

There is little recorded information relative to the Robert Emmett vein. It is parallel to the Fourth of July segment of the Red Cloud vein and is in the same fault block. It has been opened by an adit level and an incline from which at least three additional levels have been turned. The length and depth of the workings are 200 feet each (Pardee, 1918, p. 194). The width of the vein is not known.

The only available information on the San Jose vein and workings on the claim of that name is given on the applicant's Map 2. On the Grant and Hartford claim the vein is in a bedding plane that strikes about due east and dips 30° N. The vein ranges in width from 6 inches to 2 feet. Near the east end of the claim, the vein is lost in a northeasterly trending fault zone but is found again in the Magone and Anderson claim. Here the vein is in a bedding plane that strikes a little south of east and dips about 30° N. There are a series of stopes on lenses connected by narrow or lean portions of the vein. Collectively, the lenses form a thin tabular body from 100 to 300 feet in stope length and 500 feet in pitch length (Pardee, 1918, p. 188-189).

The Fairview vein is said by Pardee (1918, p. 194-195) to contain an ore body 6 inches to 3 feet wide, 400 feet long, and to have been mined to a depth of 200 feet. Its general strike is to the east and it dips 30° N. The Fairview vein cannot be correlated with any other vein on the applicant's Map 2.

PRODUCTION

Pardee (1918) and Kauffman (1963) give production from the district as a whole for the most part in terms of dollars (Pardee) and in total ounces gold and silver, total pounds copper, lead, and zinc and total dollar value with no mention of the tons from which this recovery came (Kauffman, 1963, p. 29). The total metal produced from 1867 through 1955 is 113,139 ounces gold, 101,962 ounces silver, 166,699 pounds copper, 7,442 pounds lead, and 1,744 pounds zinc. Of this total 47 percent of the gold, 51 percent of the silver, 70 percent of the copper, and all of the lead and zinc were produced since 1916, the year of Pardee's reconnaisance. This supports his conclusion (Pardee, 1918, p. 178) ". . . the Garnet district will continue to be productive for a long time." It also lends support to Kauffman's (1963, p. 29) statement: "Remaining ore, if any, is likely to be low grade and is certainly discouragingly inaccessible."

The U. S. Bureau of Mines was able to furnish partial production figures for most of the mines within the area of proposed exploration. Pardee (1918, p. 190) mentions the First Chance Mining Co. generally known as the Mitchel and Mussigbrod mines and as including the Crescent, Red Cloud, Lead King, Fourth of July, Fair View and "several other claims," the most extensive workings being on

the Red Cloud and Lead King claims. The first production figure given by the Bureau is a composite headed: "Fairview, Free Coinage, Mitchel and Mussigbrod and perhaps others," and is:

	Ounces/ton			Pounds	
Tons ore	Gold	Silver	Copper	Lead	Zinc
26,721	24,689	29,504	18,435	977	326

This would indicate an average grade of: 0.92 ounce gold and 1.10 ounces silver per ton, 0.03 percent copper, 0.008 percent lead, and 0.00012 percent zinc. Judging by the comparative extent of the Red Cloud workings shown on Map 2, it is not unreasonable to assume that 20,000 tons came from the Crescent-Lead King and Red Cloud workings.

The following production, subsequent to the above is:

		Total ounces		Total pounds
Mine	Tons	Gold	Silver	Copper
Crescent	898.0	2,038	1,872	Nil
Average		2.27 oz/T	2.08 oz/T	-
Lead King	6,040	6,482	7,833	1,194
Average		1.07 oz/T	1.29 oz/T	0.0099%
Red Cloud	9,755	7,221	12,695	410
Average		0.74 oz/T	1.30 oz/T	0.0021%
Fourth of July	3,112	2,667	3,614	1,356
Average		0.86 oz/T	1.16 oz/T	0.022%
Robert Emmett	1,115	663	2,226	Nil
Average		0.57 oz/T	2.0 oz/T	-
San Jose	73	143	51	83
Average		1.96 oz/T	0.70 oz/T	0.058%

Assuming that all of the above production came from within the subject claims, the total is in the order of 47,700 tons of ore with a weighted average grade of 0.92 ounce gold and 1.21 ounces silver per ton; copper, lead, and zinc are insignificant.

Oxidized ore in the Crescent-Lead King mine averaged about 1.75 ounces gold per ton above level 4; sulfide ore averaged 0.75 ounce gold per ton on level 2 and 0.60 ounce gold per ton on level 1. In the Red Cloud mine oxidized ore above adit 1 averaged about 1.5 ounces gold per ton; below this level the sulfide ore averaged about 0.75 ounce gold per ton. No other data relative to grades in the two zones is available.

APPLICANT'S PROPOSAL

The applicant proposes to diamond drill 12 holes from the surface directed at targets below known areas of production and 6 holes directed at targets in probable faulted segments of productive veins, a few of which have been productive.

According to the available production data for six specific mines, the most promising veins are faulted segments mined through the Lead King, Red Cloud, and Fourth of July workings. Expressed in terms of the percent of total tons, total ounces gold and total ounces silver reported from 6 mines these 3 mines produced about:

Mine	Percent total tons	Percent total gold	Percent total silver
Red Cloud	46.47	37.64	44.87
Lead King	28.77	33.79	27.69
Fourth of July	14.82	13.90	12.77

The Crescent mine to the west of the Lead King and the Robert Emmett and San Jose mines progressively to the east produced:

Mine	Percent total tons	Percent total gold	Percent total silver
Crescent	4.28	10.62	6.60
Robert Emmett	5.31	3.30	7.87
San Jose	0.35	0.75	0.18

The weak point in these comparative percentages is, of course, that the first of the Bureau figures lend no concept as to the tonnage and grade of the ore mined from the several claims "Fairview, Free Coinage, Mitchel and Mussigbrod and perhaps others." However, on the basis of the limited data, it is evident that the area of more intense ore deposition centers on the Red Cloud-Lead King claims and in general becomes less intense to the west and east. The highest

grade gold and silver was mined in the Crescent mine--fifth in percentage of total production; the lowest grade gold was mined on the Robert Emmett claim--fourth in percentage of total production; and the lowest grade silver was mined on the San Jose claim--sixth in percentage of production.

As stated earlier, faults are found in all the mines, but are difficult to trace on the surface. This creates doubt as to the accuracy of the applicant's projections of veins across faults, particularly those faulted segments of the Robert Emmett vein which are the targets for his proposed holes 3, 4, and 5, and the faulted segment of the San Jose vein that is the target for his hole 7.

A rapid check of the applicant's sections indicates that they are reasonably accurate. A notable exception is his section 1-1'. At the left (SW) end the highest surface is at an altitude of about 6,150 feet. On his Map 2 at no place southwest of the drill site for holes 1A, 1B, and 1C does the section line cross the 6,100-foot contour. As a result of this error the outcrop of the Fourth of July vein appears to be 975 feet southwest of the drill site, whereas Map 2 shows it to be 800 feet from the drill site.

The applicant proposes to explore two types of targets; the first is the downward extension of veins below known stoped areas, the second is the downward extension of offset segments of veins with no workings or, at most, with a few shallow workings of limited extent.

Included in the first target type are the Crescent-Lead King and Red Cloud workings (holes 8, 9, 10, 11, and 12), the Honolulu workings (holes 1B and 1C), the Fourth of July Workings (holes 1A, 2A, and 2B), the Robert Emmett workings (hole 3), and the Fairview workings (hole 13).

Included in the second target type are a faulted segment of the Red Cloud vein (hole 6, 6E, and 6W), a faulted segment of the San Jose vein (hole 7), a faulted segment of the Robert Emmett vein (hole 4), and a second faulted segment of the Robert Emmett vein (hole 5). The merits of each target area will be discussed rather than the merits of each proposed hole.

DISCUSSION OF THE APPLICANT'S PROPOSAL

The Crescent-Lead King-Red Cloud target.--In the Crescent-Lead King-Red Cloud workings the vein width ranged from a seam to 3 or 4 feet, considerable portions averaging 2 feet or more (Pardee, 1918, p. 191). As nearly as can be determined the grade in the oxidized ore averaged about 1.75 ounces gold and about 1.0 ounce silver per ton, dropping below the oxidized zone to 0.75 ounce gold per ton on the Lead King level 2, and to 0.6 ounce per ton on level 1. In the Red Cloud mine, the grade of the sulfide ore averaged about 1.2 ounces gold per ton on winze level 2, dropping to 0.75 ounce gold per ton on winze level 3, rising slightly to 0.8-1.0 ounce gold per ton on winze level 4. Thus, the average grade of the sulfide ore is about 0.75 ounce gold per ton. Holes 8, 9, 10, 11, and 12 are designed to cut the vein 400, 300, 360, 250, and 300 feet, respectively, below the lowest workings. If they were all successful in cutting the vein and showing an average grade of 0.75 ounce gold per ton over an average width of 2 feet which is doubtful, they would prove a vein say 2 feet wide by 300 feet high by 1,000 feet long. Using a tonnage factor of 12 cubic feet per ton, they would indicate some 50,000 tons of vein material. Comparing the probable tonnage developed by the old workings to the probable tonnage mined, only about 40 percent of the indicated tonnage or 20,000 tons could be expected to be minable, and at an average grade of 0.75 ounce gold per ton would produce 15,000 ounces of gold worth $525,000. This is the very best that could be hoped for in this target area.

The Honolulu workings.--The only available data on this offset segment of the Red Cloud vein are those indicated on the applicant's Map 2. A shaft and two levels have developed the vein, said to be 3 feet wide, for 120 feet along strike and 110 feet along dip. Of the indicated 3,300 tons developed, only 143 tons or 4.3 percent containing 0.48 ounce gold per ton were mined, presumably all from the oxidized zone. The vein would be a little longer with depth, averaging about 250 feet. If holes 1B and 1C each indicated a vein 3 feet wide, they would suggest a total of about 15,600 tons of which, based on past production, only about 645 tons containing 300 ounces of gold worth $10,500 is probably the best that could be hoped for as minable.

The Fourth of July workings.--The Fourth of July workings appear to have developed possibly as much as 28,125 tons of which 3,112 tons or 11 percent are known to have been mined. The average recorded grade is 0.80 ounce gold per ton. However, according to data on the applicant's Map 2 the average grade dropped from 1.25 ounces gold per ton on level 2 to 0.8 ounce per ton on level 1. Presumably, levels 2, 3, and 4 are in the oxidized zone and level 1 entered the sulfide zone. Should holes 1A, 2A, and 2B all cut a vein with at least 0.80 ounce gold per ton, and assuming an average vein width

DISCUSSION OF THE APPLICANT'S PROPOSAL

The Crescent-Lead King-Red Cloud lenses.--In the Crescent-Lead King-Red Cloud workings the vein width varied from a scant to 3 or 4 feet, considerable portions averaging 2 feet or more (Ewart, 1943, p. 191). As nearly as can be determined the grade in the oxidized ore averaged about 1.75 ounces gold and about 1.0 ounce silver per ton, dropping below the oxidized zone to 0.75 ounce gold per ton on the Red King level 2, and to 0.6 ounce per ton on level 1. In the Red Cloud mine, the grade of the sulfide ore averaged about 1.2 ounces gold per ton on vein level 2, dropping to 0.75 ounce gold per ton on vein level 3, rising slightly to 0.9-1.0 ounce gold per ton on vein level 4. Thus, the average grade of the sulfide ore is about 0.75 ounce gold per ton. Holes 6, 9, 10, 11, and 12 are designed to cut the vein 400, 300, 400, 200, and 300 feet, respectively, below the lowest workings. If they were all successful in cutting the vein and showing an average grade of 0.75 ounce gold per ton over an average width of 2 feet which is doubtful, they would prove a vein say 2 feet wide by 300 feet high by 1,000 feet long. Using a tonnage factor of 12 cubic feet per ton, they would indicate some 50,000 tons of vein material. Comparing the probable tonnage developed by the old workings to the probable tonnage ahead, only about 40 percent of the indicated tonnage or 20,000 tons could be expected to be mined, and at an average grade of 0.75 ounce gold per ton would produce 15,000 ounces of gold worth $525,000. This is the very best that could be hoped for in this target area.

The Monarch workings.--The only available data on this offset segment of the Red Cloud vein are those indicated on the applicant's Map 2. A crosscut and two levels have developed the vein, said to be 3 feet wide, for 120 feet along strike and 110 feet along dip. Of the indicated 2,300 tons developed, only 143 tons or 6.2 percent containing 0.42 ounce gold per ton were mined, presumably all from the oxidized zone. The vein would be a little longer with depth, averaging about 250 feet. If holes 13 and 14 each indicated a vein 3 feet wide, they would suggest a total of about 15,000 tons of which, based on past production, only about 617 tons containing 300 ounces of gold worth $10,500 is probably the best that could be hoped for or mineable.

The fourth of July workings.--The fourth of July workings appear to have developed probably as much as 28,125 tons of which 2,112 tons or 7 percent are known to have been mined. The average recorded grade is 0.50 ounce gold per ton. However, according to data on the applicant's Map 2 the average grade dropped from 1.75 ounces gold per ton on Level 2 to 0.4 ounce per ton on level 1. Presumably, levels 3, 5, and 6 are in the oxidized zone and level 1 entered the sulfide zone. Should holes 15, 24, and 28 all cut a vein with at least 0.40 ounce gold per ton, and assuming an average vein width

of 2 feet, a strike length of about 300 feet and a dip length of 470 feet, these three holes would indicate a total potential of 23,500 tons, of which 11 percent of 2,585 tons is the best that could be hoped for as minable ore worth $70,000.

The Robert Emmett workings.--If Pardee's interpretation (1918, p. 192) of the faulting is correct, it would appear likely that the Robert Emmett vein and the two faulted segments southeast of the workings, are offset segments of the Magone and Anderson-San Jose vein. The Fourth of July outcrop southeast of fault 3 is 480 feet southwest of the Honolulu vein on the northwest side of fault 3; the Robert Emmett outcrop southeast of a "possible fault" is 420 feet southwest of the unnamed vein which is the target of hole 7. The location of this unnamed vein is based on three inaccessible workings and could easily be off 50 feet or so. The workings apparently developed about 8,330 tons of which 1,115 tons or 13 percent have been mined. The average grade reported by the Bureau of Mines is 0.57 ounce gold and 2.0 ounces silver per ton; the applicant's Map 2 indicates 0.89 ounce gold and 1.0 ounce silver per ton. Hole 3 is designed to cut the vein 200 feet down dip from the bottom level and if successful in finding a vein of similar depth, length, and assumed width of 2 feet, and an average of the Bureau's and applicant's grades, or 0.73 ounce gold and 1.5 ounces silver per ton, would indicate another possible 1,000 or so tons of minable ore containing 730 ounces gold worth $25,000 and 1,500 ounces silver worth, at $1.35 per ounce, $2,000.

The Fairview workings.--According to Engineering and Mining Journal of March 1968, the average price of silver for the years 1900-1907 was 59.451, say 59.5 cents an ounce. A grade of 1.1 ounces gold and 0.77 ounce silver per ton, the average for "the latest shipments" (Pardee, 1918, p. 195) would be worth about $22.46 a ton and the $50,000 production from 1898-1907 would require about 2,200 tons of ore. An average vein width of 2 feet, a strike length of 400 feet and a dip length of 200 feet, would indicate that some 13,300 tons of ore has been developed of which 16 percent appears to have been minable. Map 2 and section 13-13' show some uncertainty as to the location of the workings and to a fault that is said to have offset the vein. Also on Map 2 the vein is shown as striking northeasterly and dipping 25° northwesterly which varies considerably from Pardee's strike of easterly and dip of 30° N. Section 13-13' shows the level at most only 130 feet down dip from the outcrop, not 200 feet as Pardee states. These discrepancies seem to make the approximate accuracy of the section open to question. Tonnage, grade, and value of any hoped for discovery cannot be estimated because of the unknown locations of the workings relative to the location of drill hole-vein intersection.

of 2 feet, a strike length of about 300 feet and a dip length of 400 feet, these three holes would indicate a total production of 23,500 tons, of which 11 percent of 2,585 tons is the best that could be hoped for as minable ore worth $70,000.

The Robert Emmett workings.--If Hague's interpretation (1918, p. 128) of the fracture is correct, it would appear likely that the Robert Emmett vein and the two faulted segments westward of the workings are offset segments of the Mayone and Anderson-San Jose vein. The fourth of July outcrop northeast of fault 3 is 450 feet southwest of the Monolith vein on the northwest side of fault 3; the Robert Emmett outcrop southeast of a "possible fault" is 400 feet southwest of the Emmett vein which is the segment of fault 3. The location of this Emmett vein is based on three inaccessible workings and could easily be off 50 feet or so. The workings apparently developed about 8,500 tons of which 1,115 tons or 13 percent have been mined. The average grade reported by the Bureau of Mines is 0.57 ounce gold and 4.0 ounces silver per ton; the applicant's map 2 indicates 0.65 ounce gold and 1.0 ounce silver per ton. Hole 3 is designed to cut the vein 200 feet down dip from the bottom level and if successful in finding a vein of similar depth, length, and assumed width of 2 feet, and an average of the Bureau's and applicant's grades, or 0.75 ounce gold and 1.5 ounces silver per ton, would indicate another probable 1,000 or so tons of minable ore containing 750 ounces gold worth $25,000 and 1,500 ounces silver worth, at $1.35 per ounce, $2,000.

The Fairview workings.--According to Engineering and Mining Journal of March 1908, the average price of silver for the years 1900-1907 was 59.431, say 59.5 cents an ounce. A grade of 1.1 ounces gold and 0.77 ounce silver per ton, the average for "the latest shipments" (Parker, 1918, p. 105) would be worth about $22.46 a ton and the 250,000 production from 1898-1907 would require about 2,500 tons of ore. An average vein width of 2 feet, a strike length of 400 feet and a dip length of 200 feet, would indicate that some 1,500 tons of ore has been developed of which 11 percent appears to have been minable. Map 2 and section 13-13' show some uncertainty as to the location of the workings and to a fault that is said to have offset the vein. Also on Map 2 the vein is shown as striking northwesterly and dipping 25° northeasterly which varies considerably from Parker's strike 7° easterly and dip of 30° W. Section 13-13' shows the level at most only 150 feet down dip from the outcrop, not 200 feet as Parker states. These discrepancies seem to make the approximate accuracy of the section open to question. Tonnage, grade, and value of any hoped for discovery cannot be estimated because of the unknown location of the workings relative to the location of drill hole-vein intersection.

The Red Cloud offset segment.--Apparently, this portion of the Red Cloud vein was found across fault 4 on adit levels 2, 3, and possibly 4. On level 2 it appears to have been followed for about 175 feet all of it outside the area of stoping. This suggests that the vein was too narrow, and/or too low grade, to be minable. Holes 6, 6E, and 6W would explore the vein over a strike length of 200 feet and a dip length of about 250 feet. At an average vein width of 2 feet the potential tonnage developed would be about 8,300 tons. The estimated minable material, based on the average of 48 percent in the Red Cloud mine, 4 percent in the Honolulu mine, and 11 percent in the Fourth of July mine, is in the order of 21 percent or about 1,700 tons. Based on limited data, it is estimated that the grade could be somewhere between 0.48 ounce gold per ton as in the Honolulu mine and 1.5 ounces gold per ton as in the upper part of the Red Cloud mine. At an assumed average grade of 0.9 ounce gold per ton this potential discovery would contain about 1,500 ounces gold worth $52,500.

Faulted segment of the San Jose vein.--There are no data on the size, grade or the exactness of the location of this vein which is the target for hole 7. Its existence is inferred from the presence of vein material found on dumps of three caved openings.

Faulted segments of the Robert Emmett vein.--As in the case of the San Jose vein segment, the existence of the first faulted segment of the Robert Emmett vein, which is the target for hole 4, is also inferred from laminated and spotted quartzite and cellular iron-stained quartz found on the dumps of three caved adits. The second faulted segment, which is the target for hole 5, is inferred on even weaker evidence--no workings, just two easterly trending geochemical survey lines 250 feet apart. The north line has thresholds of 0.0455 ppm for gold and 26.1 ppm for copper. The highest anomaly is 0.14 ppm gold and 27.0 ppm copper. The vein is inferred on the basis of this anomaly. At intervals of 100 and 200 feet, respectively, down hill from this point the anomalies are 0.06 ppm gold and 22 ppm copper and 0.04 ppm gold and 22 ppm copper. The south line has thresholds of 0.058 ppm gold and 40.5 ppm copper. Station 19 which is near the southerly projection of the supposed vein shows 0.04 ppm gold and 25 ppm copper. Stations 17, 18, 20, and 21 show respective anomalies of 0.06 ppm gold and 32 ppm copper, 0.06 ppm gold and 35 ppm copper, 0.04 ppm gold and 37 ppm copper, and 0.04 ppm gold and 35 ppm copper. All of these anomalies are about equal to or less than threshold and do not suggest the presence of a vein.

The Red Cloud offset segment.--Apparently, this portion of the Red Cloud vein was found across Fault 6 on drill levels 2, 3, and possibly 4. On level 2 it appears to have been followed for about 175 feet all of its outcrop the area of stoping. This suggests that the vein was too narrow, and/or too low grade, to be minable. Holes 6, 8A, and 3A would explore the vein over a strike length of 800 feet and a dip length of about 250 feet. At an average vein width of 2 feet the potential tonnage developed would be about 6,300 tons. The estimated minable material, based on the average of 48 percent in the Red Cloud mine, 4 percent in the Honolulu mine, and 11 percent in the Fourth of July mine, is in the order of 41 percent or about 1,700 tons. Based on limited data, it is estimated that the grade could be somewhere between 0.46 ounce gold per ton as in the Honolulu mine and 1.5 ounces gold per ton as in the upper part of the Red Cloud mine. At an assumed average grade of 0.9 ounce gold per ton this potential discovery would contain about 1,500 ounces gold worth $52,500.

Faulted segment of the San Jose vein.--There are no data on the size, grade or the exactness of the location of this vein which is the target for hole 7. Its existence is inferred from the presence of vein material found on dumps of three caved openings.

Faulted segments of the Robert Emmett vein.--As in the case of the San Jose vein segment, the existence of the first faulted segment of the Robert Emmett vein, which is the target for hole 4, is also inferred from laminated and sported quartzite and sulfuric iron-stained quartz found on the dumps of three caved adits. The second faulted segment, which is the target for hole 3, is inferred on even weaker evidence--no workings, just two easterly trending geochemical anomaly lines 250 feet apart. The north line has thresholds of 0.0455 ppm for gold and 84.1 ppm for copper. The highest anomaly is 0.14 ppm gold and 247.0 ppm copper. The vein is inferred on the basis of this anomaly. At intervals of 100 and 200 feet, respectively, down hill from this point the anomalies are 4.05 ppm gold and 29 ppm copper and 0.04 ppm gold and 22 ppm copper. The south line has thresholds of 0.0255 ppm gold and 40.5 ppm copper. Station 19 which is near the southerly projection of the supposed vein shows 0.04 ppm gold and 23 ppm copper. Stations 17, 18, 20, and 21 show respective anomalies of 0.06 ppm gold and 32 ppm copper, 0.06 ppm gold and 35 ppm copper, 0.04 ppm gold and 37 ppm copper, and 0.04 ppm gold and 35 ppm copper. All of these anomalies are about equal to or less than thresholds and do not suggest the presence of a vein.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The inferences upon which the locations of the faulted segments of the San Jose and Robert Emmett veins are based are so weak that there is some doubt as to their existence.

Pardee's statement that the Fairview vein has been mined to a depth of 200 feet and the applicant's uncertainty as to the location of the workings and of a fault said to cut off the vein make acceptance of this target of hole 13 difficult.

Of the other targets, the best success that could be hoped for is tabulated as follows:

Target vein	Hole Nos.	Tons ore	Grade	Ounces Gold	Value
Crescent-Red Cloud	8,9,10,11,12	20,000	0.75	15,000	$525,000
Honolulu	1B, 1C	625	0.48	300	10,500
Fourth of July	1A, 2A, 2B	2,585	0.80	2,000	70,000
Robert Emmett	3	1,000	0.73	730	25,000
Red Could (offset)	6, 6E, 6W	1,700	0.9	1,500	52,500

Each of the above targets must be considered as a separate project because each will require its own method of access, if a discovery is made, and because it is too optimistic to suppose that minable ore will be found in each. It is concluded that holes 4, 5, and 7 are in essence prospecting for veins of uncertain existence and of unknown width and potential grade if they do exist, and that the target for hole 13 is ill-defined and may already have been stoped. It is recommended that the drilling of these holes be denied.

It is concluded that holes 1B and 1C directed at a target in the Honolulu vein, that holes 1A, 2A, and 2B directed at a target in the Fourth of July vein, and that hole 3 directed at a target in the Robert Emmett vein stand a less than fair chance of resulting in significant discoveries. It is recommended that the drilling of these holes be denied.

If Red Cloud levels 2 and 3 have crossed fault 4 as indicated on Map 2 and are projected to the plane of section 6-6', it will be seen that they are approximately 240 feet and 130 feet, respectively, down dip from the indicated intersection of hole 6 and the vein. There seems to be little doubt that these nearly parallel drifts are on the vein, level 2 being driven as far as section 6-6'. It cannot be positively so asserted, but it is a reasonable supposition that

the drifts were discontinued and no stoping was done because either the vein was too narrow and/or the grade was too low to be profitable. It is therefore concluded that the chance of a significant discovery resulting from hole 6 and the offset holes 6E and 6W is less than fair and it is recommended that the drilling of these holes be denied. However, should the applicant expose the vein by, say three bulldozer trenches about 250 feet apart and thereby demonstrate that the vein is of potentially minable width and grade, the drilling of these holes could be given further consideration. The indicated point of hole-vein intersection is about 250 feet down dip from the vein outcrop and may be in or just below the oxide zone.

This leaves for consideration holes 8, 9, 10, and 11 designed to explore below the Red Cloud workings at depths ranging from 250 to 400 feet below the bottom level, and hole 12 designed to explore below the Lead King workings at a depth of 300 feet below the bottom level. This would be between 300 and 600 feet vertically below the surface.

The best possible indicated discovery, should all five holes indicate ore of minable width and grade, is in the order of 20,000 tons with an average grade of 0.75 ounce gold per ton or 15,000 ounces worth $525,000. However, it is concluded that it is very doubtful that more than 25 percent of the tonnage or 5,000 tons containing 3,750 ounces silver worth $131,250 stands at most a fair chance of being discovered. This might be considered significant if accessibility to such a discovery is of no moment.

The proposed holes will cut the vein at vertical depths ranging from 300 feet in the plane of hole 9 to 580 feet in the plane of hole 12. The cost of reopening the old workings to permit sinking on the vein would probably be greater than the cost of sinking a vertical shaft to reach the ore. At a minimum of $130 per foot, a 300-foot shaft would cost $39,000, plus the cost of surface facilities would reduce the estimated $131,250 to something in the order of $75,000. Because of the narrowness of the vein, selective mining or a mill would further reduce the estimated value of the potential discovery. It is therefore concluded that the potential discovery cannot be considered as significant for any practical purpose.

It is recommended that the application be denied.

D R MacLaren

D. R. MacLaren

Distribution:
OME Docket
USGS(SRO) MacLaren

REFERENCES CITED

Pardee, J. T., 1918, Ore deposits of the northwestern part of the Garnet Range, Montana: Contributions to economic geology, U. S. Geol. Survey Bull. 660, p. 159-195.

Kauffman, Marvin E., 1963, Geology of the Garnet-Bearmouth area, western Montana: State of Montana Bureau of Mines and Geology Memoir 39, p. 28-29.

Contract Mining.
&
Assessment Work.

E.C.ECKLESDAFER
532 North Ave.W.
Missoula,Montana.
59801

August 13,1968

S T A T E M E N T

IN ACCOUNT WITH:

AMERICAN MINING COMPANY
700 Securities Bldg.
Seattle,Washington.

FOR:

Constructing drill sites and access roads on TINTIC-SHIAN, Claims at Philipsburg,Montana,with D-8 (36A) Dozer.

Moving equipment IN & OUT 211.33 Miles @ 1.40 per Mile, 2-Wide load permits @ 8.00 each ---------- 311.96

Work commenced August 6,1968

Constructing 4 drill sites and approximately 800 feet of access road and reconstructing approximately 3/8 Mi. of existing road to main road, Dozer time 14-1/3 hrs.@ 28.00 per hour,with D-8 Dozer(36A).---------- 401.24

Work Completed; August 12,1968

Total ---------- $713.20

Note Bulldozer hourly cost

Pd. 8/14/68
ck # 632
(for Contract 2263
OME-6639)

RECEIVED
AUG 19 1968
U.M.F.
SEATTLE, WASH.

WOP

P. O. Box 1583,
Butte, Montana
August 17, 1968

Mr. Don R. MacLaren,
O.M.E. Field Officer,
U. S. Geological Survey,
U. S. Courthouse, Rm. 656
West 920 Riverside Ave.
Spokane, Washington 99201

Subject: OME-6741 (Gold)
American Min. Co.
Crescent, Lead King
et al Group,
Granite Co., Mont.

Dear Don:

In the captioned submittal, recently made, I had based bulldozing costs for D-8, or D-7 machines, en $20.00 per hour.

I have just finished paying for the bulldozing costs, involved in putting in roads and sites (see enclosed copy of statement) on Contract 2263, OME -6639, Tintic-Shian Group, Philipsburg, Granite Co., Montana.

Bulldozing costs have very definitely changed since I made out the estimate on OME 6639, and also on the recently submitted program which has been given the docket number of 6741. You will note I had to pay E. C. Ecklesdafer, of Missoula, at the rate of $28.00 per hour for a D-8, and he states the price is the same for a D-7.

I realize, ofcourse, that nothing can be changed as far as Contract 2263 (Docket OME-6639) is concerned, but I call this increased cost to your attention now, so that in considering my recent application, on Garnet (the captioned Docket No. OME-6741) this more realistic cost can be taken into account and my estimated bulldozing costs revised upward, in that application.

Sincerely yours,

Joe G. Irving

Joe G. Irving
(For The American Mining Co.)
(700 Securities Bldg.)
Seattle, Washington 98101)

RECEIVED
AUG 19 1968
O.M.E.
SPOKANE, WASH.

XERO COPY XERO COPY XERO COPY XERO COPY

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

	DATE	INITIALS
TO: Chief, OME	8/19/68	
1. OME-6741 (Gold) American Mining Co.		
2. Crescent, Lead King, et al., Group		
3. Granite County, Montana		
4. D. R. MacLaren		
5.		
FROM: Fld. Officer, Reg. I		

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions X Your information

REMARKS:

OFFICIAL COPY O. M. E. RECEIVED AUG 21 1968

INITIALS	CODE
	~~130~~
	120 M
	~~110~~
EP	120 P

M56300-62

INT.-DUP. SEC., WASH., D.C.

Florence Hotel, Room 314
Missoula, Montana
July 21, 1968

Mr. Don R. MacLaren, Field Officer,
[illegible]
U. S. [illegible]
U. S. [illegible]
West [illegible]
Spokane, [illegible]

Dear [illegible]

The [illegible] received a letter, dated July 18, 1968, from Mr. [illegible] Jenson, [illegible] office, stating [illegible] application, but [illegible] was sent to you [illegible].

The [illegible] this applicant [illegible] (Gold) but [illegible] gave also [illegible] "King, [illegible] Group [illegible]". Now, it is probable [illegible] they are not [illegible] to it, as [illegible] which they always [illegible] Land King claim, [illegible]. So, it should [illegible] Lead King, [illegible] and [illegible] Fourth of July [illegible] information [illegible].

[illegible] at Philipsburg, that is nearly [illegible] could [illegible] the local [illegible] American [illegible] OMB-[illegible]

/s/ Joe G. Irving
Joe G. Irving, Jr.
American [illegible]
Florence Hotel, Missoula, Mont.

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Chief, OME	7/22/68	
2. Re: OME-6741 (Gold) American Mining Co.		
3. Lead King, Fourth of July, et al., Group of Claims Granite County, Montana		
4. D. R. MacLaren		
5. D. R. MacLaren		
FROM: Fld. Officer, REG. I		

FOR: Check items for action desired

____ Action	____ Reply for signature of		
____ Approval	____ Investigate		
____ Comment	____ Recommendations		
____ Conference	____ Rewrite		
____ Instructions	X Your information		

OFFICIAL COPY
O. M. E.
RECEIVED
JUL 24 1968

Surname
Signature
File

REMARKS:

INITIALS	CODE
	30
	20
	10
	120

INT.-DUP. SEC., WASH., D.C. M56300-62

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/18/68	Peterson	120
7/18/68	Kirkham	120
		110
7/18	cal	220
		120M

JUL 18 1968

AIRMAIL

Memorandum

To: Field Officer, Region I

From: Chief, Office of Minerals Exploration

Subject: OME-6741 (Gold)
American Mining Company
Lead King, Fourth of July, et al., Group of Claims
Granite County, Montana

The subject application is being referred to you for further consideration and recommendations. You have indicated that a field examination will not be necessary in this case.

The application is complete and well prepared, however, we are not favorably impressed with the proposed program. The work is based chiefly on questionable geologic interpretations and projections extending over considerable distances with little or no supporting evidence. In addition, we believe that the proposal is overly ambitious in relation to the size and grade of the potential deposit.

We note that many of the proposed drill holes, in particular, holes 4, 5, 6, 7, and 13, list targets which are very indefinite and this suggests some of the work may be considered prospecting. Hole No. 12 will test a vein that previous OME work (OME-6410) indicated according to the Applicant at that time to be small and weakly mineralized of no commercial value.

FRANK E. JOHNSON

(RK)

Frank E. Johnson

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
Mr. Peterson
R30

ECPeterson/bsl 7/18/68

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
7/18/68	Peters	120
7/18/68	Kirkham	120
		110
		220
		120M

JUL 18 1968

AIRMAIL

American Mining Company
700 - Securities Building
Seattle, Washington 98101

Re: OME-6741 (Gold)
American Mining Company
King, Fourth of July, et al.,
Group of Claims
Granite County, Montana

Gentlemen:

Your application for exploration assistance has been reviewed in our Washington office and referred to Mr. D. R. MacLaren, Field Officer, Region I, U. S. Geological Survey, U. S. Courthouse, Room 656, West 920 Riverside Avenue, Spokane, Washington 99201.

Mr. MacLaren will notify you if additional information concerning the application is needed.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Economic Geology File
~~OME~~ Docket
OME Reading File
Mr. Peterson
130

ECPeterson/bsl 7/18/68

July 12, 1968

American Mining Company
700 Securities Building
Seattle, Washington 98101

Subject: OME-6741

Gentlemen:

Your application for exploration assistance, dated July 8, 1968, submitted to our office at Spokane, Washington, has been assigned Docket No. OME-6741.

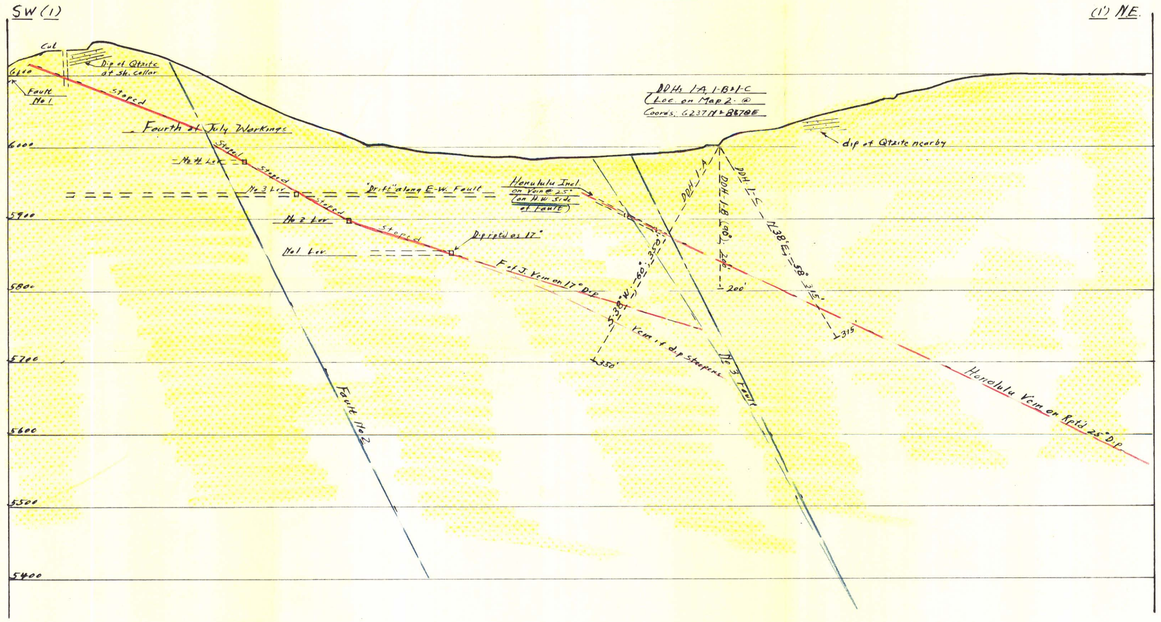
Please identify all future correspondence relating to your application by this docket number.

Sincerely yours,

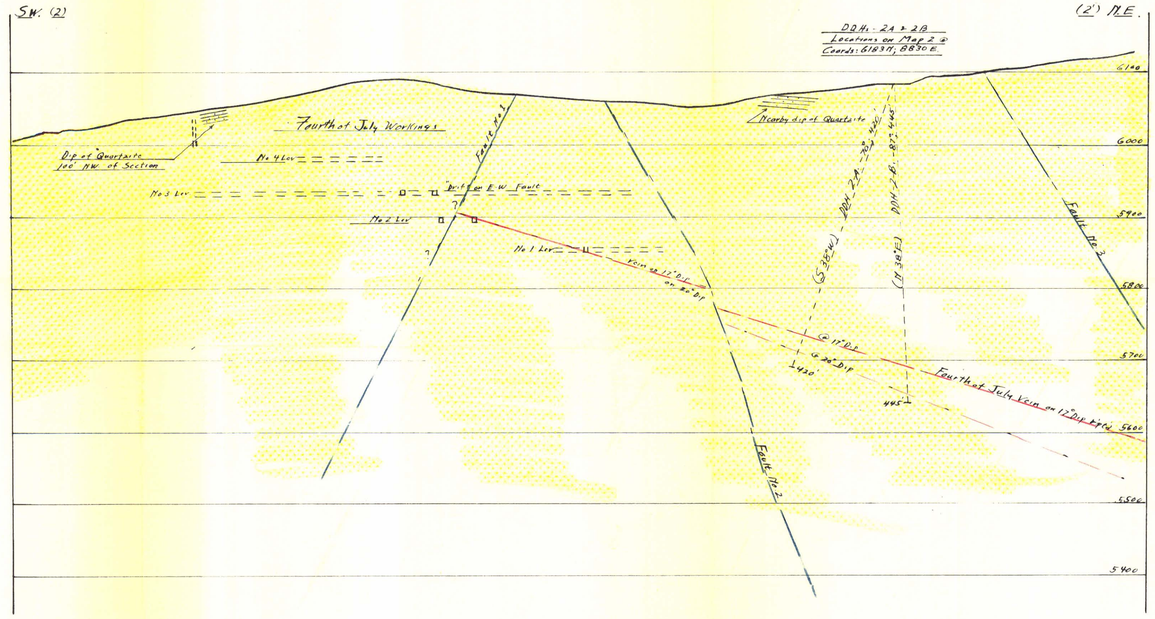
Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy to Region I

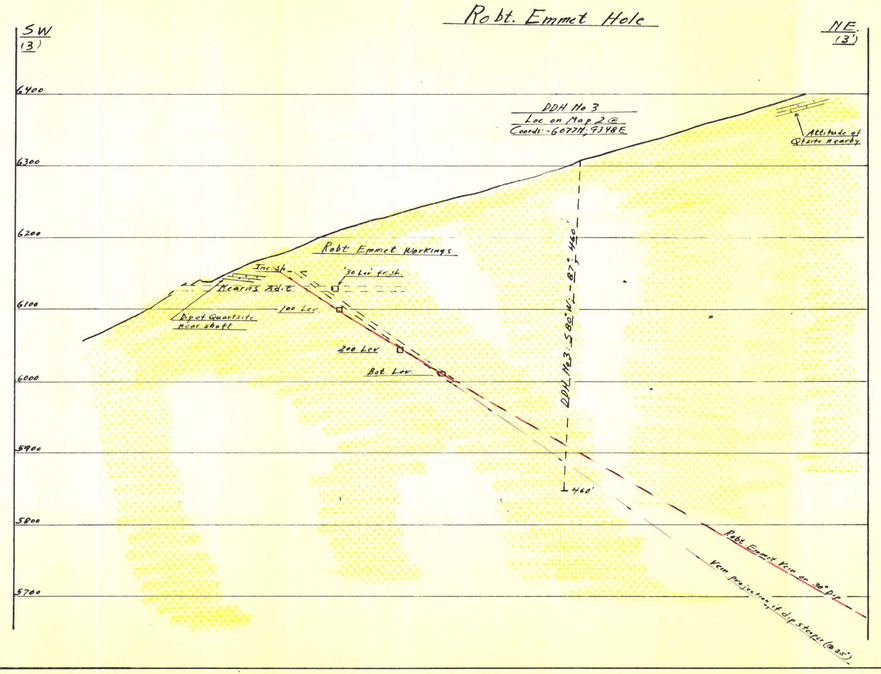
Section 1-1'
Looking N.W.
Fourth of July Holes



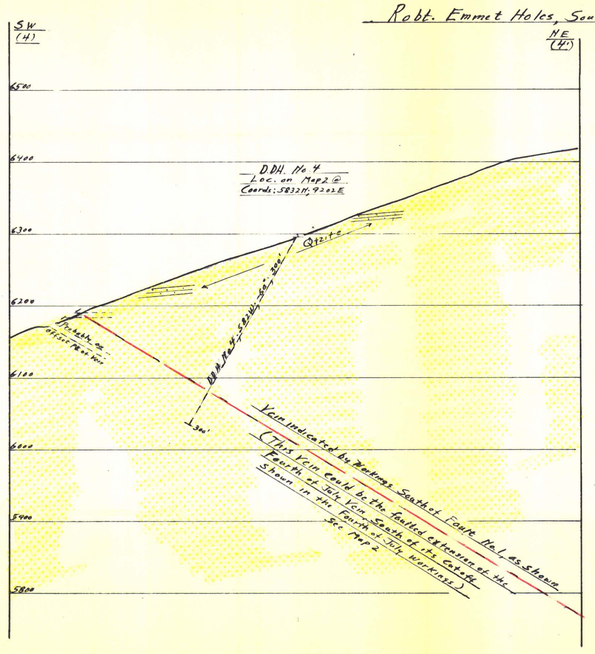
Section 2-2'
Looking N.W.
Fourth of July Holes



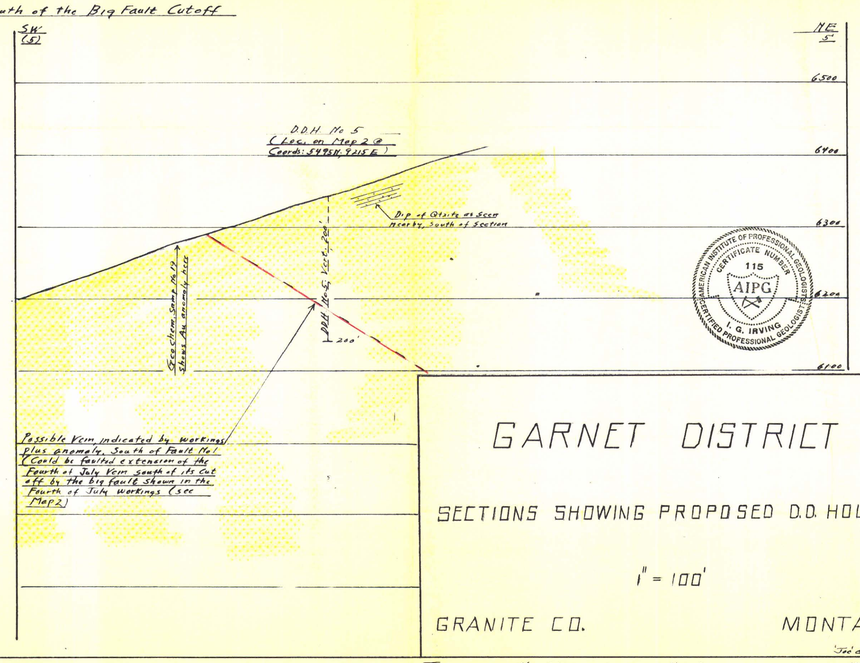
Section 3-3'
(Looking N.W.)
Robt. Emmet Hole



Section 4-4'
(Looking Northerly)
Robt. Emmet Holes, South of the Big Fault Cutoff



Section 5-5'
(Looking Northerly)



AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
CERTIFICATE NUMBER
115
AIPG
T. G. IRVING
CERTIFIED PROFESSIONAL GEOLOGIST

GARNET DISTRICT

SECTIONS SHOWING PROPOSED D.D. HOLES

1" = 100'

GRANITE CO. MONTANA

Ted G. Irving '60

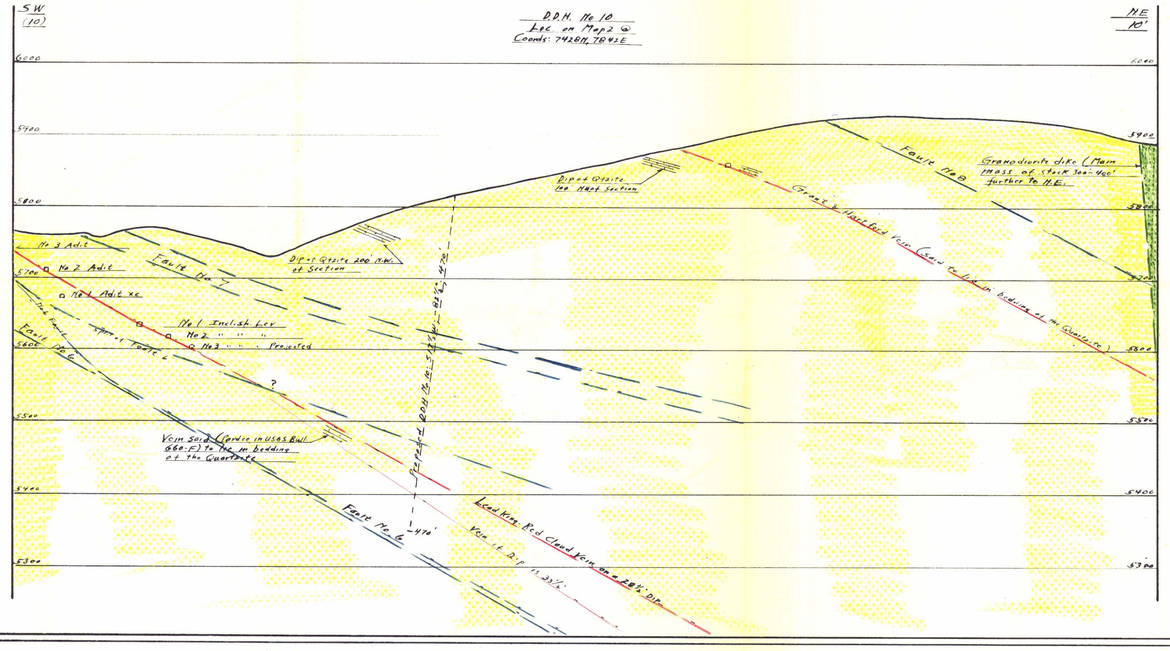
To accompany the O.M.E application of the American Mining Co., 700 Securities Bldg, Seattle, Wash.

Map 3

Section 10-10'
(Looking Westerly)

Lead King Hole

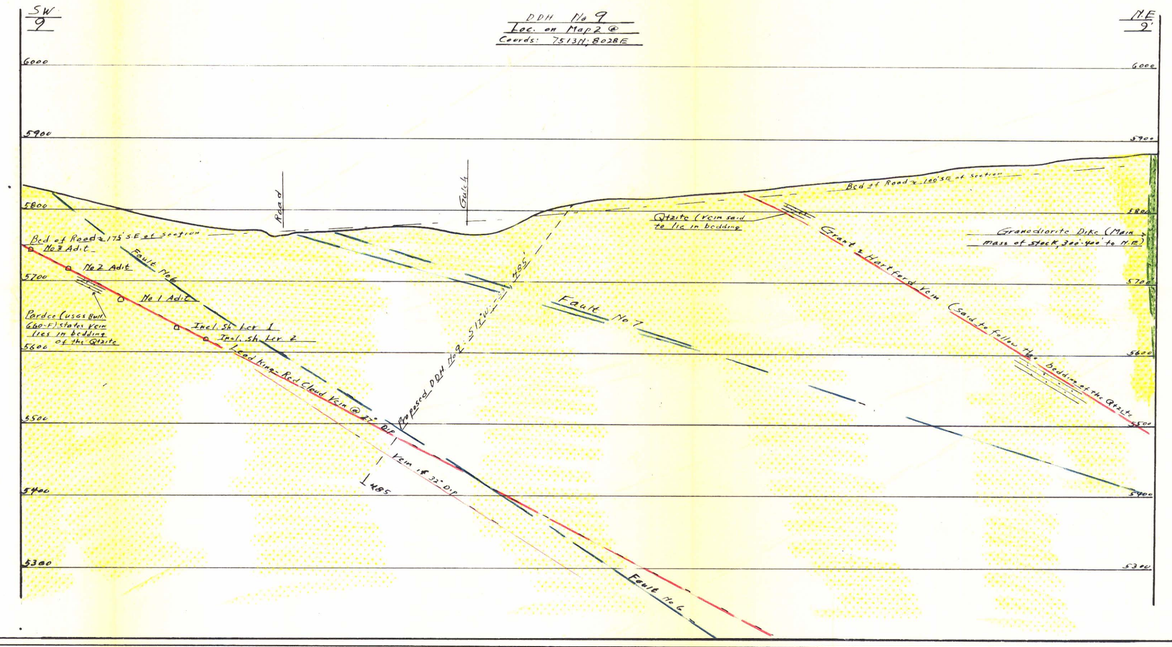
DDH. No 10
Loc. on Map 2 @
Coords: 7428N, 7843E



Section 9-9'
(Looking Westerly)

Lead King-Red Cloud Hole

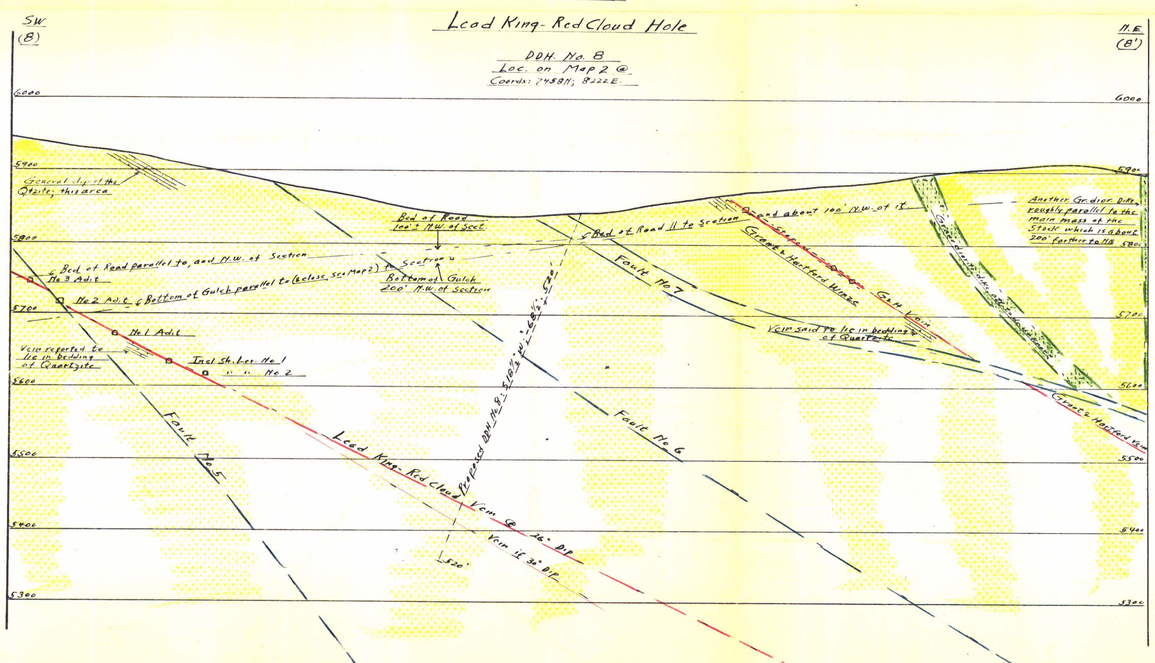
DDH No 9
Loc. on Map 2 @
Coords: 7513N, 8038E



Section 8-8'
(Looking Westerly)

Lead King-Red Cloud Hole

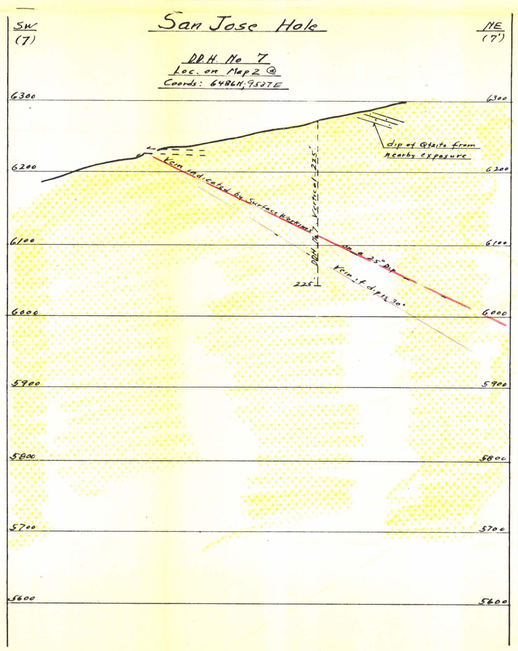
DDH. No 8
Loc. on Map 2 @
Coords: 7498N, 8222E



Section 7-7'
Looking Northerly

San Jose Hole

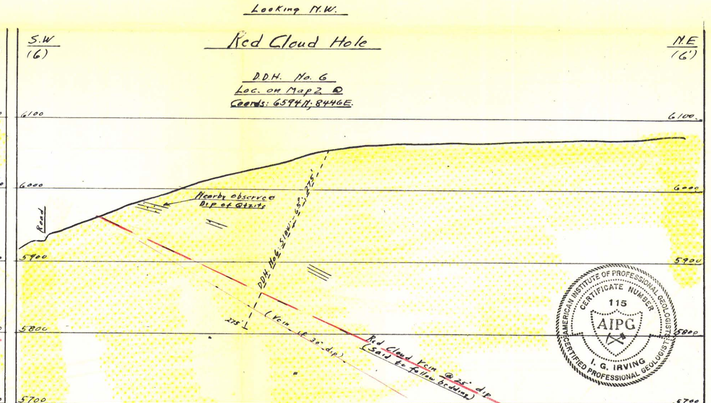
DDH. No 7
Loc. on Map 2 @
Coords: 6486N, 7527E



Section 6-6'
Looking N.W.

Red Cloud Hole

DDH. No. 6
Loc. on Map 2 ⊥
Coords: 6594N, 8446E



AMERICAN INSTITUTE OF PROFESSIONAL GEOLOGISTS
CERTIFICATE NUMBER 115
AIPG
I. G. IRVING
CERTIFIED PROFESSIONAL GEOLOGIST

GARNET DISTRICT

SECTIONS SHOWING PROPOSED D.D. HOLES

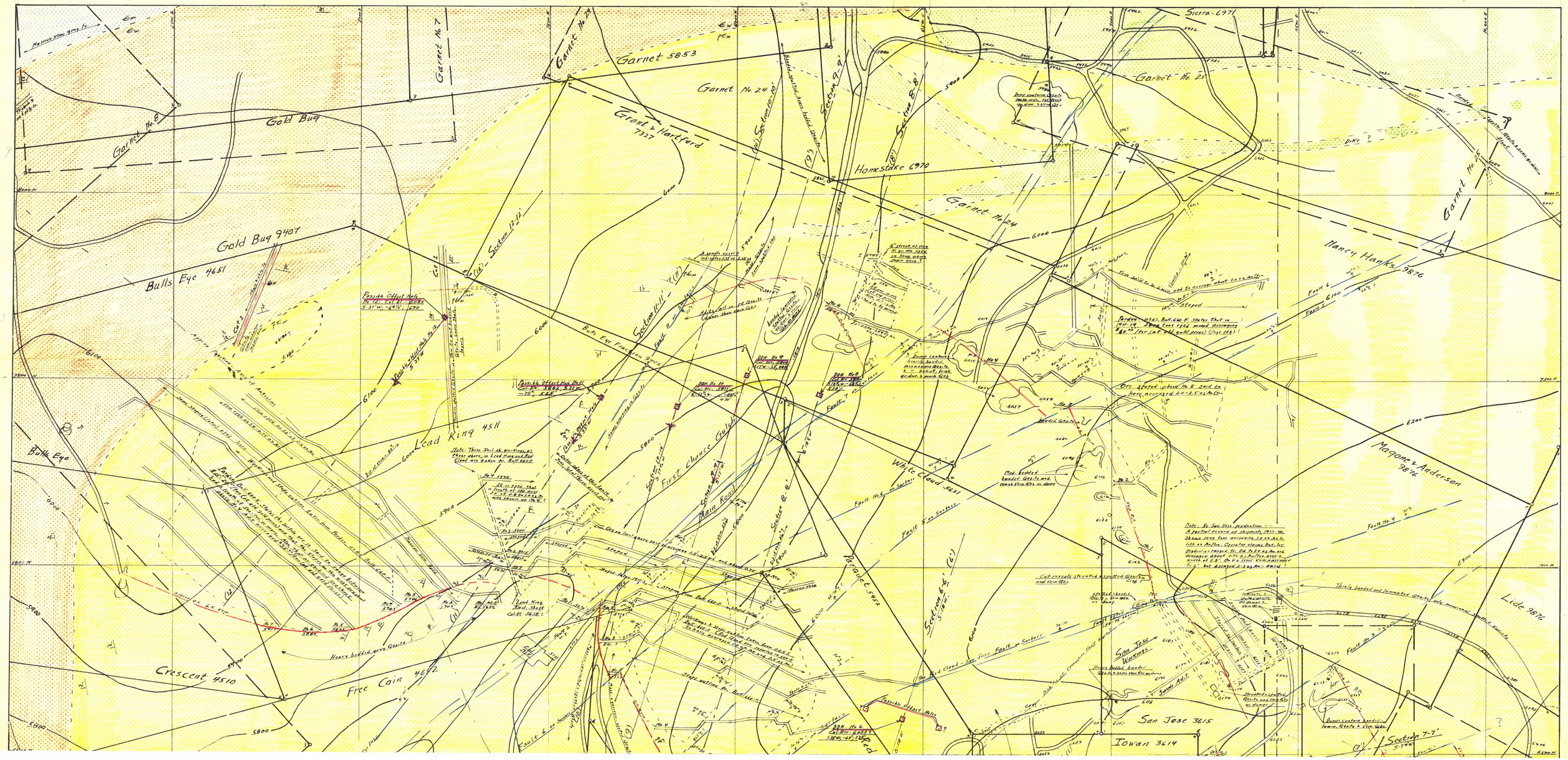
1" = 100'

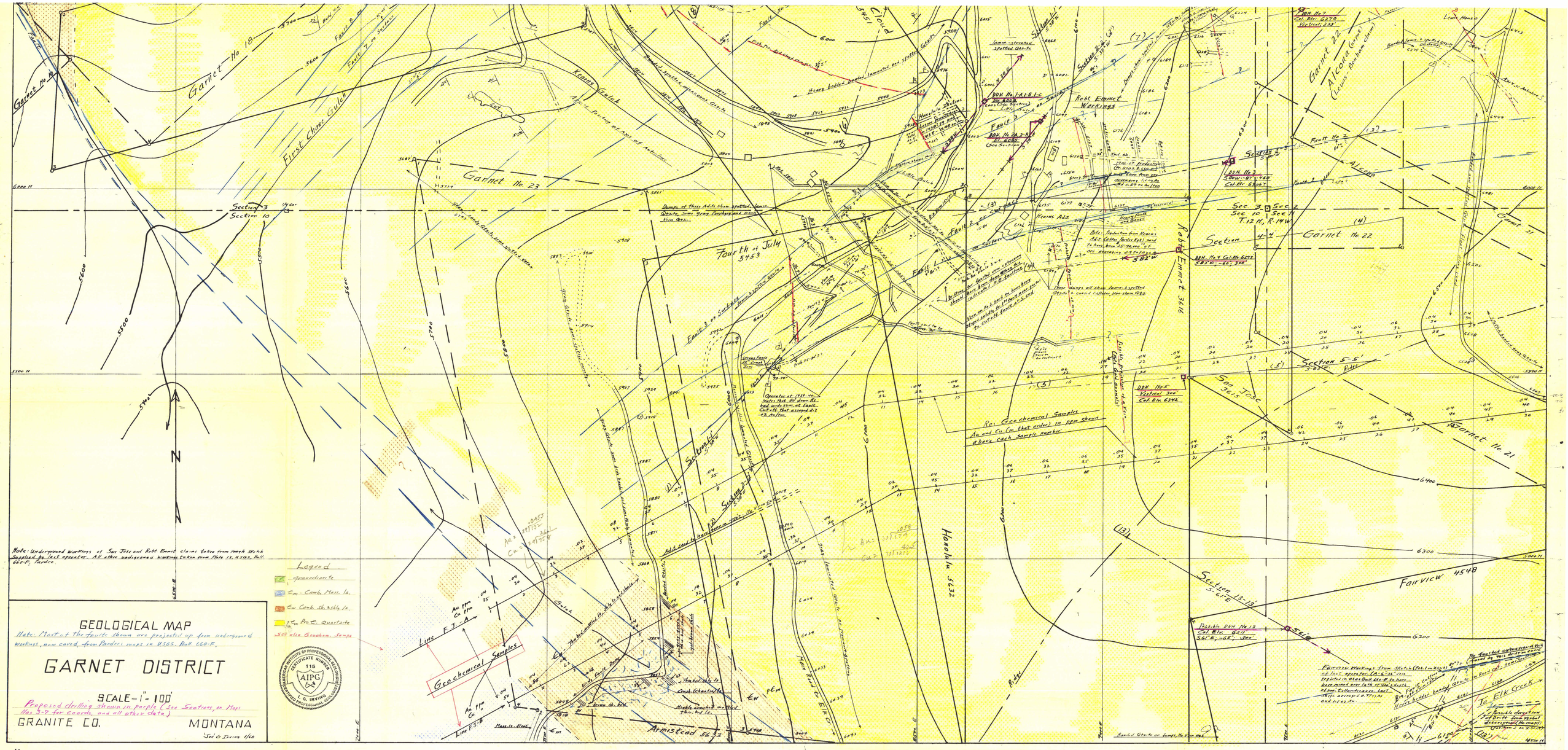
GRANITE CO. MONTANA

Joe G. Irving 1/60

To accompany the O.M.E. Applic. of the American Mining Co, 700 Securities Bldg, Seattle, Wash.

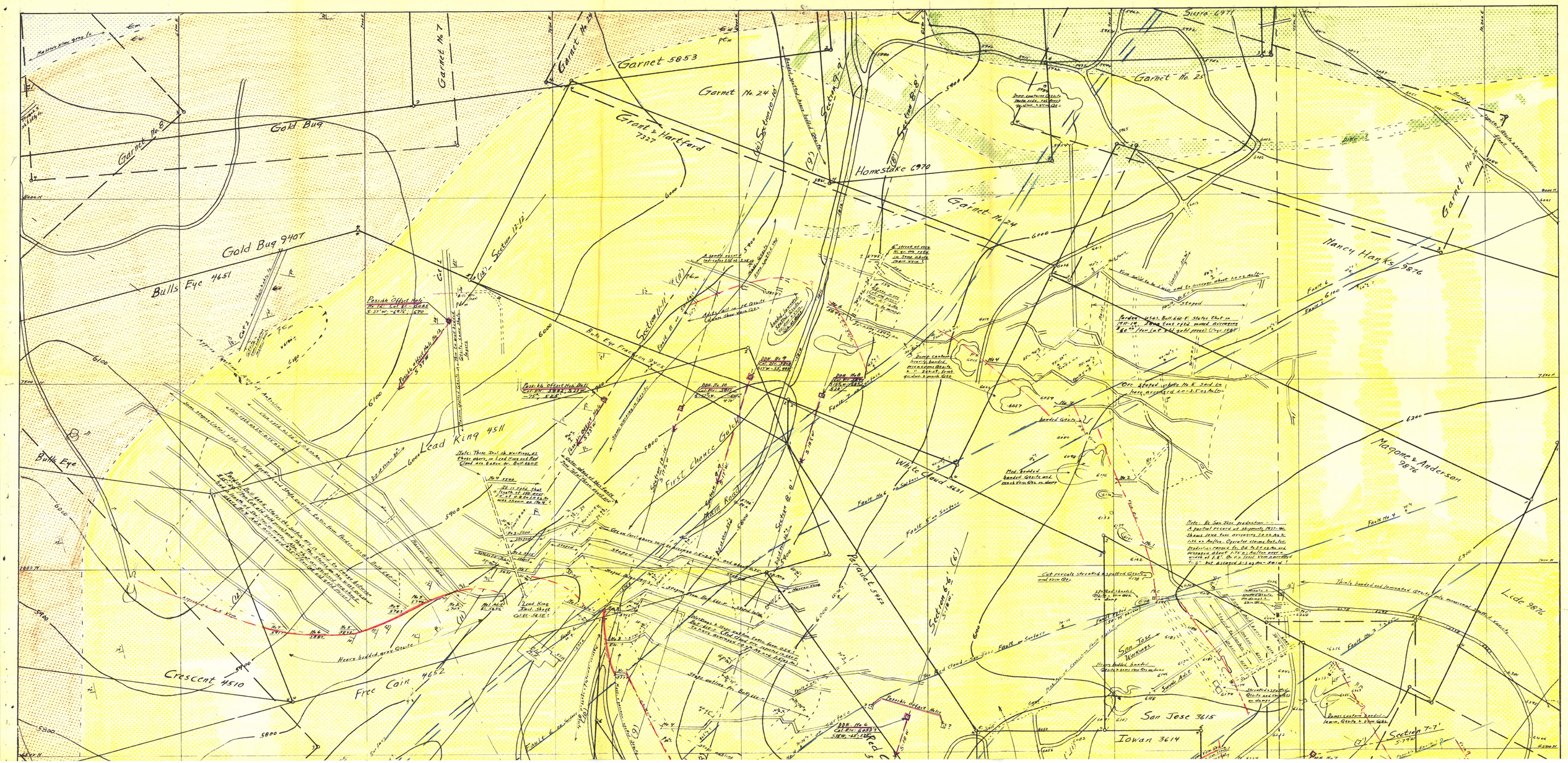
Map 4

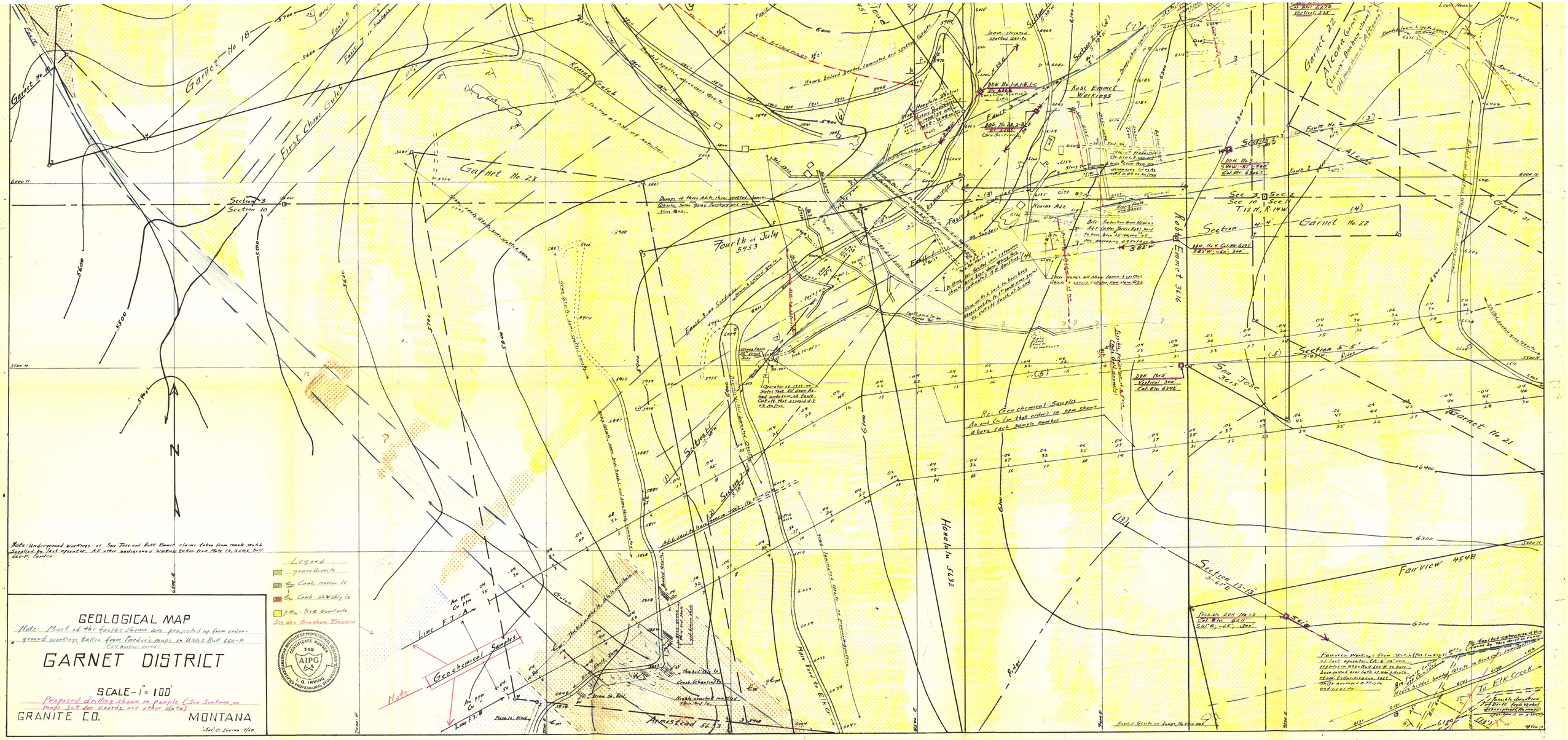

Garnet No 8
Gold Bug
Garnet No 7
Garnet No 23
Garnet 5853
Garnet No 24
Grant & Hartford 7327
Section 9-9'
Section 8-8'
Homestake 6970
Garnet No 25
Sierra 6971
Garnet No 26
Garnet No 4
Gold Bug 9407
Bulls Eye 4651
Section 11-11'
Section 10-10'
Nancy Hanks 9876
Bulls Eye
Good Lead King 4511
First Chance Gulch
Main Road
White Cloud 3651
Magone & Anderson 9876
Lide 9876
Crescent 4510
Free Coin 4692
San Jose 3615
Iowan 3614
Section 7-7'
Section 6-6'
Section 5-5'
Section 4-4'
Section 3-3'
Section 2-2'
Section 1-1'
Fault 6
Fault 5
Fault 4
Fault 3
Fault 2
Fault 1
Dikes



Map 2

To accompany O.M.E. application of the American Min. Co., 700 Securities Bldg., Seattle, Wn.


Garnet 5853
Garnet No. 24
Garnet No. 7
Garnet No. 8
Gold Bug
Gold Bug 9407
Bulls Eye 4651
Bulls Eye
Grant & Hartford 7327
Homestake 6970
Garnet No. 25
Garnet No. 26
Garnet No. 24
Sierra 6971
Nancy Hanks 9876
Magone & Anderson 9876
Lead King 4511
First Chance Gulch
White Cloud 3651
Crescent 4510
Free Coin 4652
San Jose 3615
Iowan 3614
Section 9-9'
Section 8-8'
Section 12-12'
Section 11-11'
Section 6-6'
Section 7-7'
Fault No. 1
Fault No. 2
Fault No. 3
Fault No. 4
Fault No. 5
Fault No. 6
Fault on Surface
Heavy bedded grey Granite
Mod. bedded banded Granite and some Iron Ore in place
Note: Re San Jose production.
A partial record of shipments 1937-46.
Shows some two directions, 1.0 to 2.0 to 1.25 on Author. Operator claims better.
Production records for 1946 to 1950 are not available. About 1/3 on Author exists with at 1.5'. On its level Vein specified 7.5' but assayed 2.1 oz/ton Gold.


GEOLOGICAL MAP
Note: Most of the faults shown are projected up from underground workings taken from Pardee's maps in USGS Bull. 660-F (Collapsing corrd)
GARNET DISTRICT
SCALE - 1" = 100'
Proposed drilling shown in purple (See Sections on maps 3-7 for details and other data)
GRANITE CO.
MONTANA
Legend
granodiorite
Camb. massive ls
Camb. shaly ls
Pzm - Pest Quartzite
See also Geochem Traverse
Note: Underground workings at San Jose and Robt Emmet claims taken from maps supplied by last operator. All other underground workings taken from Plate IX, USGS Bull. 660-F, Pardee.
Re: Geochemical Samples
Au and Co (in that order) in ppm shown above each sample number
Geochemical Samples
Line F3-A
Line F3-B
Garnet No 18
Garnet No 23
Garnet No 22
Garnet No 21
First Chance Gulch
Kearns Gulch
Fourth of July 5453
Silbrath
Section 3
Section 10
Section 5-6
Section 13-13
Robt Emmet 5216
San Jose 5215
Honolulu 5632
Amistead 5233
Fairview 4548
Alcoda
Fault No 2
Fault 3
Fault 4
Fault 5
Fault 6
Fault 7
Fault 8
Fault 9
Fault 10
Fault 11
Fault 12
Fault 13
Fault 14
Fault 15
Fault 16
Fault 17
Fault 18
Fault 19
Fault 20
Fault 21
Fault