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 Pinal, State of Arizona, in Warranty Deed described as follows:[2] VEKOL MINING CLAIM, MOUNT VERNON MINING CLAIM, ARGOSY MINING CLAIM, GRANDFATHER MINING CLAIM, LOOKOUT MINING CLAIM & FLAT IRON MINING CLAIM, lode mining claims in Sec 34 & 35, T9S, R2E, G&SRB&M being shown on Mineral Survey #4143 on file in the office of the Bureau of Land Management as granted by Patent recorded Apr. 20, 1933, Book 52 of Deeds P.138 records of Pinal County, Arizona

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 Harry Westling, dba VEKOL MINING AND EXPLORATION CO.[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 10th day of March, 19 68.

FEDERAL MINES COMPANY, INC.
an Arizona corporation (Street)
(City & State)

Albert L. Wilson Sr (Seal)
Albert L. Wilson, Sr
President

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

I, Richard G. Clemans (Name), certify that I am the Sec.-Treas. (Title—Secretary, etc.) of the corporation named herein; that Albert L. Wilson, Sr. (Name), who signed this agreement was then President (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.

Richard G. Clemans (Corporate Seal)
Richard G. Clemans
Secretary-Treasurer

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 Pinal, State of Arizona, in Warranty Deed described as follows:[2] VEKOL MINING CLAIM, MOUNT VERNON MINING CLAIM, [illegible] MINING CLAIM, GRANDFATHER MINING CLAIM, LOOKOUT MINING CLAIM & FLAT IRON MINING CLAIM, lode mining claims in Sec 34 & 35, T9S, R2E, G&SRB&M being shown on Mineral Survey #4143 on file in the office of the Bureau of Land Management as granted by Patent recorded Apr. 20, 1933, Book 52 of Deeds P.13[illegible] records of Pinal County, Arizona

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 Harry Westling, dba VEKOL MINING AND EXPLORATION CO.[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 10th day of March, 19 68.

FEDERAL MINES COMPANY, INC.
an Arizona corporation (Street)
(City & State)

Albert L. Wilson Sr. (Seal)
Albert L. Wilson, Sr
President

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

I, Richard G. Clemans (Name), certify that I am the Sec.-Treas. (Title—Secretary, etc.) of the corporation named herein; that Albert L. Wilson, Sr. (Name), who signed this agreement was then President (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.

Richard G. Clemans (Corporate Seal)
Richard G. Clemans
Secretary-Treasurer

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 Pinal, State of Arizona, in Warranty Deed described as follows:[2] VENOL MINING CLAIM, MOUNT VERNON MINING CLAIM, ARGOSY MINING CLAIM, GRANDFATHER MINING CLAIM, LOOKOUT MINING CLAIM & FLAG IRON MINING CLAIM, lode mining claims in Sec 34 & 35, T9S, R2E, GSRM, being shown on Mineral Survey 4143 on file in the office of the Bureau of Land Management as granted by Patent recorded Apr. 20, 1933, Book 52 of Deeds P.138 records of Pinal County, Arizona

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 Harry Westling, dba VENOL MINING AND EXPLORATION CO.[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 10th day of March, 19 68.

FEDERAL MINES COMPANY, INC.
an Arizona corporation (Street) (City & State)

Albert L. Wilson Sr. (Seal)
Albert L. Wilson, Sr
President

(Street) (City & State)

(Seal)

(Street) (City & State)

(Seal)

(Street) (City & State)

(Seal)

(Street) (City & State)

(Seal)

(Street) (City & State)

(Seal)

I, Richard G. Clemans (Name), certify that I am the Sec.-Treas. (Title—Secretary, etc.) of the corporation named herein; that Albert L. Wilson, Sr. (Name), who signed this agreement was then President (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.

Richard G. Clemans (Corporate Seal)
Richard G. Clemans
Secretary-Treasurer

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 Pinal, State of Arizona, in Warranty Deed described as follows:[2] VIKOL MINING CLAIM, MOUNT VERNON MINING CLAIM, ARCOSY MINING CLAIM, GRANDFATHER MINING CLAIM, ROCKTOWN MINING CLAIM & PINE IRON MINING CLAIM, lode mining claims in Sec 34 & 35, T9S, R2E, G&SRB&M being shown on Mineral Survey 4143 on file in the office of the Bureau of Land Management as granted by Patent recorded Apr. 20, 1933, Book 52 of Deeds P.138 records of Pinal County, Arizona

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 Harry Westling, dba VIKOL MINING AND EXPLORATION CO.[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 10th day of March, 19 68.

FEDERAL MINES COMPANY, INC.
an Arizona corporation (Street)
(City & State)

Albert L. Wilson Sr. (Seal)
Albert L. Wilson, Sr
President

(Street)
(City & State)
(Seal)

(Street)
(City & State)
(Seal)

(Street)
(City & State)
(Seal)

(Street)
(City & State)
(Seal)

(Street)
(City & State)
(Seal)

I Richard G. Clemans (Name), certify that I am the Sec.-Treas. (Title—Secretary, etc.) of the corporation named herein; that Albert L. Wilson, Sr. (Name), who signed this agreement was then President (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.

Richard G. Clemans (Corporate Seal)
Richard G. Clemans
Secretary-Treasurer

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 Pinal, State of Arizona, in Warranty Deed described as follows:[2] VENOL MINING CLAIM, MOUNT VERNON MINING CLAIM, ARCOSY MINING CLAIM, GRANDPARENT MINING CLAIM, LONGSHOT MINING CLAIM & PLAT IRON MINING CLAIM, lode mining claims in Sec 34 & 35, T9S, R2E, GSRB&M being shown on Mineral Survey 3243 on file in the office of the Bureau of Land Management as granted by Patent recorded Apr. 20, 1933, Book 52 of Deeds P.130 records of Pinal County, Arizona

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 Harry Postlind, dba VENOL MINING AND EXPLORATION CO.[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 10th day of March, 19 68.

FEDERAL MINES COMPANY, INC.
an Arizona corporation (Street)
(City & State)

Albert L. Wilson Sr. (Seal)
Albert L. Wilson, Sr
President

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

(Street)
(City & State)

(Seal)

I, Richard G. Clemens (Name), certify that I am the Sec.-Treas. (Title—Secretary, etc.) of the corporation named herein; that Albert L. Wilson, Sr. (Name), who signed this agreement was then President (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.

Richard G. Clemens
Richard G. Clemens (Corporate Seal)
Secretary-Treasurer

MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE Contract No. _____ Docket No. 6704

Application
- [x] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

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

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semiannual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) 4/69
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

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

Right Side

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

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

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty Material

72195-65

MME Form 40
Jan. 65

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

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

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

HARRY WESTLING DBA VEKOL MINING AND EXPLORATION CO.
1198 E. RODEO ROAD
CASA GRANDE, ARIZONA 85222

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6704
DATE RECEIVED: 3/5/68
REGION: III
DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

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

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE

STATE IN WHICH FIRM IS ORGANIZED: ARIZONA

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: SILVER AND OTHERS

ESTIMATED COST OF PROJECT: $ 77,800.00

PROPERTY NAME	LOCATION COUNTY	LOCATION STATE
VEKOL MINE	PINAL	ARIZONA

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.

FEBRUARY 29, 1968
DATED

VEKOL MINING AND EXPLORATION CO.
LEASEE

Harry Westling
BY *(Signature)*

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

HARRY WESTLING
1198 EAST RODEO ROAD
CASA GRANDE, ARIZONA
BALANCE SHEET
FEBRUARY 29, 1968

ASSETS

ASSETS:		
CASH:		
ON HAND AND DEPOSIT		800.00
ACCOUNTS RECEIVABLE:		
15,500 SHARES OF MI-CASA STOCK SALE SOLD TO HARLYN GRIFFITH ON CONTRACT (TRANSAMERICA TITLE) CURRENT BALANCE DUE	37,400.53	
MORTGAGE RECEIVABLE - CLIFFORD SEIDLE NOTE (ARIZ. LAND)	23,336.94	
CONTRACT RECEIVABLE - 70 ACRE LAND SAEE - MERIDAN, UTAH	614.14	
INTEREST IN MINE OPERATIONS AND EQUIPMENT SOLD TO DONALD COOMBES - CONTRACT BALANCE DUE	24,210.00	85,561.61
LAND:		
2 ONE ACRE LOTS IN WINSLOW, ARIZONA	800.00	
45 ACRES IN SECTION 35, T6S, R5E, G&SRB&M, PINAL COUNTY, APPRAISED VALUE	72,000.00	
RESIDENCE LOCATED IN RANCHO GRANDE SUBDIVISIONS	15,000.00	
INVESTMENT IN VEKOL MINE	13,000.00	100,800.00
PROMISSORY NOTE:		
RICHARD HALLIBURTON	1,250.00	
RONALD MANNING	30.00	
TED CESSNA	675.00	
ALVIN JOHNSON (30 DAY)	500.00	
ELZIE SHIRLEY	233.75	
CLYDE HONEYCUTT (ARIZONA LAND)	2,117.13	
CENOEL WALKER (30 DAY)	500.00	5,305.88
TOTAL ASSETS		192,467.49

LIABILITIES AND EQUITY

LIABILITIES:		
MORTGAGE PAYABLE ON SECTION 35, T6S, R5E, G&SRB&M, PINAL COUNTY	20,500.00	
BALANCE DUE ON RESIDENCE MORTGAGE, T.J. BETTES CO. RANCHO GRANDE DIVISION, CASA GRANDE, ARIZONA	11,100.00	
DUE PACIFIC FINANCE COMPANY (AUTO LOAN)	1,823.00	33,423.00
EQUITY:		
HARRY WESTLING		159,044.49
TOTAL LIABILITIES AND EQUITY		192,467.49

Feb. 29 1968
Harry Westling

BIOGRAPHY OF HARRY WESTLING

I WAS BORN JANUARY 24, 1909, HOPKINS, MINNESOTA, EDUCATED IN THE HOPKINS PUBLIC SCHOOLS, BOTH GRADE AND HIGH SCHOOL.

I WORKED AT MINNEAPOLIS POWER IMPLEMENT COMPANY AS A SHEET METAL MAN AND MACHINE OPERATOR UNTIL 1945. I WAS BUSINESS AGENT FOR LOCAL 1138 U. E., C. I. O. FROM 1945 TO 1950. IN JANUARY OF 1951, I MOVED TO PHOENIX, STARTING AN APPLIANCE STORE AT 1521 E. THOMAS ROAD, PHOENIX, ARIZONA. THIS BUSINESS WAS KNOWN AS WESTLING'S ELECTRIC APPLIANCE HANDLING BOTH SALES AND SERVICE. THIS BUSINESS WAS SOLD IN 1958.

WHEN I MOVED TO CASA GRANDE IN 1958 IT WAS TO START A NEW SUBDIVISION KNOWN AT THIS TIME AS RANCHO GRANDE. OUR BUILDING NAME WAS MI-CASA BUILDERS, INC. MY INTEREST IN MI-CASA BUILDERS AND RANCHO GRANDE WAS SOLD IN 1963 AT WHICH TIME I STARTED A GRAVEL PIT SOUTHWEST OF CASA GRANDE, IN SECTION 35, TOWNSHIP 6 SOUTH, 5 EAST. I ACQUIRED NECESSARY EQUIPMENT TO PROCESS SAND AND GRAVEL AND OPERATED THE PIT UNTIL APRIL OF 1964. AT THAT TIME I SOLD THE PIT WITH FORTY (40) ACRES OF LAND AND EQUIPMENT TO PINAL SAND AND GRAVEL. ?

SINCE THEN I HAVE BEEN SELLING REAL ESTATE AND WORKING WITH OTHERS TO BRING NEW INDUSTRIES INTO CASA GRANDE.

PRESENTLY I AM DEVOTING FULL TIME TO THE MANAGERSHIP OF THE OPERATION OF VEKOL MINE.

Feb. 29 1968

Harry Westling

Albert S. Johnson
Consulting Engineer

5215 North Oracle Road
Tucson, Arizona 85704

(602) 887-6053

Personal Information

Born 1931, Jennings, La.; married, 5 children; residence, Oracle, Arizona

Education

BS, Petroleum Engineering, Louisiana State University, 1955

Military Service

Two years active duty, Army Corps of Engineers; honorably discharged in 1957 with rank of 1st Lieutenant

Professional Engineer Registration

Arizona and New Mexico

Field Experience

1957-1960: 3 1/2 years with Standard Oil Co. of Texas with title of Drilling Supervisor. Primary duties consisted of the drilling and completion of oil and gas wells in West Texas and New Mexico. Depth of drilling ranged from 2,000 feet to 15,000 feet.

1960-1963: 3 years as Area Engineer for J. Glenn Turner, an independent oil and gas producer of Dallas, Texas. I was in charge of all operations in Four Corners Area which consisted of drilling, completing, and producing oil and gas wells in that area.

1963-1965: 2 years as an independent consultant in Four Corners Area. Served as a consultant in connection with drilling, completing, and production of oil and gas wells in that area. Also did economic evaluations on producing properties in that area.

1965-1968: Independent consultant in minerals industry in Arizona, specializing in exploration drilling and coring.

Clients

Sinclair Oil and Gas Co., Occidental Petroleum Corp., Sun Oil Co., Quintana Minerals Corp., Bear Creek Mining Co., and numerous independent companies and individuals.

Professional Organizations

Society of Petroleum Engineers of AIME
American Petroleum Institute

Professional Papers

"Development of Techniques and Equipment for Deeper U.S. Mineral Exploration," 12th Exploration Drilling Symposium, University of Minnesota, October 1967.

ARTHUR G. BLUCHER
MINING GEOLOGIST
201 SUN BLDG.
2030 EAST SPEEDWAY
TUCSON, ARIZONA 85719

326-4807

PERSONAL RESUME

Following completion of the requirements for a B.S. degree in Mining Geology at the University of Arizona (1951), I gained experience in resident geology, engineering, and mining at three major mineral deposits--Climax in Colorado, San Manuel in Arizona, and Toledo in the Philippines. This involved junior responsibilities in most aspects of exploration, development, and exploitation.

Upon my return to the United States in 1957 I joined the ASARCO exploration organization in the southwestern U.S. where I had the fortunate opportunity to learn under the tutelage of Kenyon Richard and Harold Courtright.

In 1961 I was sent by ASARCO to Santiago, Chile to open an office for regional exploration. During the next three years, reconnaissance and property examinations took me to almost all parts of Chile from Arica in the north to the Rio Tolten in the south, and during this time I became familiar with administrative matters such as mining law, transportation, economics, and a moderate command of the Spanish language. For a four-month interim period in 1963 I was sent to Peru to conduct the outcrop mapping project, prior to drilling at the Michiquillay ore deposit.

In January of1965 I returned to Peru to organize and conduct a helicopter reconnaissance program from a base at Cajamarca, during which we explored a large portion of northern Peru and found a number of interesting properties. At the completion of this project, in December of 1965, I severed ties with American Smelting and Refining Company and returned to the United States.

From March of 1966 I have had an office in Tucson, Arizona offering consulting services in all fields in which I felt qualified.

L. A. Drilling Co.
Box 519
Casa Grande, Arizona

Mr. Harry Westling, Mgr.,
Vekol Mining and Exploration Co.,
1198 East Rodeo Road,
Casa Grande, Arizona, 85222

Dear Mr. Westling,

I would like to submit a bid for drilling on the Vekol mine near Casa Grande. In accordance to your specifications I agree to drill and core:

5-1000 ft. holes @ 9.80 per ft.	49,000.00
60-50 ft. holes @ 4.80 per ft.	12,180.00
	61,180.00

This cost will include drill bits and chemicals. You will furnish roads and drill sites, and mud pits where necessary.

Respectfully Yours,

Albert L. Wilson

Albert L. Wilson, partner

From:

J.O. Barnes Drilling Service, Inc.
P.O. Box 141
Casa Grande, Arizona 85222

To:

Mr. Harry Westling
Vekol Mining and Exploration Co.
Casa Grande, Arizona

February 29, 1968

RE: Bid on drilling work on Vekol Mining Site 4143 at Sections 34 and 35, Township 9 South, Range 2 East, G&SRB&M, Pinal County.

Drilling and Coring 5 - 5½ inch
Diameter holes - 1000 ft. deep - - - - - - - - - $37,200.00

Drilling and Coring 60 - 5½ inch
Diameter holes - 50 ft. deep - - - - - - - - - - $21,400.00

Roadways to drill locations to be furnished by your company.

J.O. Barnes Drilling Service, Inc.

J.O. Barnes

J.O. Barnes

THOMAS C. WHEAT Well Drilling
Rotary and Cable tools
Route #1, Box 762
Glendale, Arizona 85301

Ph. 937-5466
Licensed
Bonded

February 28 1968

Mr. Harry Westling
VEKOL MINING AND EXPLORATION
CASA GRANDE, ARIZONA 85222

We are happy to submit these prices for your consideration on the drilling work you are contemplating on Sections 34 and 35, T9S, R2E, Pinal County, Arizona - VEKOL 4143.

For drilling and necessary coring on 5-1,000 ft. holes 5½" diameter @ $7.60 per ft. -$38,000.00

For drilling and necessary coring on 60 holes 50 ft. deep 5½" diameter @ $7.60 per ft. -$22,000.00

Ingress and Egress and navigable roads to be furnished by your company.

Thomas C. Wheat

ARTHUR G. BLUCHER
MINING GEOLOGIST
201 SUN BLDG.
2030 EAST SPEEDWAY
TUCSON, ARIZONA 85719

326-4807

February 9, 1968

Mr. Harry Westling,
Vekol Mining & Exploration Co.,
Casa Grande, Arizona

VEKOL MINE AREA
Pinal County, Arizona

Dear Mr. Westling:

At your suggestion I visited the old Vekol Mine southwest of Casa Grande, Arizona. It does, indeed, look as if it might have possibilities--either as a small producer of high grade silver ore, or as a large producer of base metal-silver ore from deeper stratigraphic horizons.

If you wish, and if we agree on reasonable terms, I will make a preliminary examination of the property in coordination with Al Johnson who will handle the engineering and drilling aspects.

Thank you for bringing this property to my attention.

Sincerely,

Art

Art Blucher

AGB:fw

cc: ASJohnson
File

WILLIAM K. HUDZIETZ
Regional Vice President
Central Arizona Regional Home Office
117 W. Second Street

UNITED BANK OF ARIZONA
P.O. BOX 1139
CASA GRANDE, ARIZONA 85222
(602) 963-6945

February 13, 1968

Mr. Harry Westling
Vekol Mining and Exploration Company
1198 East Rodeo Road
Casa Grande, Arizona 85222

Dear Mr. Westling:

With reference to the application submitted by you on Vekol Mining and Exploration Company for $100,000.00, I regret that at the present time we are unable to assist you on this request.

Should there be any further questions regarding this matter, please do not hesitate to contact me.

Sincerely,

W. K. Hudzietz
Regional Vice President

WKH/a

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

FIRST NATIONAL BANK OF ARIZONA

CASA GRANDE OFFICE

423 NORTH FLORENCE STREET CASA GRANDE, ARIZONA 85222 TELEPHONE 836-8234

February 13, 1968

Mr. Harry Westling dba
Vekol Mining and Exploration Co.
1198 East Rodeo Road
Casa Grande, Arizona 85222

Dear Harry:

After taking into consideration all the information available, your financial statement and purpose of loan, we find that at this time we are unable to advance you $100,000.00 for your mining operation.

Sincerely,

John E. Hammond
Manager

JEH:sh

February 29, 1968

Mr. Harry Westling, Mgr.,
Vekol Mining and Exploration Co.,
1198 East Rodeo Road,
Casa Grande, Arizona 85222

Dear Mr. Westling:

Enclosed is my report on your Vekol Prospect, including Mr. Johnson's estimates of exploration costs. Also enclosed are data as follows:

1. Vekol Mine - Surface Geology Map - colored, with surface assay data,
2. Copy of Map - Vekol Mine dated September 2, 1932, Mitke - on which assay values are plotted from our underground sampling, 2 copies,
3. Certificate of Assay for assays made on the surface and underground samples taken, and
4. Copy of a Total Intensity Airborne Magnetic Survey made by Heinrichs Geoexploration Company complete with map and report.
5. Plat of Patented claims of Vekol Mine.

You have a good property, and I trust that this study by Mr. Johnson and myself has contributed to its development.

Very truly yours,

Original signed by
Arthur G. Blucher
Arthur G. Blucher

AGB:fw

Encl.

cc: Westling extra
ASJohnson
File

PRELIMINARY REPORT

VEKOL MINE AREA

Index

	Page
INTRODUCTION AND CONCLUSIONS	1
SUMMARY	1
REGIONAL SETTING	2
GEOLOGY AND MINERALIZATION	3
PROPOSAL A	4
PROPOSAL B	4
RECOMMENDATIONS	5

ATTACHMENTS

A	Index Map
B	Regional Map
C	Geologic Map
D	Cost Estimate
E	Photographs

February 27, 1968

Mr. Harry Westling, Mgr.,
Vekol Mining and Exploration Co.,
1198 East Rodeo Road,
Casa Grande, Arizona 85222

PRELIMINARY REPORT
VEKOL MINE AREA
Pinal County, Arizona

Dear Mr. Westling:

Following is my report on the preliminary study of the old Vekol Mine Area. The engineering aspects of the study were handled by Mr. Albert S. Johnson, an engineering consultant with offices at 5215 North Oracle Road, Tucson, Arizona. His discussion of the drilling methods to be recommended here, and his cost and time estimates, are included as an appendix to this report. In addition to data gathered during this examination, information was drawn from previous work by Tenney, Mitke, Carpinter, and geologists of the Duval Corporation.

INTRODUCTION AND CONCLUSIONS

The old Vekol Mine is located on the western flank of the northern Vekol Mountains about 30 miles S 55 W of Casa Grande, Arizona. It can be reached by about 30 miles of fair dirt road turning south off U.S. Highway 8 at Stanfield, Arizona (see Attachments A & B).

Discovered in 1879, it had a reported production of about one million ounces of silver between 1882 and 1916. There has been little exploration or production since that date.

The property consists of six patented mining claims (Mineral Survey 4143). The surrounding ground is part of the Papago Indian Reservation, and is controlled by the Tribal Council.

Present geologic and mineralogic information is sufficient to show that this prospect warrants drilling--either as a prospect of shallow and small highgrade silver orebodies, or as a prospect of a large volume of base metal-silver ore from deeper stratigraphic horizons. The exact location and number of drill holes will depend on the results of recommended detailed geologic studies.

SUMMARY

Mineralization at the old Vekol Mine consisted of lenses and pods of silver minerals enriched from a low grade deposit of

primary Cu-Pb-Zn-Ag minerals in dolomitized and fractured Escabrosa limestone near the base of the overlying Naco limestone. These secondary orebodies, though rich in silver, were quite small in physical dimensions.

Primary ore controls appear to have been N-S to N 30 W striking faults, N 75 E striking faults with attendant andesite porphyry dikes, and the lower surface of the Naco limestone. Secondary enrichment producing high grade silver orebodies may have been controlled by the coincidence of these geologic features with an ancient water table.

There are two exploration opportunities here: (A) The search for near surface, high grade, secondarily enriched silver deposits in areas not explored by the old workings; and (B) A test of deeper and more favorable replacement horizons in the underlying formations.

Either or both of these proposals offer a clear possibility of success. It should be pointed out that Proposal A will require a large expenditure in the search of targets of modest total potential worth, while Proposal B will require a modest expenditure in search of a target of great potential worth.

REGIONAL SETTING

This is a desert region of small mountain ranges separated by broad valleys. Although the maximum relief of the mountain ranges is not great, they are commonly quite rugged in detail. Premineral bedrock outcrops are almost entirely confined to the mountains, and a large part ofthe region is covered by valley fill or postmineral volcanic rocks.

Although the geologic history of the region is quite complex when considered in detail, it may be simplified as follows:

At the beginning of Late Precambrian time the land surface was fairly even and consisted of Early Precambrian schist and granite.

Upon this surface there was discontinuous deposition of sediments from Late Precambrian until the end of Mesozoic time. There was little deformation or faulting during this period.

Active crustal movement beginning in Mesozoic time continued well into Tertiary and was accompanied by the intrusion of various igneous rocks. With some of these intrusives there was associated mineralization.

Uplift and erosion during middle Tertiary was followed by the deposition of postmineral detrital deposits and the extrusion of a considerable thickness of volcanic rocks. During the period of uplift and erosion some of the above mentioned mineral deposits were exposed to oxidation and leaching, and the consequent

redistribution of mineral values between the surface and the water table. This process resulted in the enrichment of the very large chalcocite--copper deposits of the southwestern U.S. as well as some of the small but high grade silver deposits.

GEOLOGY AND MINERALIZATION

At the base of the stratigraphic column in the region of the Vekol Mountains is the much contorted Early Precambrian Pinal schist, intruded in places by Early Precambrian granite. Unconformably overlying these rocks is the Apache group--a thick (1500 feet plus) sequence of shale, quartzite, and conglomerate, with one thin bed of limestone. At the top of this sequence is the Troy quartzite, which may be either Late Precambrian or Cambrian in age, depending on the authority quoted. Conformably overlying the Troy is the Cambrian Abrigo Formation, the Martin limestone of Devonian age, and the Mississippian Escabrosa limestone. Overlying the Escabrosa with an apparent slight disconformity is the Naco limestone of lower Pennsylvanian age.

At the Vekol Mine the Naco limestone and the underlying Escabrosa limestone form a northwesterly trending ridge rising several hundred feet above the valley floor. These beds strike generally N 30 W and dip about 25 degrees to the southwest (See Attachment C). Two sets of premineral faults cut these formations with small (10 to 100 feet) apparent displacement. The N 10-20 W set show dips from 70 degrees east to 70 degrees west, and are commonly multiple structures of fractured and brecciated rock. The N 70-80 E set dip about 80 degrees north and are commonly straight and clearly defined. The largest of this second set cuts the north end of the old workings and is intruded in places by small andesite dikes. The faults of both types may have been channels of mineralizing hydrothermal solutions, and the porphyry is of a type commonly associated with mineral deposits in southern Arizona.

According to report the ore extracted from the old workings consisted of small nodules of horn silver, argentite, and silver-bearing tetrahedrite, which during most of the period of production was handsorted to a grade of several hundred ounces of silver per ton. This was mined from small pockets and lenses in the dolomitized upper horizon of the Escabrosa limestone within a few tens of feet of the basal shale bed of the overlying Naco formation. There was associated copper, lead, and zinc--and carbonates and sulfates of these elements can be found on the dump and in the walls of the old workings. Assays of samples taken during an extensive examination by Duval Corporation averaged 0.02% Cu, 0.27% Pb, and 0.51% Zn.

Two samples taken during this examination from typical zones of what appeared to be remnants of strong mineralization left in the walls of old cuts and stopes assayed only 5.7 oz. Ag and 2.1 oz. Ag, with about 0.01 oz. Au. A large sample taken from barren looking material immediately adjacent to these assayed only 0.2 oz.

Ag and trace Au. A large (100 lb.) composite sample taken from holes dug in four places on the dump was rolled and split down to a small sample. This assayed 6.3 oz. Ag and 0.02 oz. Au. The results of Duval's sampling tend to confirm these values.

From the above sample results, the reported past production, and the size ofthe old stopes, it would appear that the high grade ore was closely confined to small pods and had little or no low grade fringe. The overall area explored by the old workings amounts to about 300,000 sq. ft. The area of the old stopes shown on Mitke's map is about 6000 sq. ft. or about 2% of the total area explored.

It is clear then that the search for new orebodies in the Escabrosa-Naco contact horizon will require detailed geologic studies and close spaced drilling.

A second observation that can be made is that this mineralization, though spotty, occurs over a wide area, in a stratigraphic horizon several hundred feet above the more favorable replacement horizons of the region, and is related to faults and intrusives which surely cut the deeper beds. This may reflect base metal deposits in th deeper formations. Newmont Mining Corporation has discovered such a deposit about five miles east of the Vekol mine which is reported to contain about 75 million tons of low grade copper ore.

PROPOSAL A

Geologic mapping should be done on a scale of 1 inch equals 100 feet to determine the location and attitude of faults and the subsurface level of the Naco-Escabrosa contact. Present geologic knowledge suggests that areas I, II, and III on the attached map might be favorable. This mapping might take one geologist about three weeks depending on the amount of geologic complexity encountered. For the purpose of Mr. Johnson's drilling estimate, an arbitrary figure of 60 drillholes averaging fifty feet in depth was chosen.

PROPOSAL B

For Proposal B a second geologic map with two crosssections should be prepared on a scale of one inch equals 500 feet. Some work will have to be done on outcrops outside of the immediate Vekol area in order to determine the thicknesses of the older formations beneath the Naco and Escabrosa limestones on Vekol Ridge.

The target horizons here are the lower Martin limestone, the Abrigo formation, and the upper Apache Group. Present knowledge indicates depths to these beds at the upper Vekol workings of about 600 feet, 700 feet, and 1000 feet, respectively.

On the attached geologic map are shown five proposed drillhole locations. I, II, and III are a minimal test of Proposal B. The drilling of holes at sites IV and V is contingent on the geologic studies, the results encountered by the first three drillholes, and the acquisition of adjacent property.

RECOMMENDATIONS

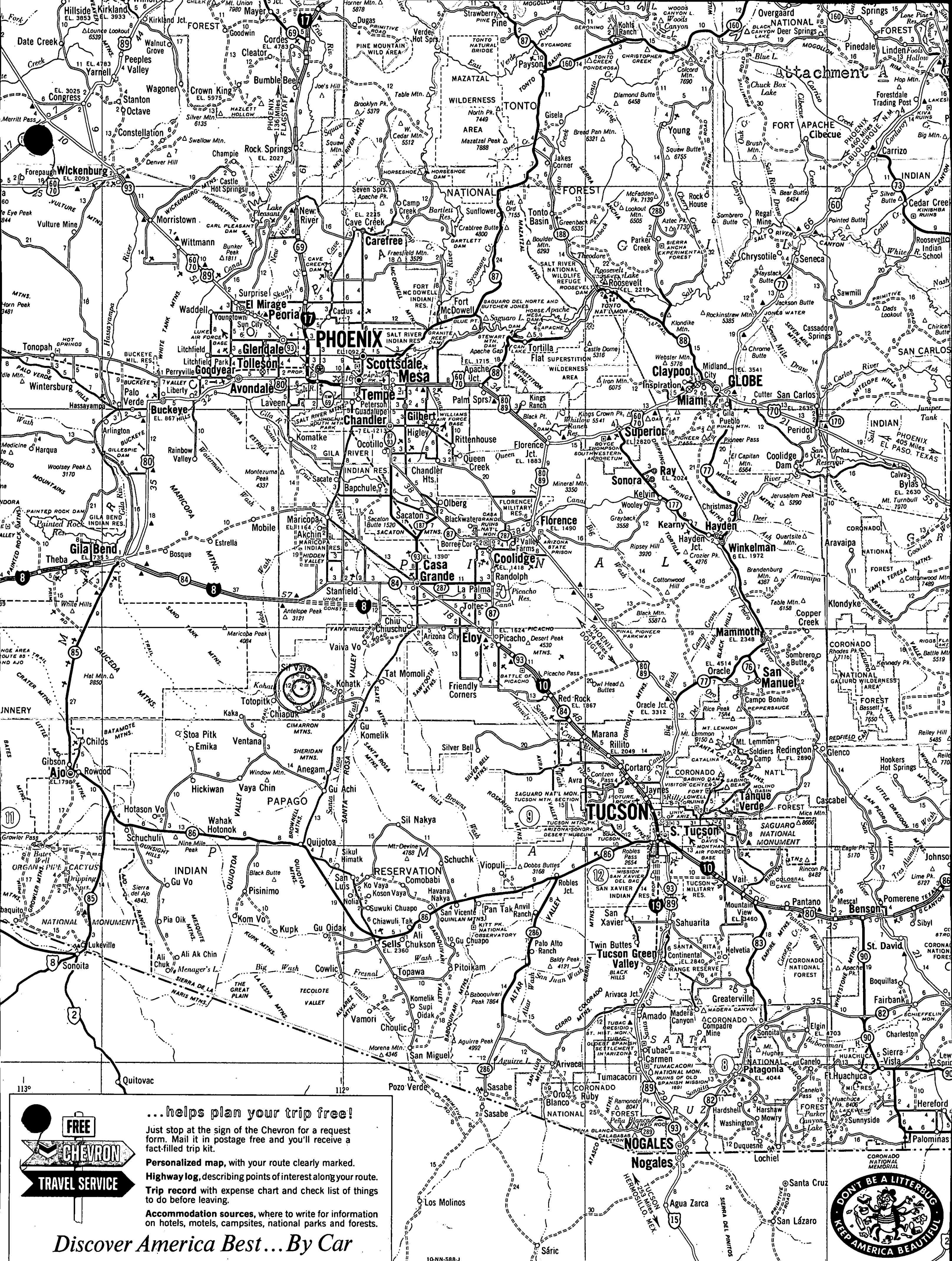
Prior to further work on the Vekol Prospect a property study should be made including an accurate survey of the six patented claims, a check of public records, and an inquiry as to the possibility of acquiring adjacent ground on the Indian Reservation.

Following this, the geologic studies described under Proposal A and Proposal B should be completed. The results of this work will determine the amount of drilling necessary as a minimal test of the property--either as Proposal A, Proposal B, or a combination of both.

Very truly yours,

Arthur G. Blucher

cc: Westling extra
ASJohnson
File



FREE CHEVRON TRAVEL SERVICE

...helps plan your trip free!

Just stop at the sign of the Chevron for a request form. Mail it in postage free and you'll receive a fact-filled trip kit.

Personalized map, with your route clearly marked.

Highway log, describing points of interest along your route.

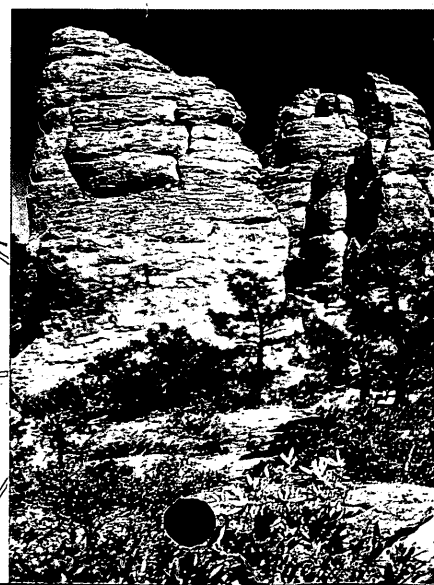
Trip record with expense chart and check list of things to do before leaving.

Accommodation sources, where to write for information on hotels, motels, campsites, national parks and forests.

Discover America Best... By Car

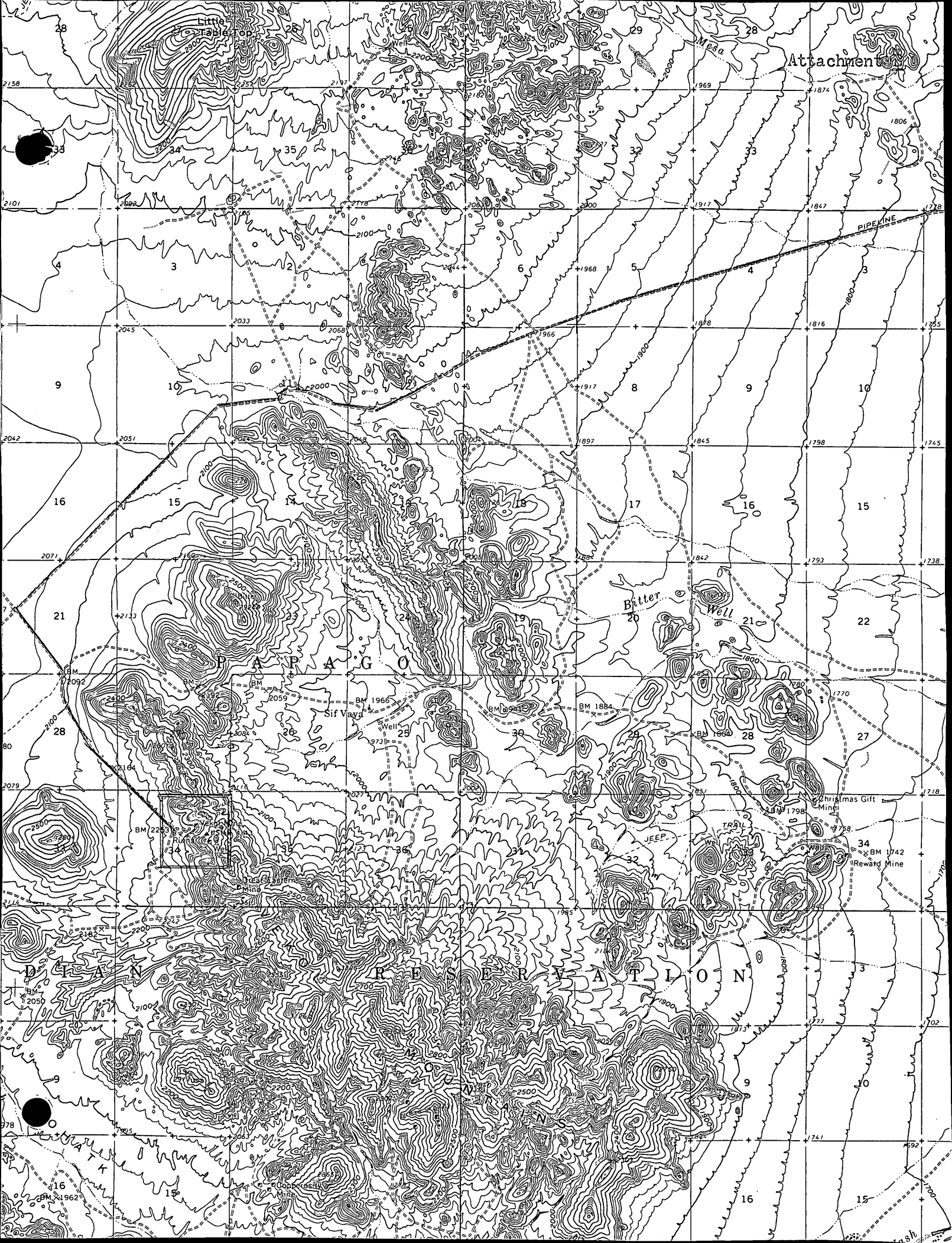
10-NN-588-J

K CREEK CANYON
red walls and pinnacles, towering to 2,500 feet
canyon floor, attract the tourist, camper, fisher-
ist and photographer to this popular area between
and Sedona.

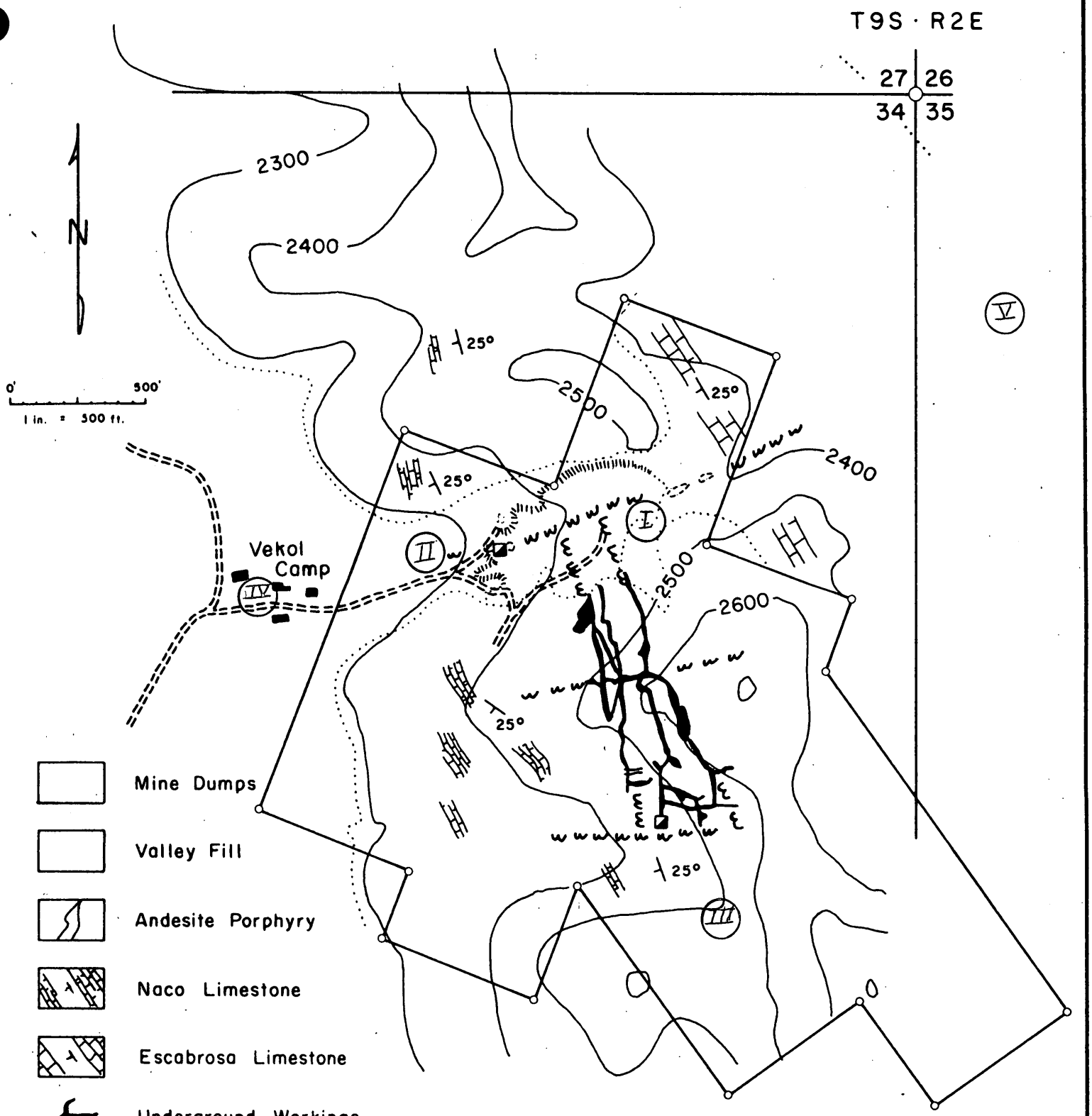


NT
the north
sheltered
y percent
dwelling of
oms. The

Lake Powell
Page
GRAND CANYON NAT'L MON.
Colorado Riv.
Lake Mead
LAKE MEAD NAT'L RECREATION AREA
Grand Canyon Village
GRAND CANYON NAT'L PK.
Moencopi
CANYON DE CHELLY NAT'L MON.
WUPATKI NAT'L MON.
Little Colorado R.
Williams
Big Chino Wash
Flagstaff
Kingman
Winslow
Mormon Lake
Holbrook
PETRIFIED FOREST NAT'L PK.
Lake Havasu
Prescott
Bill Williams R.
Agua Fria R.
Verde R.
Wickenburg
Lake Pleasant
Theodore Roosevelt Lake
Salt R.
Alpine
Black R.
Scottsdale
Phoenix
Mesa
Tempe
Globe
San Carlos Res.
Gila R.
Clifton
Gila Bend
Yuma
Casa Grande
Santa Cruz R.
San Pedro R.
Ajo
Tucson
SAGUARO NAT'L MON.
ORGAN PIPE CACTUS NAT'L MON.
CHIRICAHUA NAT'L MON.
N
W
E
S


Attachment 1
Little Table Top
Mesa
PIPELINE
Bitter Well
P A P A G O
Sif Vayd
BM 1966
BM 1884
BM 1798
Christmas Gift Mine
JEEP TRAIL
BM 1742
Reward Mine
Quartzite Mine
Copperosa Mine
D I A N
R E S E R V A T I O N
N O R T H
BM 1962

Attachment C



PRELIMINARY MAP
VEKOL MINING AREA
Pinal County, Arizona

Contour Interval 100 ft.

Topography after Vekol Quadrangle U.S.G.S.

A.G.B. Feb. 1968

Attachment D

ALBERT S. JOHNSON
CONSULTING ENGINEER

~~BOX 558~~
~~ORACLE, ARIZONA 85623~~
5215 North Oracle
Tucson, Arizona 85704

AREA CODE 602
~~896-2394~~
887-6053

February 23, 1968

VEKOL MINE

Estimate of Exploration Costs

For: Mr. Harry Westling

The following is a report in which an estimate is made of the costs of exploring your claim group known as the Vekol Mine in Pinal County, Arizona. This estimate is based upon the exploration program outlined by Mr. Arthur G. Blucher, and is an attachment to Mr. Blucher's report.

INTRODUCTION:

The drilling and coring procedures recommended in this report are designed to produce the best quality geologic information possible at the lowest cost possible consistent with the objective. The nature of the area and the type of rock to be penetrated dictate the methods to be used.

The estimate also includes anticipated costs of road building, assaying of drill cuttings and cores, engineering and geologic supervision, and the miscellaneous labor required in handling and splitting samples, cores, etc.

SUMMARY

The program as outlined by Mr. Blucher consists of five holes to be drilled to an average depth of 1,000 feet, plus 60 holes drilled to a depth of 50 feet. The deeper holes are for the purpose of exploring for a deep-seated orebody. The shallow holes will explore for additional pockets and veins of high-grade silver not mined out in the early life of the mine.

The cost of this program is estimated as follows:

1.	Roads and drill sites	$ 6,000.00
2.	Drilling and coring	52,750.00
3.	Supervision and miscellaneous labor	15,000.00
4.	Assays and miscellaneous services	4,050.00
		$ 77,800.00

DISCUSSION

A. Drilling Problems and Costs

The most outstanding characteristic of the rock in the Vekol Mine Area in regard to drillability is its hardness. Two general rock types will be encountered: (a) a massive limestone with probable quartz veining and (2) a quartzite. Every hole will be spudded in limestone.

There is a possibility of loss of mud circulation. The holes are in an area of faulting, and it can be assumed that fracturing of the rock has occurred in conjunction with movement along the faults. This fracture system could create a loss of circulation problem. Old records of the area indicate that water will be encountered at a depth of 300 feet.

Taking the above conditions into account, the following drilling procedure is recommended:

1. Drill to water table (300') with air using a downhole hammer.

2. Set 4" O.D. casing at 300'.

3. Core from 300'--total depth (1,000') with 3.25" x NX diamond core bit using low solids mud as circulating fluid.

The drilling costs for such a program are estimated as follows:

1.	5 holes to average depth of 1,000'	$42,250.00
2.	60 holes to average depth of 50'	10,500.00
	Total	$52,750.00

B. Roads and Drill Sites

A system of old existing roads is present in the mine area. Where possible, these roads will be reconditioned and put to use. New roads will have to be built in areas which have not been explored in the past. These roads will be built in massive limestone and will require sidehill cuts. A hydraulic ripper will be used where possible, but parts of the area will have to be drilled and blasted. The estimated cost of road and drill site preparation is $6,000.00.

C. Supervision and Miscellaneous Labor

Into this category fall three types of peronnel:

1. Geology.--Drill cuttings and cores will be logged, and as information accumulates, successive steps in the exploration program will be conducted based on the accumulated information. Detailed geologic mapping will proceed in conjunction with the drilling.

2. Engineering.--General planning and supervision of construction and drilling will be an engineering responsibility.

3. Miscellaneous labor.--Miscellaneous labor costs will arise from the work involved in handling and splitting drill cuttings and

cores and in assisting in field mapping.

Supervision and miscellaneous labor costs are estimated at $15,000.00

D. Assays

The primary target for the shallow holes is silver. A silver assay will be made on each five-foot section of hole drilled. In addition, two samples on each hole will be assayed for lead, gold, copper, and zinc.

On deep holes, assays will be run on 10-foot samples taken in the interval from 500' to total depth. Samples will be assayed for lead, zinc, copper, and silver.

The estimated cost for assay work is $4,050.00.

E. Total Cost

The total cost for the project is estimated at $77,800.00.

Respectfully submitted,

Albert S. Johnson

Albert S. Johnson

ASJ:h

Registered Professional Engineer (Petroleum)
CERTIFICATE NO. 6777
ALBERT S. JOHNSON
Date Signed 2/23/68
Arizona U. S. A.

L E A S E

1. PARTIES. The parties to this Agreement are FEDERAL MINES COMPANY, INC., an Arizona corporation, referred to as Lessor and HARRY WESTLING doing business as VEKOL MINING & EXPLORATION COMPANY, referred to as Lessee.

2. PROPERTY. The property which forms the subject of this Lease are those six (6) patented lode mining claims described as:

Name	Bureau of Land Management Mineral Survey Number
Vekol	4143
Argosy	4143
Mount Vernon	4143
Grandfather	4143
Lookout	4143
Flatiron	4143

all situated in Sections Thirty-four (34) and Thirty-five (35), in Township Nine (9) South, Range Two (2) East, G & S R B & M, in Pinal County, Arizona; all granted by patent recorded April 20, 1933, in Book 52 of Deeds, at Page 138, in the records of said county; and containing ninety-nine (99) acres, more or less;

together with all right, title, estate and interest, whether now owned or hereafter acquired, of Federal and its successors and assigns (a) in, to and under the lands upon which the above mining claims are located; and (b) in and to any and all ores, minerals, materials and solutions in, upon or under said lands, or mined and deposited thereon (subject to the provisions herein concerning certain Mine Dumps described below); and (c) the surface and subsurface thereof; and (d) all water, water rights, easements and rights of way in, upon, under or pertaining to said lands; and (e) all fixtures, improvements, structures, shafts, drifts and workings in, upon or under said lands.

3. GRANT OF LEASE. Lessor hereby leases the property to Lessee and further grants Lessee the following rights with respect to the property:

A. The sole and exclusive possession thereof during the term of this Lease.

B. The right to conduct mining operations thereon, including exploration, developement and production, and removal of ore and by-products therefrom.

4. TERM OF LEASE. The term of lease shall be sixty (60) months from January 28, 1968. Lessee may renew this Lease for additional five year terms after the expiration of the initial term provided Lessee is not in default or in violation of the terms of this Lease. Upon the expiration of any five year term including the initial term said Lease is automatically renewed for an additional five year term unless Lessee is in violation of the terms of said Lease or unless Lessee gives Lessor sixty (60) days written notice of his intent not to renew said Lease prior to the expiration of the then current term.

5. RENTAL. Lessee shall pay as rental for the premises the following schedule:

A. FIRST YEAR. Lessee shall pay Lessor 5% of the net smelter returns, if any, for first year on or before January 28, 1969. Net smelter returns does not include cost of mining, milling, taxes, equipment or hauling to railhead.

B. SECOND YEAR. Lessee shall pay for rental for the second year the sum of Eight Hundred Dollars per month or five per cent of the net smelter receipts per month, whichever is greater. Lessee shall pay the sum of Eight Hundred Dollars per month to Lessor commencing on January 28, 1969, and continuing on the 28th day of each month thereafter of said second year. In the event the five per cent of the net smelter receipts for any month exceeds the sum of Eight Hundred Dollars already paid then Lessee shall pay said additional monthly rental to Lessor whenever such is determined.

C. THIRD YEAR. Lessee shall pay for rental for the third year the sum of One Thousand Dollars per month or five per cent of the net smelter receipts per month, whichever is greater. Lessee shall pay the sum of One Thousand Dollars per month to Lessor commencing on January 28, 1970, and continuing on the 28th day of each month thereafter of said third year. In the event the five per cent of the net smelter receipts for any month exceeds the sum of One Thousand Dollars already paid then Lessee shall pay said additional monthly rental to Lessor whenever such is determined.

D. FOURTH YEAR. Lessee shall pay for rental for the fourth year the sum of One Thousand Two Hundred Fifty Dollars per month or five per cent of the net smelter receipts per month, whichever is greater. Lessee shall pay the sum of One Thousand Two Hundred Fifty Dollars per month to Lessor commencing on January 28, 1971, and continuing on the 28th day of each month thereafter of said fourth year. In the event the five per cent of the net smelter receipts for any month exceeds the sum of One Thousand Two Hundred Fifty Dollars already paid then Lessee shall pay said additional monthly rental to Lessor whenever such is determined.

E. FIFTH YEAR. Lessee shall pay for rental for the fifth year the sum of Fifteen Hundred Dollars per month or five per cent of the net smelter receipts per month, whichever is greater. Lessee shall pay the sum of Fifteen Hundred Dollars per month to Lessor commencing on January 28, 1972, and continuing on the 28th day of each month thereafter of said fifth year. In the event the five per cent of the net smelter receipts for any month exceeds the sum of Fifteen Hundred Dollars already paid then Lessee shall pay said additional monthly rental to Lessor whenever such is determined.

F. RENEWAL. In the event that said Lease is renewed the rental shall be during the renewal period the sum of Fifteen Hundred Dollars per month or five per cent of the net smelter receipts per month whichever is greater. The initial monthly rental shall be paid on January 28th of said renewal period and continue on the 28th day of each month thereafter of said renewal period. In the event that five per cent of the net smelter receipts for any month exceeds the sum of Fifteen Hundred Dollars already paid then Lessee shall pay said additional monthly rental to Lessor whenever such is determined.

6. MINE DUMPS AND TAILINGS ON CLAIMS. Certain mine dumps and tailings containing overburden and crude mineral-bearing materials are now situated on the above described claims. The mine dumps and tailings approximate 500,000 tons. Lessor reserves to itself the right to remove, mine, excavate and remove all such ore, minerals and materials contained in the Mine Dumps and Tailings as Lessor

desires to remove, and to sell or dipose of the same for Lessor's account. Lessor shall have the right to remove, mine and excavate said Mine Dumps and Tailings for a period of thirty-six months after the date of this agreement. During the removal period, Lessor shall have all reasonably necessary rights to access on said claims for the purposes above stated, but shall not unnecessarily or unreasonably interfere with Lessee's operations on or about the Claims. Lessor shall conduct its operations in a careful and workmanlike manner, shall indemnify Lessee against liability to third persons resulting from Lessor's operations.

7. OPTION TO PURCHASE. Lessor grants to Lessee an option to purchase the above said mining claims upon the terms and conditions set forth in that certain Option Agreement between the parties dated January 28, 1968.

8. NONCONVEYANCE AND LIENS. During the term or any term of renewal of this lease Lessor shall not sell or convey any of its interest in the above claims to parties other than Lessee. Lessee shall have the right during the term of this lease to lien above described property to secure a loan from O.M.E. for the purposes of exploration and development, loan not to exceed TWO HUNDRED THOUSAND DOLLARS ($200,000).

9. ADDENDUM TO PARAGRAPH 6. In addition to paragraph 6 hereof the parties agree that in the event the total tonnage of the same Mine Dumps and Tailings should not amount to 500,000 tons Lessor or its nominee may remove additional material from the saddle area of said claims so as to make a total of 500,000 tons excluded. However, should Lessee's exploration prove, prior to removal, that certain ore in the saddle area be more valuable for conventional mining methods than and in that event Lessee may mine the same. In such event Lessee and Lessor shall select additional materials from the claims to substitute therefore. All excluded materials not removed from the aforesaid claims within 36 months from the date of this lease shall revert and become subject to this lease.

Lessee and Lessor or their nominees shall in good faith cooperate with each other as to Lessee's exploration, development and mining and as to Lessor's removal of excluded materials.

In the event of dispute as to the excluded materials clauses and related matters the same shall be submitted to binding arbitration. One arbitrator shall be appointed by Lessor and one by Lessee or his nominee. Richard G. Clemans shall be the third arbitrator. The decision of two arbitrators shall be binding on all interested parties.

10. LESSEE'S DUTIES DURING THE LEASE. During the term of Lease, Lessee agrees:

A. To conduct its operations on the property in a good minerlike manner.

B. To pay all current property taxes and assessments levied against the property during the term of the Lease. Severance taxes, if any, shall be paid by the parties in the same proportions as they share in net smelter returns.

C. To save Lessors harmless against any and all demands, claims, liens, or suits arising from injury to persons or damage to property, by accident, or otherwise; and to carry the necessary Workman's Compensation, and Public Liability (not less than $50,000.00 personal injury and not less than $10,000.00 property damage) insurance for such purposes, the policy or policies evidencing such insurance to be put in force prior to commencement of any work by Lessee upon the subject property. Lessee agrees to post non-liability notices for Lessor on the property.

D. Lessee shall keep full, true and accurate records concerning all ore mined, milled, concentrated, treated, shipped or otherwise disposed of, and of the place or places to which shipped, and the returns therefrom, and shall make such records available for inspection and copying by a representative of Lessors at all reasonable times.

11. REMOVAL OF TOOLS, ETC. All tools, machinery, and equipment place upon the property by Lessee shall remain the property of Lessee whether or not affixed to the realty; and upon termination of this Mining Lease for whatever cause, Lessee shall have 90 days thereafter in which to remove all such tools, machinery, and equipment from the premises. It is specifically agreed that Lessee during said 90 days period shall cooperate with Lessors

so that the location of such tools, machinery and equipment shall not interfere with Lessors or third persons operations upon said property. A specific condition of said removal is that no such tools, machinery or equipment shall be so removed while the said Lessee may be in any manner indebted to the said Lessors under any obligation incurred under this lease.

All buildings, machinery, and tools, (except timber, or other structures covered by mine safety regulations and except mill foundations) may be removed at any time from the property.

12. TERMINATION BY LESSEE. Notwithstanding any other provision of this Agreement, Lessee may, at any time, terminate this Lease upon written notice, and thereafter be under no further obligation to Lessors, except as herein provided and an obligation to deliver to Lessors copies of its engineering data relating to the property. Lessors shall retain all payments theretofore paid by Lessee.

13. DEFAULT. Should Lessee default in the performance of any provision of this Mining Lease, and fail to remedy such default within thirty (30) days after written notice specifying such default (or if such default cannot reasonably be cured within thirty (30) days thereafter and diligently proceed to remedy such default). Lessors may, at its option, terminate this Mining Lease.

14. NOTICES. Notices hereunder shall be sent registered or certified mail, postage prepaid, addressed as follows:
To Lessors: c/o RICHARD G. CLEMANS, Box 889, Florence, Arizona;
To Lessee: HARRY WESTLING, 1198 E. Rodeo Road, Casa Grande, Arizona;
or such other addresses as the parties may notify. Any notice so posted shall be deemed to have been received by the other party within forty-eight (48) hours from the time of posting, providing that either party may give to the other, written notice of a change of address for purpose of this clause.

15. ADDITIONAL DOCUMENTS. The parties agree to execute such additional documents as may be desirable to carry out the purposes of this agreement.

16. Notwithstanding anything herein contained to the contrary, in the event of a forfeiture on the part of Lessee,

Lessee shall save and hold Lessors harmless from payment of delinquent taxes, adverse claims or encumbrances and rentals, or any other obligation incurred by Lessee during the operation of said mining claims which embrace the premises at the date of re-conveyance or forfeiture, to the end that title shall revest in Lessors free and clear of any taxes, adverse claims, encumbrances, rentals or other obligations which arose during the period that Lessee had possession of said premises under the terms of this agreement except liens for exploration and development by O.M.E.

17. The rights and priviledges granted parties herein shall extent to and be available to their successors.

18. ASSIGNMENT BY LESSEE. Lessee may assign his interest in this lease without the prior written consent of Lessor.

IN WITNESS WHEREOF, the parties have executed this Lease this 6 day of February, 1968.

FEDERAL MINES COMPANY, INC.

By Albert L. Wilson Sr.
President

ATTEST: Richard G. Clemens
Secretary

VEKOL MINING & EXPLORATION COMPANY

By Harry Westling
HARRY WESTLING

STATE OF ARIZONA)
)ss.
County of Pinal)

This instrument was acknowledged before me this 6 day of February, 1968, by Albert L. Wilson Sr as President and Richard G Clemens Secretary of FEDERAL MINES COMPANY, INC.

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

James A. Hatlin
Notary Public

My Commission Expires:
8/19/71

STATE OF ARIZONA)
) ss.
County of Pinal)

This instrument was acknowledged before me this 6 day of February, 1968, by HARRY WESTLING dba VEKOL MINING & EXPLORATION COMPANY.

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

James A. Hatten
Notary Public

My Commission Expires:
8/19/71

CERTIFIED RESOLUTION

THIS is to certify that at a special meeting of the Board of Directors of Federal Mines Company, Inc. at which all members of the Board of Directors were present, duly held at 1100 N. Arbor, Casa Grande, Arizona, on the 24th day of January, 1968, at 10:30 A.M., the following Resolution was adopted and that said Resolution has not been revoked:

UPON MOTION DULY MADE, SECONDED AND UNANIMOUSLY ADOPTED it was Resolved that Federal Mines Company, Inc. would lease the Vekol Mine, more particularlydescribed as follows:

Name	Bureau of Land Management Mineral Survey Number
Vekol	4143
Argosy	4143
Mount Vernon	4143
Grandfather	4143
Lookout	4143
Flatiron	4143

all situated in Sections Thirty-four (34) and Thirty-five (35), in Township Nine (9) South, Range Two (2) East, G & S R B & M, in Pinal County, Arizona; all granted by patent recorded April 20, 1933, in Book 52 of Deeds, at page 138, in the records of said county; and containing ninety-nine (99) acres, more or less;

together with all right, title, estate and interest, whether now owned or hereafter acquired, of Federal and its successors and assigns (a) in, to and under the lands upon which the above mining claims are located; and (b) in and to any and all ores, minerals, materials and solutions in, upon or under said lands, or mines and deposited thereon (subject to the provisions herein concerning certain Mine Dumps described below); and (c) the surface and subsurface thereof; and (d) all water, water rights, easements and rights of way in, upon, under or pertaining to said lands; and (e) all fixtures, improvements, structures, shafts, drifts and workings in, upon or under said lands.

to Harry Westling for a term of Five (5) years with rental of 5% of net smelter returns and guaranteed rental of no less than $800.00 per month for second year, and containing renewable provisions and to further grant to Harry Westling an option to purchase the same for $1,300,000.

The President of this Corporation, ALBERT L. WILSON, SR., and the Secretary, RICHARD G. CLEMANS, were authorized and instructed to negotiate the transaction and to prepare and execute the necessary instruments to complete this transaction.

WITNESS my hand and seal this 12th day of February, 1968.

FEDERAL MINES COMPANY, INC.

Approved:
Albert L. Wilson Sr.

By: Richard G. Clemans
Secretary

CERTIFIED SECOND RESOLUTION

This is to certify that at a special meeting of the Board of Directors of Federal Mines Company, Inc. at which all members of the Board of Directors were present, duly held at Casa Grande, Arizona, on the 28th day of January, 1968, at 10:00 A.M., the following Resolution was adopted and that said Resolution has not been revoked:

UPON MOTION DULY MADE, SECONDED AND UNANIMOUSLY CARRIED it was Resolved that the acts of the President, Albert L. Wilson, Sr., and Secretary, Richard G. Clemans, in preparing and execution of Lease and Option Agreements to Harry Westling, copies of which were presented at this meeting and which are hereby incorporated into this Resolution, are hereby ratified, confirmed and approved.

WITNESS my hand and seal this 13th day of February, 1968.

FEDERAL MINES COMPANY, INC.

Approved:
Albert L. Wilson Sr.

By _____
Secretary

REPORT on the VEKOL MINE
by
W. J. FORBACH, Mine Superintendant, 1907-1908.

Superior, Arizona
July 12, 1946

To Dr. H. A. Moore
Arizona Club
Phoenix, Arizona

Dear Sir:

Referring to the Vekol Mine, this property was discovered by Papago Indians and samples taken to the J. D. Walker Ranch on the Gila River, where samples were sent out for assaying, the results of which showed high values in silver: whereupon J. D. Walker, P. R. Brady and Lucien Walker located the property in 1880 and jointly began the operation as a co-partnership. For some reason or other, the Walkers and Brady failed to agree on the manner of operating the property, and the net result was the sale of Brady's one-third interest for $60,000 to the Walker brothers, who jointly operated the property from 1880 to 1892. During this period, several million dollars worth of ore was shipped to various smelters, and the lower grade ores were milled in a 10-stamp mill followed by pan amalgamation.

In 1892 J. D. Walker became ill and died a short time later. Following the death of Mr. Walker, the property was involved in a series of legal entanglements which extended over a period of ten years, and following this period of litigation, I secured a lease and option for the sum of $100,000 and interested some southern gentlemen to take it over. At that time I reccommended a campaign of diamond drilling to determine the exact displacement of the ore-bearing series which occur between the highly altered shale beds and a dolomitized limestone which had been faulted by post-mineral east-dipping faults, displacing the ore-bodies which follow the bedding planes, which dip approximately 32° to the west-southwest.

The Walkers, in operating the property, followed in along the strike for a distance of some 1400 feet from the discovery point, and in the extreme southern workings of the mine the ore-bodies became much more base--the lead and zinc increasing--thus rendering their method of milling inadequate for the treatment of the sulphide ores. The displacement of the ore-bearing blocks increased from a throw of 63 feet from the western extremity of the ore-blocks to a distance of 113 feet on the lastffault to the east. These are the true faults, in my estimation, that make the Vekol a very interesting mining venture, as there is a large block of ground, lying to the south and ea st, of virgin territory, which is exposed to the brow of the hill, where it is said that two carloads were shipped from this outcrop which averaged 1200 ounces of silver per ton.

To the west of the Argosy shaft there is a very strong probability that the Vekol ore-bodies can be picked up in comparatively short diamond drill holes and that was the reason why I became interested in the mine in 1907, besides the fact that the records them in the office safe, which were not complete by any means, but which, showed by smelter settlement sheets, accounted for a million, six hundred thousand dollars, the average value in silver being 312 ounces and 12% lead. The mill book then in the safe showed some $398,000 odd dollars as return from bullion indicating an average of 39 ounces of silver per ton. I had also beem told by the book-keeper, Mr. Mitchell, that the total production of the Vekol, at the time of Mr. Walker's death, was approximately seven million dollars.

REPORT on the VEKOL MINE by W. J. FORBACH, page 2

I had proposed to the people interested that we initiate a diamond drilling campaign prior to attempting constructive development, but unfortunately I was over-ruled by the president of the company, and was instructed to sink a two-compartment working shaft adjacent to a 680-foot water-well which had been drilled to supply water for the mill and camp. The reason for the insistence of the president on sinking the two-compartment working shaft at this point was based on a drunken well-driller's story that in drilling the water-well they had passed through 29 feet of 30-ounce silver ore. However, when the shaft reached the depth of 120 feet, we encountered an east-dipping post-mineral fault which made it clear to me that the collar of the shaft had been started at a point where the ore-bearing series had long since been eroded, and was below the ore-bearing strata, there being a canyon extending from a pass in the mountains downward, forming a V-valley at the place where the shaft was sunk. I stopped the work at the 120-foot level, and avised the president of the company of the true conditions. They ignored the advice as furnished and instructed me to continue the shaft to a depth of 400 feet. No ore-bodies were encountered, proving the deductions previously given were correct.

This shaft, however, will be worth a good deal of money in the future operations in entering into the estension of the ore-bodies to be determined by future drilling, there being a long cross-out to the east which encountered the displacing fault on the east block of the worked-out ore-bodies, affording a good working level through which the ore-body can be picked up by raising to the mineralized horizon. There is also a drift near the shaft along the strike of the post-mineral fault, extending some 850 feet to south under the old workings, which by extending can be utilized as a haulage way for the ore encountered to the south and west. This drift was run on the advice of Professor Tellman, then professor of the University of Arizona; however, the work was stopped short of the distance reccommended.

It is my firm convidtion that by carrying out a campaign of drilling comparatively short drill holes, the ore-bodies will be found to continue on the downward dip to the west and also be located to the east where there is a large block of ground to be proppected. The drift to the south can be utilized in proving the southerly extension of the knownore-bodies to the south and west.

Trusting that this report will give you a general outline of the conditions at the Vekol property, I am

Respectfully yours,

W. J. Forbach
Superior, Arizona
PO Box 21

VEKOL MINE, Casa Grande Mining District, Pinal County, Arizona

Recommaissance Report by J. S. Coupal, Mining Engineer, Phoenix, Arizona, July 10, 1946

CONCLUSION. The Vekol mine has shown a large recorded production of high grade silver ore. A misconception of the relation between the ore occurance and the step faulted limestone series resulted in a comparatively large area of virgin ground being left unexplored. The virgin area justifies intensive exploration and development and I do so recommend.

PROPERTY. The property consists of six patented mining claims and should include a few of the adjoining unpatented claims. Title to the property was under litigation at one time but has since been cleared and is now, I believe, free from any and all incumbrance. Located in the Casa Grande Mining District, Pinal County, Arizona about 35 miles southwest from Casa Grande and in the Papago Indian Reservation. It is at an elevation of about 1600 to 1700 feet above sea level. The route from Casa Grande, the nearest rail point, is over practically level desert road, a good part of which is maintained by the gas line company. Ample water is available both for domestic and milling purposes from a deep well on the patented claims. Operating conditions are favorable for year around operations.

GEOLOGY. The geology is fully covered in a transcript, from the "Economic Geological Reconnaissance of the Casa Grande Mining District, Pinal County, Arizona" by J. B. Tenney, which is attached. Briefly it may be summarized as a minerlized replacement in amlatered shale horizon in a block faulted limestone series. The ore bearing shale horizon is capped by a hard gray limestone and underlain by an altered iron-stained dolomitized lime.

DEVELOPMENT. The ore bodies have not been systematically mined but have been irregularly opened up and mined by several thousands of feet of drifts, raises, stopes, open cuts and shafts. The strike of the block faulting is not normal to the dip of the lime bedding in which the ore occurs and the major development has been roughly parallel to the strike of the block faulting so that the major working level is a gentle incline dipping from 5 to 8 degrees downward from the portal. This results in a high cost for the removal of the mined ore. The workings are very irregular.

Mr. Charles A. Mitke, a mining engineer of high personal standing, acquired a lease and option on the property and spent the greater part of his time from 1932 and 1933 in an intensive study and mapping of the property. He plotted the results of these studies on a sectional glass scaled model of the geology and the underground workings. This model shows the location and existence of several unexplored blocks of virgin area where the productive ore horizon is practically assured.

The earlier workings were all in oxidized ore. At the southeast end of the developed ore body the Argosy shaft was sunk to a depth of about 300 feet and exploration and development work from the bottom of this shaft opened up a sizeable body of sulphide ores as well as connecting with the old workings for ventilation and for an easier and less costly way of removing the mined ore.

Due to the irregularity of the mine workings and the unsystematic method of development it is impossible for me to call any of the ore "blocked ore". From the habit of the ore occurance and from observations made I believe it is safe to say that there is practically assured about 15,000 to 20,000 tons of sulphide ore near the Argosy shaft and from 3,000 to 5,000 tons which can be recovered from the oxidized ores when adequate means of removing that ore can be provided.

Report on the VEKOL MINE by J. S. Coupal, page 2

There is also a sizeable tonnage of approximately one half million tons dump ore which, when the proper metallurgy is worked out, might show a substantial profit. This can only be determined by intensive sampling and by careful testing to outline the proper mill flow sheet required. In addition to this there is the possibility of being able to handle a large tonnage of outcrop by open cut shovel work. This also calls for careful sample work and flow sheet study.

RECORDED PRODUCTION. From partial records a production of in excess of $1,000,000 in silver is reported by Mr. J. B. Tenney. It is known that these records were incomplete. From other authentic sources the recorded production is placed at between $3,000,000 and $7,000,000.

The records of the mine have been lost. Mr. Charles A. Mitke had a complete set of the record with him while in the Phillippines during the 2nd World War and they were all lost.

RECOMMENDATIONS. The property justifies systematic and intensive development and exploration and it is so recommended by me.

The work should be done in stages. When the results obtained from the first stage are known, a decision can be soundly made as to the following stage and in a similar manner as to the next following stage.

Stage 1.	Rehabilitation of camp and partial mine workings. Survey, sample and plot sites for diamond drilling. Equip and diamond drill for new ore. Estimated cost of stage 1	$25,000
Stage 2.	Open up newly exposed ore shown by drilling and prepare for the efficient mining of this ore. Estimated cost of stage 2	$25,000
Stage 3.	Erect and install adequate mill, 50 to 100 tons daily capacity, and provide working capital for production. Estimated cost of stage 3	$100,000
Total committment		$150,000

CONCLUSIONS. I believe the project thus outlined to be sound and that the records and the history of the Vekol mine fully justify carrying out this program.

It is entirely possible and well within reasonable expectation that the work outlined under stage 1 may reveal the occurance of sufficient high grade ore, within a comparatively short time and and expense to start production within the amount, $25,000 allocated for stage 1.

One of the major reccommendations for the future of the property is the personal time and expense made by Mr. Mitke in his study and the results obtained by him. The low price of silver and the conditions at the time made it advisable for him to abandon the project.

The present price of silver, 90.5¢ an ounce, and the favorable position of silver in the world markets make the project most attractive at this time.

I take pleasure in being able to recommend it highly.

Respectfully submitted.

J. S. Coupal. Mining Engineer
307 Arizona Title Bldg.
Phoenix, Arizona

July 31, 1946

LABORATORY REPORT

Mariposa Spectrographic Laboratory

Star Route, Mariposa, California
Telephone WOodland 6-2591

LAB NO. 7948

SUBMITTED BY:

American Land Co.
P. O. Box 2464
Phoenix, Arizona 85002

Date 10/15/65

Qualitative Spectrographic Analysis

ELEMENTS FOUND
AND ESTIMATED PERCENTAGE RANGE
OF CONCENTRATION

SAMPLE MARK
No mark

VEKOL MINE DUMP ANALYSIS

ELEMENT	Not Less Than %	Not More Than %	ELEMENT	Not Less Than %	Not More Than %	ELEMENT	Not Less Than %	Not More Than %
Aluminum	4.0	10.0	Lithium			Thallium		
Antimony	0.05	0.25	Magnesium	3.0	8.0	Thorium		
Arsenic			Manganese	0.03	0.15	Tin	.002	.005
Barium	.005	0.05	Mercury			Titanium	.001	.006
Beryllium			Molybdenum	.0008	.004	Tungsten		
Bismuth			Nickel	.003	0.02	Uranium		
Boron			Osmium			Vanadium	.002	.009
Calcium as CaO	4.0	12.0	Palladium			Zinc	2.0	7.0
Cadmium	0.05	0.20	Phosphorus			Zirconium		
Cesium			Platinum Not detected in sample			RARE EARTHS:		
Chromium	0.01	0.10	Potassium	0.20	0.80	Cerium		
Cobalt	.0008	.004	Rhenium			Dysprosium		
Columbium			Rhodium			Erbium		
Copper	0.30	1.25	Rubidium			Europium		
Gallium	.002	.007	Ruthenium			Gadolinium		
Germanium			Scandium			Holmium		
Gold Not detected in sample			Silicon (as SiO2)	20.0	40.0	Lanthanum		
Hafnium			Silver	0.03	0.15	Neodymium		
Indium			Sodium	0.20	0.80	Praseodymium		
Iridium			Strontium	.005	0.05	Samarium		
Iron	4.0	10.0	Tantalum			Ytterbium		
Lead	2.0	7.0	Tellurium			Yttrium	.001	.004

Remarks: See letter.

Respectfully Submitted

George R. Franco Spectrographer

MARIPOSA SPECTROGRAPHIC LABORATORY

EDMUND E. PHILLIPS, VICE-PRES. - GEN. MGR. M. E. PHILLIPS, SECRETARY

THE COLORADO ASSAYING COMPANY

(Incorporated)

ASSAYERS AND CHEMISTS

2244 BROADWAY

DENVER, COLO. 80201

OUR MOTTO: – *"What there is in it, no more, no less."*

March 14, 1966

Report on Spectrographic Analysis submitted by Mr. Donald E. Coombes, Brooks, Oregon

* *

ELEMENTS PRESENT	APPROXIMATE PERCENTAGES
Silicon	Major
Calcium	10.-15.
Magnesium	5.
Zinc	5.-10.
Aluminum	5.-8.
Iron	5.
Lead	2.-5.
Sodium	1.
Potassium	.5
Manganese	.05-.1
Titanium	.1
Arsenic	.01
Antimony	.2-.5
Barium	.01-.03
Cadmium	.005
Chromium	.01
Copper	.3-.5
Lithium	.001
Mercury	.05-.1
Nickel	.002
Strontium	.01
Silver	.01
Vanadium	.002
Yttrium	.01

Gold .01 oz./ton @ $35./oz. - $.35/ton
Silver 3.80 oz./ton @ $1.30/oz. - $4.94/ton
Copper - 0.35% @ $6./ unit - $2.10/ton
Lead - 3.0% @ $2.50/unit - $7.50/ton
Zinc - 7.3% @ $1.50/unit - $10.95/ton
Uranium, Thorium - None detected

REMARKS:

The heavy white minerals in this sample are Cerussite (lead carbonate) and Smithsonite (zinc carbonate).
The gangue consists of soft Dolomite (calcium and magnesium carbonate), fine Sand (mostly silica), soft Clay (complex hydrous aluminum silicate) and the red-brown Hematite (iron oxide).
The Silver, Copper, Lead and possibly Zinc and Mercury contents are of interest.

Respectfully submitted,

THE COLORADO ASSAYING COMPANY

BY Ed Phillips

Mariposa Spectrographic Laboratory

Mariposa, California 95338

WOodland 6-2591

American Land Company
P. O. Box 2464
Phoenix, Arizona

10/15/65

Attention Mr. Norman Twenstrup

Dear Mr. Twenstrup:

Enclosed, find spectrographic analysis report #7948, covering the analysis of your submitted ore sample.

We are very sorry to have held you up for so long a time Mr. Twenstrup. We have had an almost unbelievable amount of analyses here in the laboratory which has of necessity obliged us to do the analyses in their order that we received them. We have made this analysis two days ahead of the date that we would have otherwise been able to have analized it in the order received.

This material is limestone Mr. Twenstrup. It is composed of a dolomitic limestone and a feldspathic rock approximating Orthoclase feldspar or Orthoclase groundmass rock.

It is a well mineralized formation, and contains not only Lead and Zinc in good amounts, but also contains a very good amount of Copper, Silver, along with smaller amounts of Cadmium and Antimony.

Again, our apologies to you and our good wishes in your mining.

Sincerely,

George R. Graves

George R. Graves

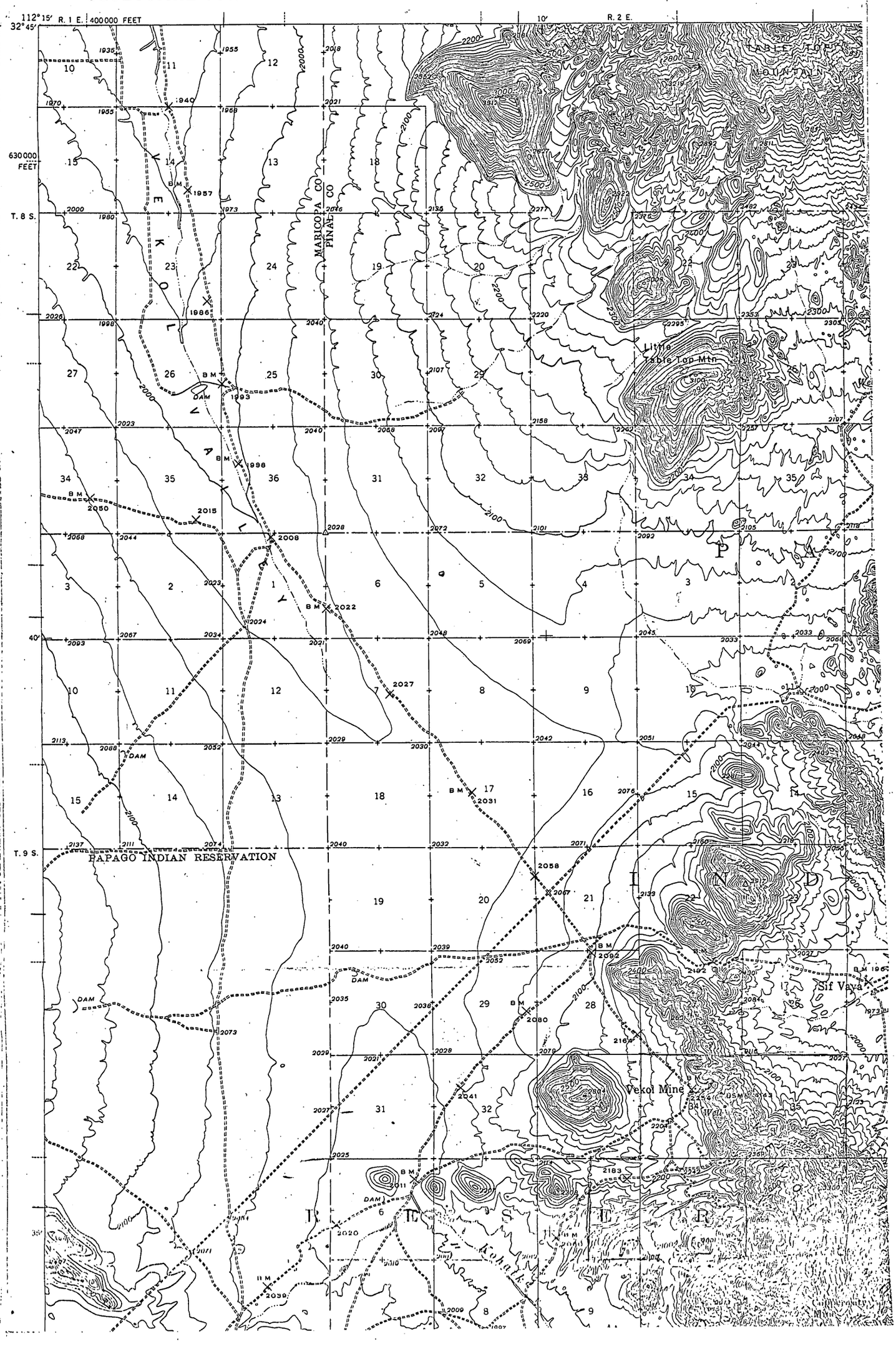
lcc

This sample was from the blocked out high grade zone of about 10,000 tons - 1 foot under surface - raw dump ore unconcentrated

Silver, oz.	Lead, %	Zinc, %
One of the three main lower dumps		
2.52	0.56	1.60
3.33	0.51	1.80
2.26	0.41	1.20
2.65	0.66	2.40
Middle dump, screened to 3/4 minus		
4.40	3.35	4.90
4.10	2.00	5.60
4.50	4.40	9.15
Upper dump		
7.60	2.70	not run
10.80	4.80	not run
4.70	1.80	not run
Tailings		
3.40	3.10	5.30
4.60	2.90	5.80
4.60	3.95	5.80
4.60	3.90	4.60
2.70	1.35	2.45
Tailings, wet run jig		
26.40	34.06	20.90
52.40	20.00	not run

Silver, oz.	Lead, ppm.	Zinc, ppm.
Taken at 100 foot intervals in main tunnel.		
4.80	3300	12,500
7.30	8000	29,000
1.50	9000	10,300
.75	1350	4,500
2.60	3200	8,100
1.70	2800	6,500
11.46	1000	28,000
.60	1000	400
2.70	4500	5,000
5.50	7000	1.900
1.80	25,000	4,000

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Office of Minerals Exploration
Building 25 Room 200

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 19 1969

INITIALS	CODE
Gal	120 M
WE	120 E
	220

May 16, 1969

Mr. Harry Westling
1198 East Rodeo Road
Casa Grande, Arizona 85222

Re: OME-6704 (Silver)
Vekol Mining & Exploration Company
Vekol Mine
Pinal County, Arizona

Dear Mr. Westling:

Enclosed is the application material that you requested to be returned to you in your letter dated May 13, 1969.

It was a pleasure to serve you and hope we may have another opportunity to see you at a later time.

Sincerely yours,

J. William Hasler

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

Enclosures

cc: Chief, OME
OME chron
Mr. Hasler
OME-6704

5/5/69

Phone call from Mr. Roger Lewis, Congressman Udall's office inquiring about this application. I told him the Applicant was informed by letter May 1, 1969 that application was denied without prejudice & I explained the reasons.

He asked how further consideration could be given — by submitting more geological info to support the proposal. We had asked for more info. but had not received it.

Explanation was accepted without further question.

H. Kirkeno

ME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/29/69	Emerick	120
"	Kirkemo	120
4/30	Nielsgaard	
		220
		120

AIRMAIL

MAY 1 1969

Mr. Harry Westling d/b/a
Vekol Mining and Exploration Co.
1198 E. Rodeo Road
Casa Grande, Arizona 85222

Re: OME-6704 (Silver)
Vekol Mining and Exploration Co.
Vekol Mine
Pinal County, Arizona

Dear Mr. Westling:

A careful review of your application for financial assistance to explore the subject property and other information available to us indicates that the probability of disclosing significant reserves of silver on your property is not sufficiently promising to justify Government participation in the proposed exploration. Accordingly, we regret to inform you that your application for assistance is denied without prejudice.

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

Sincerely yours,

Harold Kirkemo (gla)

Harold Kirkemo, Chief
Office of Minerals Exploration

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
Region III
Mr. Emerick

WLEmerick/bsl 4/29/69

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/29/69	Emerick	120
"	Kirkemo	120
4/30	Lupp	
		220

April 29, 1969

Memorandum

To: The File

From: William L. Emerick
Office of Minerals Exploration

Subject: OME-6704 (Silver)
Vekol Mining and Exploration Co.
Vekol Mine
Pinal County, Arizona

Justification for Denial of Application

Mineralization in the Vekol Mine consisted of lenses and pods of silver minerals enriched from low grade deposits of primary Cu-Pb-Zn-Ag minerals in dolomitized and fractured limestones. Although rich in silver the secondary ore bodies were quite small in dimensions.

There are not enough areas where additional sampling would indicate much evidence of ore grade material in the present workings, inasmuch as the workings have been quite thoroughly mined. Sampling to date in the old workings indicates ore grade material is low grade and may not be commercial unless selectively mined.

Both the consulting geologist and the examining geologist recommended to the Applicant completion first of detailed geologic mapping in order to appraise specific targets or target areas in which exploration work could be done efficiently. Applicant completed some geophysical work but not the detailed geologic mapping.

The Field Officer concludes that without completing the detailed geologic mapping the chances of discovering new reserves is decidely unpromising and speculative. Inasmuch as the Applicant has not completed the recommended prior geologic mapping necessary to outline target areas for exploration drilling, I concur with the Field Officer's recommendation that the application be denied without prejudice.

William L. Emerick

William L. Emerick

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
Mr. Emerick
WLEmerick/bsl 4/29/69

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration
Building 53 Room 200

April 18, 1969

RECEIVED
APR 21 1969

INITIALS	CODE
gla	130
gla	120
JHK	120
	120

Memorandum

To: Chief, Office of Minerals Exploration

From: Field Officer, Region III

Subject: OME-6704 (Silver)
Harry Westling, Vekol Mining & Exploration Company
Vekol Mine
Pinal County, Arizona

Transmitted herewith is a Report of Examination by J. William Hasler on the subject property recommending denial without prejudice.

Enclosed also is a report on a geophysical survey as well as some additional sampling that was completed after the date of the field examination.

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

UNITED STATES

DEPARTMENT OF THE INTERIOR

WALTER J. HICKEL, SECRETARY

U. S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION

REGION III

OME-6704 (Silver)

HARRY WESTLING, VEKOL MINING & EXPLORATION COMPANY

PINAL COUNTY, ARIZONA

By

J. William Hasler,

Geologist

April 1969

ON-SITE
EXAM.RPT.

Index

	Page
Introduction	1
The property	1
History and production	2
Geology and ore deposits	9
Applicant's proposed exploration	13
Appraisal and recommendations	15

Introduction

The Vekol Mining and Exploration Co., 1198 E. Rodeo Road Casa Grande, Arizona applied to the Office of Minerals Exploration for financial assistance to explore for silver in the Vekol Mine, Pinal County, Arizona. The application was referred to the field and an examination was made on May 23, 1968. The examining geologist was accomanpanied by Mr. Harry Westling, the applicant, and Mr. John Walker, Geologist, Gunnar Ltd., who was investigating the Vekol mine for his company at the same time. Additional data were requested some of which was transmitted January 6, 1969.

The property

The old Vekol Mine is located on the western flank of the northern Vekol Mountains about 30 miles S. 55° W. of Casa Grande, Arizona. The mine can be reached by approximately 30 miles of fair dirt road turning south of U. S. Highway 8 at Stanfield, Arizona, Fig. 1, Attachment B.

The applicant holds six patented mining claims under a lease agreement with Federal Mines Company, Inc., an Arizona corporation. Harry Westling, the applicant, is doing business as Vekol Mining and Exploration Company.

The property on which the Vekol Mine is located is contained in six (6) patented claims that lie in Sections thirty-four (34) and thirty-five (35) in T. 9 S., R. 2 E., G & SRB & M in Pinal County, Arizona, all of the patented claims, the Vekol, Argosy, Mount Vernon, Grandfather, Lookout, and Flatiron have the Mineral Survey Number 4143 and are recorded in Book 52 of Deeds, at Page 138, in the

records of the Pinal County Courthouse, Florence, Arizona, and containing ninety-nine (99) acres, more or less. The surrounding ground is part of the Papago Indian Reservation, and is controlled by the tribal council.

History and production

The Vekol Mine was discovered in 1879, and had a reported production of about one million ounces of silver between 1882 and 1916. There has been little exploration or production since that date.

In a report on the Vekol mine, Mr. W. J. Forbach, Mine Superintendent gave a most interesting account as follows:

"REPORT ON THE VEKOL MINE

by

W. J. FORBACH, Mine Superintendent, 1907-1908

Superior, Arizona

July 12, 1946

To Dr. H. A. Moore

Arizona Club

Phoenix, Arizona

Dear Sir:

"Referring to the Vekol Mine, this property was discovered by Papago Indians and samples taken to the J. D. Walker Ranch on the Gila River, where samples were sent out for assaying, the results of which showed high values in silver: whereupon J. D. Walker, P. R. Brady and Lucien Walker located the property in 1880 and jointly began

the operation as a co-partnership. For some reason or other, the Walkers and Brady failed to agree on the manner of operating the property, and the net result was the sale of Brady's one-third interest for $60,000 to the Walker brothers, who jointly operated the property from 1880 to 1898. During this period, several million dollars of ore was shipped to various smelters, and the lower grade ores were milled in a 10-stamp mill followed by pan amalgamation."

"In 1892 J. D. Walker became ill and died a short time later. Following the death of Mr. Walker, the property was involved in a series of legal entanglements which extended over a period of ten years, and following this period of litigation, I secured a lease and option for the sum of $100,000 and interested some southern gentlemen to take it over. At that time I recommended a campaign of diamond drilling to determine the exact displacement of the ore-bearing series which occur between the highly altered shale beds and a dolomitized limestone which had been faulted by post-mineral east-dipping faults, displacing the ore bodies which follow the bedding planes, which dip approximately 32° to the west-southwest."

"The Walkers, in operating the property, followed in along the strike for a distance of some 1400 feet from the discovery point, and in the extreme southern workings of the mine the ore-bodies became much more base -- the lead and zinc increasing -- thus rendering their method of milling inadquate for the treatment of the sulphide ores. The displacement of the ore-bearing blocks

increased from a throw of 63 feet from the western extremity of the ore-blocks to a distance of 113 feet on the last fault to the east. These are the true faults, in my estimation, that make the Vekol a very interesting mining venture, as there is a large block of ground, lying to the south and east, of virgin territory, which is exposed to the brow of the hill, where it is said that two carloads were shipped from this outcrop which averaged 1200 ounces of silver per ton."

"To the west of the Argosy shaft there is a very strong probability that the Vekol ore-bodies can be picked up in comparatively short diamond drill holes and that was the reason why I became interested in the mine in 1907, besides the fact that the records then in the office safe, which were not complete by any means, but which, showed by smelter settlement sheets, accounted for a million, six hundred thousand dollars, the average value in silver being 312 ounces and 12% lead. The mill book then in the safe showed some $398,000 odd dollars as return from bullion indicating an average of 39 ounces of silver per ton. I had also been told by the bookkeeper, Mr. Mitchell, that the total production of the Vekol, at the time of Mr. Walker's death, was approximately seven million dollars."

"I had proposed to the people interested that we initiate a diamond drilling campaign prior to attempting constructive development, but unfortunately I was over-ruled by the president of the company and was instructed to sink a two-compartment working shaft adjacent to a 680-foot water-well which had been

drilled to supply water for the mill and camp. The reason for the insistence of the president on sinking the two-compartment working shaft at this point was based on a drunken well-driller's story that in drilling the water-well they had passed through 29 feet of 30-ounce silver ore. However, when the shaft reached the depth of 120 feet, we encountered an east-dipping post-mineral fault which made it clear to me that the collar of the shaft had been started at a point where the ore-bearing series had long since been eroded, and was below the ore-bearing strata, there being a canyon extending from a pass in the mountains downward, forming a V-valley at the place where the shaft was sunk. I stopped the work at the 120-foot level, and advised the president of the company of the true conditions. They ignored the advice as furnished and instructed me to continue the shaft to a depth of 400 feet. No ore-bodies were encountered, proving the deductions previously given were correct. This shaft, however, will be worth a good deal of money in the future operations in entering into the extension of the ore-bodies to be determined by future drilling, there being a long cross-cut to the east which encountered the displacing faults on the east block of the worked-out ore-bodies, affording a good working level through which the ore-body can be picked up by raising to the mineralized horizon. There is also a drift near the shaft along the strike of the post-mineral fault,.extending some 850 feet to south under the old workings, which by extending can be utilized as a haulage way for the ore encountered to the

south and west. This drift was run on the advice of Professor Tellman, then professor of the University of Arizona; however, the work was stopped short of the distance recommended."

"It is my firm conviction that by carrying out a campaign of drilling comparatively short drill holes, the ore-bodies will be found to continue on the downward dip to the west and also be located to the east where there is a large block of ground to be prospected. The drift to the south can be utilized in proving the southerly extension of the known ore-bodies to the south and west."

"Trusting that this report will give you a general outline of the conditions at the Vekol property, I am"

"Respectfully yours,"

"W. J. Forbach"

"Superior, Arizona"

"PO Box 21"

A later report by Mr. J. S. Coupal, Mining Engineer, dated July 10, 1946, described the earlier geologic and development work, and made recommendations as follows:

"DEVELOPMENT. The ore bodies have not been systematically mined but have been irregularly opened up and mined by several thousands of feet of drifts, raises, stopes, open cuts and shafts. The strike of the block faulting is not normal to the dip of the lime bedding in which the ore occurs and the major development has been roughly parallel to the strike of the block faulting so that the major working level is a gentle incline dipping from 5 to 8

degrees downward from the portal. This results in a high cost for the removal of the mined ore. The workings are very irregular."

"Mr. Charles A. Mitke, a mining engineer of high personal standing, acquired a lease and option on the property and spent the greater part of his time from 1932 and 1933 in an intensive study and mapping of the property. He plotted the results of these studies on a sectional glass scaled model of the geology and the underground workings. This model shows the location and existence of several unexplored blocks of virgin area where the productive ore horizon is practically assured."

"The earlier workings were all in oxidized ore. At the southeast end of the developed ore body the Argosy shaft was sunk to a depth of about 300 feet and exploration and development work from the bottom of this shaft opened up a sizeable body of sulphide ores as well as connecting with the old workings for ventilation and for an easier and less costly way of removing the mined ore."

"Due to the irregularity of the mine workings and the unsystemmatic method of development it is impossible for me to call any of the ore "blocked ore". From the habit of the ore occurrence and from observations made I believe it is safe to say that there is practically assured about 15,000 to 20,000 tons of sulphide ore near the Argosy shaft and from 3,000 to 5,000 tons which can be recovered from the oxidized ore when adequate means of removing that ore can be provided."

"There is also a sizeable tonnage of approximately one half million tons of dump ore which, when the proper metallurgy is worked out, might show a substantial profit. This can only be determined by intensive sampling and by careful testing to outline the proper millflow sheet required. In addition to this there is the possibility of being able to handle a large tonnage of outcrop by open cut shovel work. This also calls for careful sample work and flow sheet study."

"RECORDED PRODUCTION. From partial records a production of in excess of $1,000,000 in silver is reported by Mr. J. B. Tenney. It is known that these records were incomplete. From other authentic sources the recorded production is placed at between $3,000,000 and $7,000,000".

"The records of the mine have been lost. Mr. Charles A. Mitke had a complete set of the record with him while in the Phillippines during the 2nd World War and they were all lost."

"CONCLUSION: The Vekol mine has shown a large recorded production of high grade silver ore. A misconception of the relation between the ore occurrence and the step-faulted limestone series resulted in a comparatively large area of virgin ground being left unexplored. The virgin area justifies intensive exploration and development and I do so recommend."

Mr. Coupal's recommendations suggested a three stage exploration and development program, beginning essentially with a sampling and diamond drilling program, then followed by development of any ore that may have been discovered as a result of the diamond drilling

program. The final recommendations were for the construction of a mill to process the ore.

Geology and Ore Deposits

Quoted from a Preliminary Report, Vekol Mine Area, February 27, 1968, by Arthur G. Blucher, Consulting Geologist.

"REGIONAL SETTING. This is a desert region of small mountain ranges separated by broad valleys. Although the maximum relief of the mountain ranges is not great, they are commonly quite rugged in detail. Premineral bedrock outcrops are almost entirely confined to the mountains, and a large part of the region is covered by valley fill or postmineral volcanic rocks:

"Although the geologic history of the region is quite complex when considered in detail, it may be simplified as follows:"

"At the beginning of Late Precambrian time the land surface was fairly even and consisted of Early Precambrian schist and granite."

"Upon this surface there was discontinuous deposition of sediments from Late Precambrian until the end of Mesozoic time. There was little deformation or faulting during this period."

"Active crustal movement beginning in Mesozoic time continued well into Tertiary and was accompanied by the intrusion of various igneous rocks. With some of these intrusives there was associated mineralization."

"Uplift and erosion during middle Tertiary was followed by the deposition of postmineral detrital deposits and the extrusion of a considerable thickness of volcanic rocks. During the period of uplift and erosion some of the above-mentioned mineral deposits were exposed to oxidation and leaching, and the consequent redistribution of mineral values between the surface and the water table. This process resulted in the enrichment of the very large chalcocite--copper deposits of the southwestern U. S. as well as some of the small but high grade silver deposits."

"GEOLOGY AND MINERALIZATION"

At the base of the stratigraphic column in the region of the Vekol Mountains is the much contorted Early Precambrian Pinal Schist, intruded in places by Early Precambrian granite. Unconformably overlying these rocks is the Apache group -- a thick (1500 feet plus) sequence of shale, quartzite, and conglomerate, with one thin bed of limestone. At the top of this sequence is the Troy quartzite, which may be either Late Precambrian or Cambrian in age, depending on the authority quoted. Conformably overlying the Troy is the Cambrian Abrigo Formation, the Martin limestone of Devonian age, and the Mississippian Escabrosa Limestone. Overlying the Escabrosa with an apparent slight disconformity is the Naco limestone of lower Pennsylvanian age."

"At the Vekol Mine the Naco limestone and the underlying Escabrosa limestone form a northwesterly trending ridge rising several hundred feet above the valley floor. These beds strike generally N. 30 W"

"and dip about 25 degrees to the southwest (See Attachment C). Two sets of premineral faults cut these formations with small (10 to 100 feet) apparent displacement. The N. 10-20 W. set shows dips from 70 degrees east to 70 degrees west, and are commonly multiple structures of fractured and brecciated rock. The N. 70-80 E. set dip about 80 degrees north and are commonly straight and clearly defined. The largest of this second set cuts the north end of the old workings and is intruded in places by small andesite dikes. The faults of both types may have been channels of mineralizing hydrothermal solutions, and the porphyry is of a type commonly associated with mineral deposits in southern Arizona."

"According to report the ore extracted from the old workings consisted of small nodules of horn silver, argentite, and silver-bearing tetrahedrite, which during most of the period of production was handsorted to a grade of several hundred ounces of silver per ton. This was mined from small pockets and lenses in the dolomitized upper horizon of the Escabrosa limestone within a few tens of feet of the basal shale bed of the overlying Naco formation. There was associated copper, lead, and zinc -- and carbonates and sulfates of these elements can be found on the dump and in the walls of the old workings. Assays of samples taken during an extensive examination by Duval Corporation averaged 0.02%,Cu, 0.27% Pb, and 0.51% Zn."

"Two samples taken during this examination from typical zones of what appeared to be remnants of strong mineralization left in the walls of old cuts and stopes assayed only 5.7 oz. Ag and 2.1 oz. Ag, with about 0.01 oz. Au. A large sample taken from barren looking material immediately adjacent to those assayed only 0.2 oz. Ag and trace Au. A large (100 lb.) composite sample taken from holes and dug in four places on the dump was rolled and split down to a small sample. This assayed 6.3 oz. Ag and 0.02 oz. Au. The results of Duval's sampling tend to confirm these values."

"From the above sample results, the reported past production, and the size of the old stopes, it would appear that the high grade ore was closely confined to small pods and had little or no low grade fringe. The overall area explored by the old workings amounts to about 300,000 sq. ft. The area of the old stopes shown on Mitke's map is about 6000 sq. ft. or about 2% of the total area explored."

"It is clear then that the search for new ore bodies in the Escabrosa-Naco contact horizon will require detailed geologic studies and close spaced drilling."

"A second observation that can be made is that this mineralization, though spotty, occurs over a wide area, in a stratigraphic horizon several hundred feet above the more favorable replacement horizons of the region, and is related to faults and intrusives which surely cut the deeper beds. This may reflect base metal deposits in the deeper formation. Newmont Mining Corporation has discovered such a deposit about five miles east of the Vekol mine which is reported

to contain about 75 million tons of low grade copper ore." It is reported to contain 0.6% Cu and .01% Mo. Most of the ore is in diabase, but some is in sediments.

Applicant's Proposed Exploration

"SUMMARY"

"Mineralization at the old Vekol Mine consisted of lenses and pods of silver minerals enriched from a low grade deposit of primary Cu-Pb-Zn-Ag minerals in dolomitized and fractured Escabrosa limestone near the base of the overlying Naco limestone. These secondary ore bodies, though rich in silver, were quite small in physical dimensions."

"Primary ore controls appear to have been N-S to N. 30 W. striking faults, N. 75 E. striking faults with attendant andesite porphyry dikes, and the lower surface of the Naco limestone. Secondary enrichment producing high grade silver ore bodies may have been controlled by the coincidence of these geologic features with an ancient water table."

"There are two exploration opportunities here: (A) The search for near surface, high grade, secondarily enriched silver deposits in areas not explored by the old workings; and (B) A test of deeper and more favorable replcement horizons in the underlying formations."

"Either or both of these proposals offer a clear possibility of success. It should be pointed out that Proposal A will require a large expenditure in the search of targets of modest total potential worth, while Proposal B will require a modest expenditure

in search of a target of great potential worth."

"PROPOSAL A"

"Geologic mapping should be done on a scale of 1 inch equals 100 feet to determine the location and attitude of faults and the subsurface level of the Naco-Escabrosa contact. Present geologic knowledge suggests that areas I, II, and II on the attached map might be favorable. This mapping might take one geologist about three weeks depending on the amount of geologic complexity encountered. For the purpose of Mr. Johnson's drilling estimate, an arbitrary figure of 60 drill holes averaging fifty feet in depth was chosen."

"PROPOSAL B"

"For proposal B a second geologic map with two cross-sections should be prepared on a scale of one inch equals 500 feet. Some work will have to be done on outcrops outside of the immediate Vekol area in order to determine the thicknesses of the older formations beneath the Naco and Escabrosa limestone on Vekol Ridge."

"The target horizons here are the lower Martin limestone, the Abrigo formation, and the upper Apache Group. Present knowledge indicates depths to these beds at the upper Vekol workings of about 600 feet, 700 feet, and 1,000 feet, respectively."

"On the attached geologic map are shown five proposed drill hole locations. I, II, and III are a minimal test of Proposal B. The drilling of holes at sites IV and V is contingent on the geologic studies, the results encountered by the first three drill holes, and the acquisition of adjacent property."

"RECOMMENDATIONS"

"Prior to further work on the Vekol Prospect a property study should be made including an accurate survey of the six patented claims, a check of public records, and an inquiry as to the possibility of acquiring adjacent ground onthe Indian Reservation."

"Following this, the geologic studies described under Proposal A and Proposal B should be completed. The results of this work will determine the amount of drilling necessary as a minimal test of the property -- either as Proposal A, Proposal B, or a combination of both."

Appraisal and Recommendations

The results of an on-site field examination made by J. William Hasler, indicates that the appraisal and recommendations made by Mr. Arthur Blucher are essentially correct, in that mineralization at the old Vekol Mine consisted of lenses and pods of silver minerals enriched from a low grade deposit of primary Cu-Pb-Zn and Ag minerals in dolomitized and fractured Escabrosa limestone near the base of the overlying Naco limestone. These secondary ore bodies, though rich in silver, were quite small in physical dimensions.

Primary ore controls appear to have been N-S to N. 30° W. striking faults, N. 75° E. striking faults with attendant andesite porphyry dikes, and the lower surface of the Naco limestone. Secondary enrichment producing high grade silver ore bodies may have been controlled by the coincidence of these geologic features with an ancient water table.

According to the consulting geologist there are two exploration opportunities here: (A) The search for near surface, high grade, secondarily enriched silver deposits in areas not exposed by the old workings; and (b) A test of deeper and more favorable replacement horizons in the underlying formations.

Recommendations by the consulting geologist as well as by the examining geologist emphasize that detailed geologic mapping be completed to especially correlate all of the underground workings with the surface geology, and related faults and mineralized structures. The results of this work would serve as a better guide to ascertain specific target areas to explore for silver, copper, lead and zinc, however, this work should be completed prior to the consideration for any financial assistance from the Office of Minerals Exploration. The applicant was so informed of the necessity for this geologic work. The applicant completed additional geophysical data (enclosed), but has not yet completed the detailed geologic mapping. Mr. Blucher, his consulting geologist, did not return from a foreign assignement in order to more thoroughly complete the geologic work recommended. The map prepared by Mitke (accompanying application) does not show all of the workings observed by the examining geologist, and it may be that additional mining was done after Mitke's lease was allowed to terminate. There are not enough areas where additional sampling will indicate much evidence of ore grade material in the present workings as those workings were thoroughly mined, and sampling to date indicates that the ore grade material

is low grade and may not be commercial unless it is selectively mined.

Sampling by the Duval Corporation showed the following results:

No. of Samples	Cu%	Pb%	Zn%	Ag. oz.
24 (average)	0.0015	0.317	0.699	2.99
25 (average)	0.015	0.182	0.300	0.65

Additional dump sampling by the applicant shown on page 9 (included) shows the dumps to contain mostly low grade material, ranging in value from $11.19 per ton with zinc contributing the major portion of the values.

Tunnel sampling by the applicant showed little values, which is to be expected as there is very little mineralized material left throughout the workings. The previous miners had mined with a fine-toothed comb, so to speak.

It is concluded that the chances of discovering large new reserves of silver, copper and gold at the Vekol Mine are not promising, without first completing detailed geologic mapping. It is therefore recommended that the application be denied without prejudice, and if more specific target areas are delineated at a later date additional exploration work may be warranted.

Illustrations

Figure 1. State Highway map of the state of Arizona showing location of Vekol Mine.

Attachment B. Portion USGS topographic map of the Vekol Mountains, Arizona quadrangle showing location of the Vekol Mine.

Attachment C. Preliminary map Vekol Mining area, Pinal County, Arizona.

Attachment A

FIGURE 1

FREE
CHEVRON
AVE SERVICE

...helps plan your trip free!

Just stop at the sign of the Chevron for a request form. Mail it in postage free and you'll receive a fact-filled trip kit.

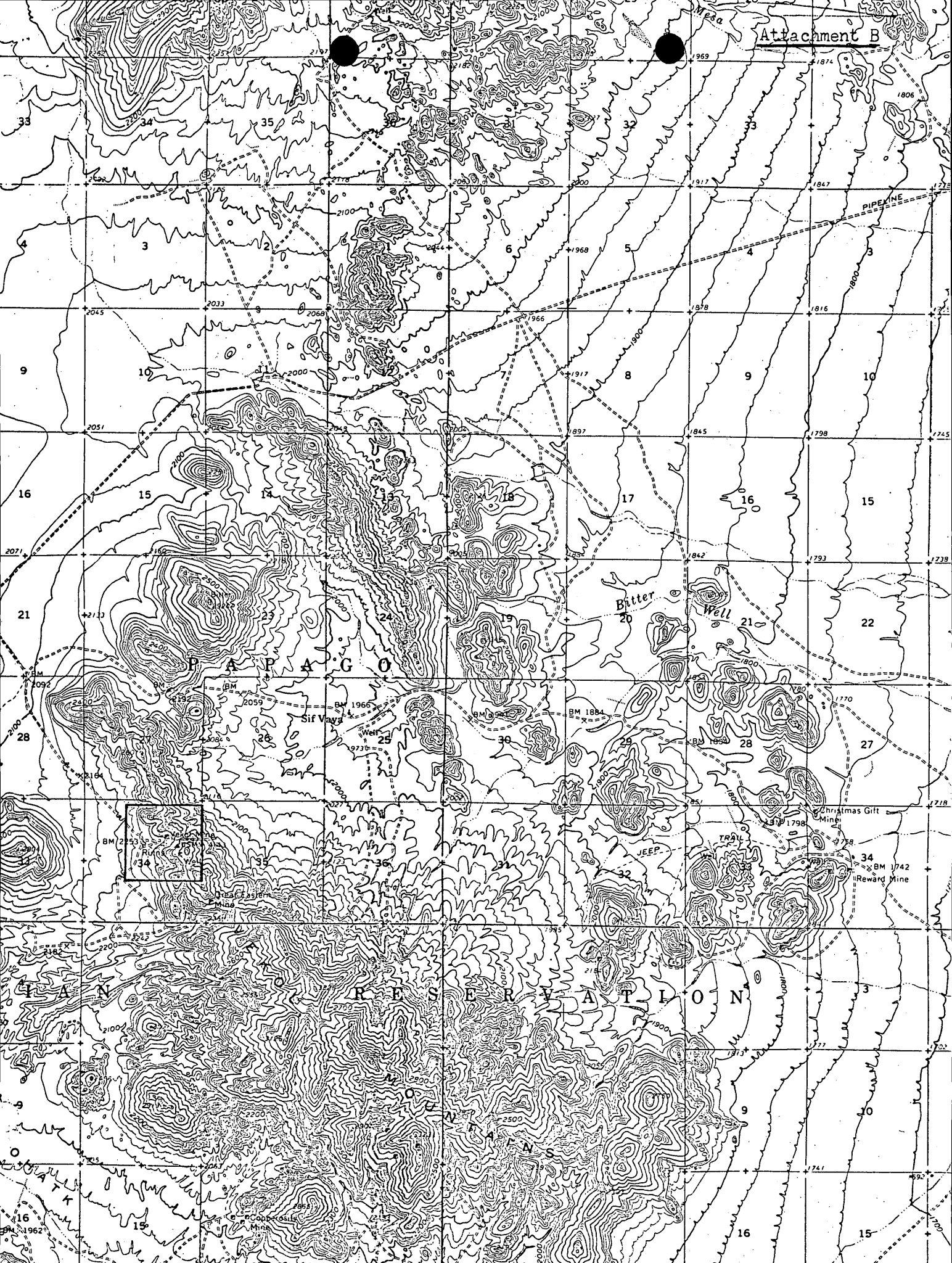
Personalized map, with your route clearly marked.

Highway log, describing points of interest along your route.

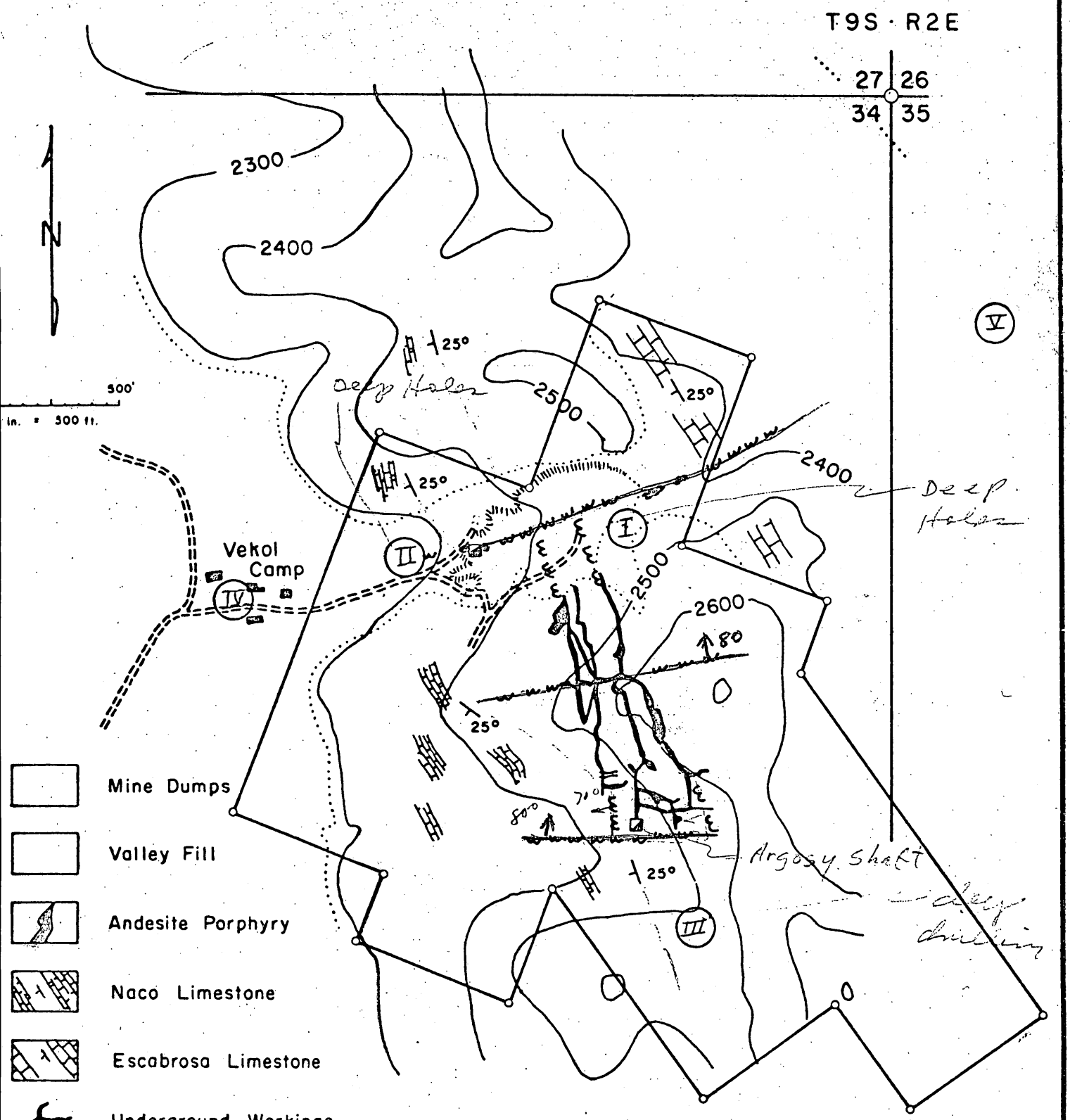
Trip record with expense chart and check list of things to do before leaving.

Accommodation sources, where to write for information on hotels, motels, campsites, national parks and forests.

Attachment B



Attachment C



Mine Dumps

Valley Fill

Andesite Porphyry

Naco Limestone

Escabrosa Limestone

Underground Workings

Major Faults

Property Boundary (Approximate)

Roads

PRELIMINARY MAP
VEKOL MINING AREA
Pinal County, Arizona
Contour Interval 100 ft.
Topography after Vekol Quadrangle U.S.G.S.
A.G.B. Feb. 1968

PHONE 836-5070

Vekol Mining and Exploration Co.

1198 East Rodeo Road
Casa Grande, Arizona 85222

January 6, 1969

OME
RECEIVED
JAN 8 - 1969
Denver, Colorado

Mr. J. William Hasler, Field Officer, Region III
Office of Minerals Exploration
United States Department of the Interior
Building 53, Room 203
Federal Center
Denver, Colorado, 80225

Re: OME 6704 (Silver)
Vekol Mining and Exploration Company
Vekol Mine
Pinal County, Arizona

Dear Mr. Hasler:

Enclosed please find two copies each of two maps of the Vekol area. One map is a copy from the Heinrichs Company who did some I. P. work in the Vekol area. The other map is a copy we have drawn showing the various faults with the shaded areas shown by the red lines on the one map. Also enclosed is a copy of an assay report from Jacobs Assay Office in Tucson. The first four samples pertain only to the dumps and tailings. Sample number five was taken from a 215 foot depth in the Argosy Shaft. This is the deepest workings in this area. Due to the fact the "old timers" had found Sulphide Ore at that depth would indicate that their should be much more in the Argosy area, due to the fact that this is one of the most fractured areas in the mountains. Because this area has not been worked to any great extent, we feel drilling in this area should produce good results. As you will notice on the map, the I. P. crew had high readings in this area indicating a Sulphide Anomaly. The other area indicated by a red line near the main tunnel has shown an Andisite Dike running in an east-west direction. This area has never been drilled. Therefore, it should be drilled to determine the quality and quantity of Sulphide Ore in this area.

If any further information is needed, please contact me.

Sincerely,

Harry Westling

Harry Westling

HW/ma

Mariposa Spectrographic Laboratory

Mariposa, California 95338

WOodland 6-2591

American Land Company
P. O. Box 2464
Phoenix, Arizona

10/15/65

Attention Mr. Norman Twenstrup

Dear Mr. Twenstrup:

Enclosed, find spectrographic analysis report #7948, covering the analysis of your submitted ore sample.

We are very sorry to have held you up for so long a time Mr. Twenstrup. We have had an almost unbelievable amount of analysos here in the laboratory which has of necessity obliged us to do the analyses in their order that we received them. We have made this analysis two days ahead of the date that we would have otherwise been able to have analized it in the order received.

This material is limestone Mr. Twenstrup. It is composed of a dolomitic limestone and a feldspathic rock approximating Orthoclase feldspar or Orthoclase groundmass rock.

It is a well mineralized formation, and contains not only Lead and Zinc in good amounts, but also contains a very good amount of Copper, Silver, along with smaller amounts of Cadmium and Antimony.

Again, our apologies to you and our good wishes in your mining.

Sincerely,

George R. Graves

George R. Graves

lcc

This sample was from the blocked out by grade zone of about 10,000 tons - 1 foot under surface - raw dump ore unconcentrated

EDMUND E. PHILLIPS, Vice-Pres. - Gen. Mgr. M. E. PHILLIPS, Secretary

THE COLORADO ASSAYING COMPANY

(Incorporated)

ASSAYERS AND CHEMISTS

2244 BROADWAY

OUR MOTTO:- "What there is in it, no more, no less."

DENVER, COLO. 80201

March 14, 1966

Report on Spectrographic Analysis submitted by Mr. Donald E. Coombes, Brooks, Oregon

ELEMENTS PRESENT	APPROXIMATE PERCENTAGES
Silicon	Major
Calcium	10.-15.
Magnesium	5.
Zinc	5.-10.
Aluminum	5.-8.
Iron	5.
Lead	2.-5.
Sodium	1.
Potassium	.5
Manganese	.05-.1
Titanium	.1
Arsenic	.01
Antimony	.2-.5
Barium	.01-.03
Cadmium	.005
Chromium	.01
Copper	.3-.5
Lithium	.001
Mercury	.05-.1
Nickel	.002
Strontium	.01
Silver	.01
Vanadium	.002
Yttrium	.01

Gold .01 oz./ton @ $35./oz. - $.35/ton
Silver 3.80 oz./ton @ $1.30/oz. - $4.94/ton
Copper - 0.35% @ $6./ unit - $2.10/ton
Lead - 3.0% @ $2.50/unit - $7.50/ton
Zinc - 7.3% @ $1.50/unit - $10.95/ton
Uranium, Thorium - None detected

REMARKS:

The heavy white minerals in this sample are Cerussite (lead carbonate) and Smithsonite (zinc carbonate).
The gangue consists of soft Dolomite (calcium and magnesium carbonate), fine Sand (mostly silica), soft Clay (complex hydrous aluminum silicate) and the red-brown Hematite (iron oxide).
The Silver, Copper, Lead and possibly Zinc and Mercury contents are of interest.

Respectfully submitted,

THE COLORADO ASSAYING COMPANY

BY Ed Phillips

LABORATORY REPORT

Mariposa Spectrographic Laboratory

Star Route, Mariposa, California
Telephone WOodland 6-2591

LAB NO. 7948

SUBMITTED BY:

American Land Co.
P. O. Box 2464
Phoenix, Arizona 85002

Qualitative Spectrographic Analysis

Date 10/15/65

ELEMENTS FOUND
AND ESTIMATED PERCENTAGE RANGE
OF CONCENTRATION

SAMPLE MARK
No mark

VEKOL MINE DUMP ANALYSIS

ELEMENT	Not Less Than %	Not More Than %	ELEMENT	Not Less Than %	Not More Than %	ELEMENT	Not Less Than %	Not More Than %
luminum	4.0	10.0	Lithium			Thallium		
ntimony	0.05	0.25	Magnesium	3.0	8.0	Thorium		
rsenic			Manganese	0.03	0.15	Tin	.002	.005
rium	.005	0.05	Mercury			Titanium	.001	.006
eryllium			Molybdenum	.0008	.004	Tungsten		
smuth			Nickel	.003	0.02	Uranium		
ron			Osmium			Vanadium	.002	.009
lcium as CaO	4.0	12.0	Palladium			Zinc	2.0	7.0
dmium	0.05	0.20	Phosphorus			Zirconium		
sium			Platinum Not detected in sample			RARE EARTHS:		
hromium	0.01	0.10	Potassium	0.20	0.80	Cerium		
balt	.0008	.004	Rhenium			Dysprosium		
olumbium			Rhodium			Erbium		
opper	0.30	1.25	Rubidium			Europium		
allium	.002	.007	Ruthenium			Gadolinium		
ermanium			Scandium			Holmium		
old Not detected in sample			Silicon (as SiO2)	20.0	40.0	Lanthanum		
afnium			Silver	0.03	0.15	Neodymium		
dium			Sodium	0.20	0.80	Praseodymium		
dium			Strontium	.005	0.05	Samarium		
on	4.0	10.0	Tantalum			Ytterbium		
ead	2.0	7.0	Tellurium			Yttrium	.001	.004

arks: See letter.

Respectfully Submitted

George D. Francis Spectrographer

MARIPOSA SPECTROGRAPHIC LABORATORY

Silver, oz.	Lead, %	Zinc, %
One of the three main lower dumps		
2.52	0.56	1.60
3.33	0.51	1.80
2.26	0.41	1.20
2.65	0.66	2.40
Middle dump, screened to 3/4 minus		
4.40	3.35	4.90
4.10	2.00	5.60
4.50	4.40	9.15
Upper dump		
7.60	2.70	not run
10.80 ?	4.80	not run
4.70	1.80	not run
Tailings		
3.40	3.10	5.30
4.60	2.90	5.80
4.60	3.95	5.80
4.60	3.90	4.60
2.70	1.35	2.45
Tailings, wet run jig		
26.40	34.06	20.90
52.40	20.00	not run

Silver, oz.	Lead, ppm.	Zinc, ppm.
Taken at 100 foot intervals in main tunnel.		
4.80	3300	12,500
7.30	8000	29,000
1.50	9000	10,300
.75	1350	4,500
2.60	3200	8,100
1.70	2800	6,500
11.46	1000	28,000
.60	1000	400
2.70	4500	5,000
5.50	7000	1.900
1.80	25,000	4,000

OME 6704

30 So. Main St.
P. O. Box 1889

Jacobs Assay Office

Registered Assayers

PHONE MA 2-0813

85702 Tucson, Arizona, Dec 27th, 1968

Sample Submitted by Mr. Verde Mining & Exploration Co

Sample Marked	GOLD Ozs. per ton ore	GOLD Value per ton ore * $	SILVER Ozs. per ton ore	COPPER ~~Per cent Wet Assay~~	LEAD Per cent Wet Assay	Zinc Per Cent Wet Assay	Mercury Per Cent Wet Assay	~~Per Cent Wet Assay~~
V I			0 6/10	1/2+ DUMP				
III			0 2/10	No 10+ SCREENED		TAILINGS		
III			1 5/10	No 10- SCREENED		"		
IV			9 2/10	TAILINGS CONCENTRATE	2 0/10	4 5/10	0 02/100	
V			143 3/10	ARGOSY	23 1/10	5 7/10	(CONTAINS-COPPER)	

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P. JACOBS
Dec 27, 19 68
Arizona U. S. A.

* Gold Figured $35.00 per oz. Troy

Charges $ 24 50

Very respectfully,

Ben P. Jacobs

Office of Minerals Exploration
Building 53 Room 203

OFFICIAL COPY
O. M. E.
RECEIVED
DEC 18 1968
INITIALS CODE
130
120M
110
120
20

December 16, 1968

Mr. Harry Westling d/b/a
Vekol Mining and Exploration Company
1198 East Rodeo Road
Casa Grande, Arizona 85222

Re: OME 6704 (Silver)
Vekol Mining and Exploration Company
Vekol Mine
Pinal County, Arizona

Dear Mr. Westling:

During the time of my field examination on May 22, 1968 you thought you would have the additional geologic data requested by me some time in July 1968, after your consultant, Mr. Arthur G. Blucher returned from abroad. Do you yet have any additional geologic data? Would you please inform us of your present plans concerning your application to the Office of Minerals Exploration for financial assistance in minerals exploration at the Vekol mine.

Sincerely yours,

J. William Hasler

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME
OME chron
Mr. Hasler
OME 6704

Office of Minerals Exploration
Building 53 Room 203

May 31, 1968

Mr. Harry Westling d/b/a
Vekol Mining and Exploration Company
1198 E. Rodeo Road
Casa Grande, Arizona 85222

SUBJECT: OME-6704 (Silver and other minerals)
Vekol Mining and Exploration Company
Vekol Mine
Pinal County, Arizona

Dear Mr. Westling:

Thank you for your fine hospitality extended me on my recent trip to make a field examination on the above-stated subject.

Enclosed is the sample of estimated costs I told you I would send.

Sincerely yours,

J. William Hasler

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

Enclosure

cc: Chief, OME
cc: OME-6704
OME chron
Mr. Hasler

Office of Minerals Exploration
Building 53 Room 203

OFFICIAL COPY
25

April 23, 1968

Honorable Morris K. Udall
2d District of Arizona
455 House Office Building
Congress of the United States
House of Representatives
Washington, D. C. 20515

Subject: OME-6704 (Silver)
Harry Westling d/b/a
Vekol Mining & Exploration Company
Pinal County, Arizona

Dear Representative Udall:

This letter is in answer to your letter dated April 19, 1968 which was received in this office April 22, 1968. The letter is in regards to Office of Minerals Exploration application 6704 (Silver), Vekol Mining and Exploration Company, Vekol Mine, Pinal County, Arizona, prepared by Mr. Harry Westling, Casa Grande, Arizona.

The application was referred to the field for review, a field examination and recommendation on April 10, 1968. Because of previous commitments it has been impossible to set a date for a field examination on the subject property until after the first part of May, 1968. Mr. Westling will be contacted within the next two or three days relative to scheduling a field examination on the subject property.

Sincerely yours,

J. William Hasler

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME
OME chron
Mr. Hasler
OME-6704

MORRIS K. UDALL
2D DISTRICT OF ARIZONA
455 HOUSE OFFICE BUILDING

COMMITTEES:
INTERIOR AND INSULAR AFFAIRS
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

April 19, 1968

OME Region III
RECEIVED
APR 22 1968

Mr. J. William Hasler
Field Officer
Office of Minerals Exploration
Room 203, Building 53
Denver Federal Center
Denver, Colorado 80225

Dear Mr. Hasler:

I am writing in regard to application O.M.E.-6704(Silver) filed by Vekol Mining and Exploration Company, Pinal County, Arizona, Mr. Harry Westling.

I understand the application has been forwarded to you and would appreciate your advising me as to such time as you have had an opportunity to make some determination. Mr. Westling is anxious to receive help under this application.

Sincerely,

Morris K. Udall

Morris K. Udall

lmn

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/8/68	RM Smith	120
		120
		110
		220
		120M

APR 10 1968

AIRMAIL

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: OME-6704 (Silver)
Vekol Mining and Exploration Co.
Vekol Mine
Pinal County, Arizona

The application is referred to Region III for review, a field examination, and recommendations. Copies of supplemental maps and bank letters are enclosed.

The application was submitted to this office in person by the Applicant and was discussed with him at that time. Lien and Subordination Agreements, new bank letters, and maps were then submitted. One additional map showing geology, assays (?) and target areas was mailed to this office about March 29 but has not been received. A copy of this map should be obtained during the field examination. The Applicant has not answered any of the questions on the back of the application form, but the accompanying exhibits provide incomplete answers to most of them. Further requests prior to a field examination are unlikely to yield complete information and will delay processing unnecessarily.

During your examination you should confirm that the Applicant can furnish his share of the costs. Financial eligibility appears to be established by the financial statement, even though the bank letters are unacceptable. In your report please comment on these factors.

The question of eligible mineral is not clear. Two drilling projects are proposed, one to test the shallow oxide zone, the other to test the deeper sulfide zone. Since secondary enrichment of silver in the oxide zone is to be expected, the shallow drilling may qualify, but in the sulfide zone the principal minerals are evidently base metals and the deep drilling may not qualify.

This application may be premature as it appears that one or both proposed projects are in the prospect stage. The Applicant's consultant recommends preliminary geologic mapping to "...determine the amount of drilling necessary as a minimal test of the property -- either as Proposal A, Proposal B, or a combination of both." The preliminary mapping should be

done at the Applicant's expense if it is needed to determine whether or not there are exploration targets. Perhaps the map that was lost in the mail indicates specific targets. If so please obtain two copies.

If you recommend a contract a cost estimate will be required. The cost summary in the consultant's Preliminary Report is inadequate.

Harold Simons

for Frank E. Johnson

Enclosures

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Smith
130

RMSMith/bsl 4/8/68

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/8/68	RMSmith	120
		120
		110
		220
		120M

APR 10 1968

AIRMAIL

Mr. Harry Westling d/b/a
Vekol Mining and Exploration Co.
1198 E. Rodeo Road
Casa Grande, Arizona 85222

Re: OME-6704 (Silver)
Vekol Mining and Exploration Co.
Vekol Mine
Pinal County, Arizona

Dear Mr. Westling:

Your application for financial assistance in exploring the referenced mine has been reviewed by the Washington Office and referred to Mr. J. William Hasler, Field Officer, Office of Minerals Exploration, Room 203, Building 53, Denver Federal Center, Denver, Colorado 80225.

Mr. Hasler will notify you if additional information is needed, or to arrange a field examination if necessary.

The map that you mailed to us about March 29 has not been received. If it arrives we will send a copy to the Field Officer; if it does not, two additional copies will be required. The Field Officer will notify you if they are needed.

Sincerely yours,

Harold Kirkham (glh)
for Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
Mr. Smith
Region III

RMSmith/bsl 4/8/68

602-
PHONE 836-5070

Vekol Mining and Exploration Co.

HARRY WESTLING, MGR.

1198 E. RODEO ROAD CASA GRANDE, ARIZ. 85222

Copy WR-1

Arizona Land Title AND TRUST COMPANY

ARIZONA'S ONLY HOME-OWNED STATEWIDE TITLE COMPANY

6704

March 11, 1968

OFFICIAL COPY
O. M. E.
RECEIVED
MAR 13 1968

INITIALS	CODE
	130
	120
	110
RMS	

Mr. Frank Johnson
Room 4460
Interior Department Building, O.M.E.
18th and "C" Street, N. W.
Washington, D. C.

Re: Vekol Mining & Exploration Company
Harry Westling

Dear Mr. Johnson:

Enclosed find copies of letters of request and letters of refusal from both the First National Bank of Arizona and the United Bank. These items are being forwarded at the request of Mr. Harry Westling in conjunction with his request of Exploration funds.

Sincerely,

Jim Gatlin

Jim Gatlin
Manager

JAG/ma
Encl.

These letters are even less acceptable than the original letters, but in conjunction with the financial statement they indicate that in actual fact funds are not available from the two banks.
RMS.

☐ MOHAVE COUNTY — 301 OAK STREET P. O. BOX 1270 KINGMAN, ARIZONA 86401 TELEPHONE (602) 753-5581

☐ MOHAVE COUNTY — P. O. BOX 827 BULLHEAD CITY, ARIZONA 86430 TELEPHONE (602) 754-8503

☐ NAVAJO AND APACHE COUNTIES — 105 NORTH 5TH AVENUE P. O. BOX 764 HOLBROOK, ARIZONA 86025 TELEPHONE (602) 524-3758

☒ PINAL COUNTY — 203 FLORENCE STREET P. O. BOX 236 CASA GRANDE, ARIZONA 85222 TELEPHONE (602) 836-8293

TITLES INSURED BY LAWYERS TITLE INSURANCE CORPORATION RICHMOND, VIRGINIA

PHONE 836-5070

Vekol Mining and Exploration Co.

1198 East Rodeo Road
Casa Grande, Arizona 85222

March 11, 1968

First National Bank of Arizona
P. O. Drawer B
Casa Grande, Arizona

Gentlemen:

Enclosed find mining reports covering the Vekol Mines. One report was prepared by W. J. Forbach, a former mine superintendant and the other by G. Arthur Blucher, a recognized Geologist and Albert S. Johnson, a registered Petroleum Engineer of vast experience.

These reports are offered as evidence of sufficient collateral in support of our request for a loan in the amount of $58,750.00 for the purpose of completing road work required to put this property into production.

Your earliest attention to this matter will be greatly appreciated.

Sincerely,

Harry Westling

Harry Westling
dba Vekol Mining and Exploration
Company

March 11, 1968

Vekol Mining and Exploration Company
1198 East Rodeo Road
Casa Grande, Arizona

Gentlemen:

We have reviewed the reports on the Vekol Mine by W. J. Forbach, dated 7/12/46, and by Arthur G. Blucher, dated 2/27/68.

We regret that even though these reports appear to be very favorable we have no funds available for this type of investment at this time.

FIRST NATIONAL BANK OF ARIZONA

By_____

PHONE 836-5070

Vekol Mining and Exploration Co.

1198 East Rodeo Road
Casa Grande, Arizona 85222

March 11, 1968

The United Bank
P. O. Box 1139
Casa Grande, Arizona

Gentlemen:

Enclosed find mining reports covering the Vekol Mine. One report was prepared by W. J. Forbach, a former mine superintendant, and the other by G. Arthur Blucher, a recognized Geologist, and Albert S. Johnson, a registered Petroleum Engineer of vast experience.

These reports are offered as evidence of sufficient collateral in support of our request for a loan in the amount of $58,750.00 for the purpose of completing road work required to put this property into production.

Your earliest attention to this matter will be greately appreciated.

Sincerely,

Harry Westling

Harry Westling
dba: Vekol Mining and Exploration Company

March 11, 1968

Vekol Mining and Exploration Company
1198 East Rodeo Road
Casa Grande, Arizona

Gentlemen:

We have reviewed the reports on the Vekol Mine by W. J. Forbach, dated 7/12/46, and by Arthur G. Blucher, dated 2/27/68.

We regret that even though these reports appear to be very favorable we have no funds available for this type of investment at this time.

THE UNITED BANK

By Allan C Gustafson AVP

October 21, 1966

HEINRICHS GEOEXPLORATION COMPANY

806 WEST GRANT ROAD, TUCSON, ARIZONA 85703. P.O. BOX 5671. PHONE (AREA CODE 602) 623-0578

Duval Corporation
4715 E. Fort Lowell
Tucson, Arizona 85716

Attn: Mr. C. W. Lorenz

Re: Air Magnetics, Vekol Mine Project
Papago Indian Reservation, Arizona

Gentlemen:

The following is our report on the above reference project:

Anomaly A is likely related to sub-alluvial basalt or pyroclastics. Anomaly B is probably the southern extension of Anomaly A. However, according to Robert Carpenter's 1947 dissertation, the basalt and pyroclastics to the north dip north or away from these anomalies, thus lessening the aforementioned probability.

Anomaly A could be associated with intrusive in contact with sediments at depth. Although slight, this possibliy does offer some exploration potential. A preliminary geologic check including ground magnetics is essential in precisely locating the anomaly as well as being helpful to establish its vertical intensity, amplitude and character.

Lineation "x" is a poorly defined, apparently shallow magnetic low of 30 or 40 gamma intensity which may be due solely to contour phenomena (a particular combination of flight paths, elevation and contour interval which can show several minor distinctly separate features as continuous). The possibility of Lineation "x" being artificial, is even greater because it runs parallel to, rather than cutting across magnetic profiles. Yet, it does show and does cross Vekol Mine mineralization and therefore should be checked.

Lineation "y" is more definite but appears as a deep seated fault or contact possibly relating to ore control for the Great Eastern Mine.

Both "x" and "y" indicate mineralization in the vicinity of the Vekol and Great Eastern Mines and should be checked for magnetic identity with ground magnetics. A suggested profile direction would be NW roughly paralleling topography. The final selection of grid and/or profile direction should, of course, be selected by a geologist on location.

Because of excellent correlation with topography and known geology, Anomalies C, D and D' are probably due to Basalt and/or pyroclastics.

Anomaly F. is probably a basin effect.

Anomaly G. is probably due to a basin effect or thicker sections of sediments.

Respectfully,

HEINRICHS GEOEXPLORATION CO.

John W. Langs

John W. Langs
Geophysicist

JWL:jh

TOTAL INTENSITY AIRBORNE MAGNETIC SURVEY

VEKOL MINE PROJECT

PAPAGO INDIAN RESERVATION, ARIZONA

For

Duval Corporation

October 1966

By

Heinrichs Geoexploration Company
P. O. Box 5671 Tucson, Arizona
Phone: 623-0578 Area Code:602

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
INTERPRETATION, CONCLUSIONS AND RECOMMENDATIONS	1
LINEATIONS	2
PROCEDURE	2

IN MAP POCKET:

Profiles 1 through 10 (in original only)

Maps 1. Contour Mag Plan Scale 1"=1000'
2. U.S.G.S. Topo Plan Scale 1"=1000'

INTRODUCTION

At the request of Mr. C. W. Lorenz of the Duval Corporation, Heinrichs Geoexploration Company, Airborne Division conducted an airborne magnetic survey in the vicinity of the Vekol Mine, Section 34, T9S, R2E, Papago Indian Reservation, Arizona on October 14, 1966. Compilation of data was commenced on October 17, 1966 and copies of the records and the location of flight lines was handed to Mr. Lorenz the same day.

A preliminary letter report was completed October 21, 1966 and a verbal discussion of this interpretation was conducted October 24, 1966 between Mr. Lorenz of Duval Corporation and Mr. John Langs, Geoex staff Geophysicist.

INTERPRETATION, CONCLUSIONS AND RECOMMENDATIONS

Anomaly A

Anomaly A is probably the southern extension of Anomaly B and could be associated with intrusive in contact with sediments at depth. Although slight, this possibility does offer some exploration potential. A preliminary geologic check including ground magnetics is essential in precisely locating the anomaly as well as being helpful to establish its vertical intensity, amplitude and character.

Anomaly B

Anomaly B is likely related to sub-alluvial basalt or pyroclastics. However, according to Robert Carpenter's 1947 dissertation, the basalt and pyroclastics to the north dip north or away from these anomalies, thus lessening the aforementioned probability.

Anomaly C, D, & D'

Because of excellent correlation with topography and known geology, Anomalies C, D, and D' are probably due to Basalt and/or pyroclastics.

Anomaly E

Omitted.

XERO COPY XERO COPY XERO COPY XERO COPY

Anomaly F

Anomaly F is probably a basin effect.

Anomaly G

Probably due to a basin effect or thicker sections of sediments.

Lineations

Lineation "x" is a poorly defined, apparently shallow magnetic low of 30 or 40 gamma intensity which may be due solely to contour phenomena (a particular combination of flight paths, elevation and contour interval which can show several minor distinctly separate features as continuous). The possibility of Lineation "x" being artificial, is even greater because it runs parallel to, rather than cutting across magnetic profiles. Yet, it does show and does cross Vekol Mine mineralization and therefore should be checked.

Lineation "y" is more definite but appears as a deep seated fault or contact possibly relating to ore control for the Great Eastern Mine.

Both "x" and "y" are apparently related to mineralization in the vicinity of the Vekol and Great Eastern Mines and should be checked for magnetic identity with ground magnetics. A suggested profile direction would be NW roughly paralleling topography. The final selection of grid and/or profile direction should, of course, be selected by a geologist on location.

Procedure

A Varian total intensity proton magnetometer using a Landers, Frary and Clark 10" rectilinear chart recorder with a sensitivity of +/- 1 gamma was used for the survey. The instruments were mounted in a Cessna 206 and the plane was flown at a speed of approximately 120 miles per hour at a controlled elevation of 500' above the terrain. A precise, radar altimeter with a sensitivity of +/- 1% at 500' was used to indicate terrain clearance.

Flight path recovery was performed by coordinating the pilot and navigator and using topo maps and photo mosaics for visual on ground recognition.

Three tie lines were flown in addition to the regular flight paths to permit more accurate contouring of the data.

Chart paper is specially designed for Geoex and is read from right to left with increasing values in gammas with the top of the record indicated by 10 on the vertical scale and is 1000 gamma across the chart. The vertical scale is printed each six inches across the record.

The horizontal scale is 6" per minute. Checkpoints are as indicated on the record in a brown ink. These points are called out on the intercom by the navigator and plotted in flight on the chart by the observer.

Magnetic data is presented in profile form and in contour plan form at a scale of 1"=1000'. The flight path recovery map is plotted also on an enlarged U.S.G.S. topographic map at a scale of 1"=1000'.

Interpretation was by John Langs, geophysicist of Geoex's staff and the following Geoex personnel also worked on the project. Richard Barrett, pilot, James Bush, instrument observer, and James Bauersachs, navigator.

Respectfully submitted,

HEINRICHS GEOEXPLORATION COMPANY

John W. Langs

John W. Langs
Geophysicist

APPROVED: _____
E. Grover Heinrichs
Vice President

October 31, 1966
P. O. Box 5671
Tucson, Arizona

HEINRICHS GEOEXPLORATION COMPANY

DUVAL CORPORATION
COPPER DIVISION — ESPERANZA PROPERTY
SAHUARITA, ARIZONA

CERTIFICATE OF ASSAY

Aug. 19, 1966

SPECIAL FOR GEOL. DEPT. (C.W.L.)

BEAKER NOS.	MARKS, ETC.	SAMPLE GMS.	Cu ppm	Pb ppm	Zn ppm	Au oz/ton	Ag oz/ton
	1575-11		590	1400	5700	.006	2.50
	12		15	50	90	Nil	1.90
	13		43	10	50	Nil	.03
	14		470	3100	7500	Nil	2.10
	15		21	40	60	Nil	.02
	16		480	6800	16,000	Nil	2.30
	17		460	3100	9000	Nil	2.33
	18		78	1800	4200	Nil	.70
	19		180	2800	10,000	Nil	.85
	20		38	60	185	Nil	.12
	21		80	1600	4000	Nil	.57
	22		157	1450	4900	Nil	.95
	23		680	3300	12,500	Nil	4.80
	24		1160	8000	29,000	Nil	7.30
	25		195	9000	10,300	Nil	1.50
	26		110	1350	4500	Nil	.75
	27		168	3200	8100	Nil	2.60
	28		200	2800	6500	Nil	1.70
	29		890	1000	28,000	Nil	11.46
	30		28	1000	400	Nil	.60
	31		190	4500	5000	Nil	2.70
	32		540	7000	1900	Nil	5.50
	33		830	25,000	4000	.002	1.80
	34		22	500	140	Nil	.05
							55.13

FORM 311 M.L.

7625 8886 172,025 .008

AEB

3

DUVAL CORPORATION
COPPER DIVISION — ESPERANZA PROPERTY
SAHUARITA, ARIZONA

Cl.

CERTIFICATE OF ASSAY

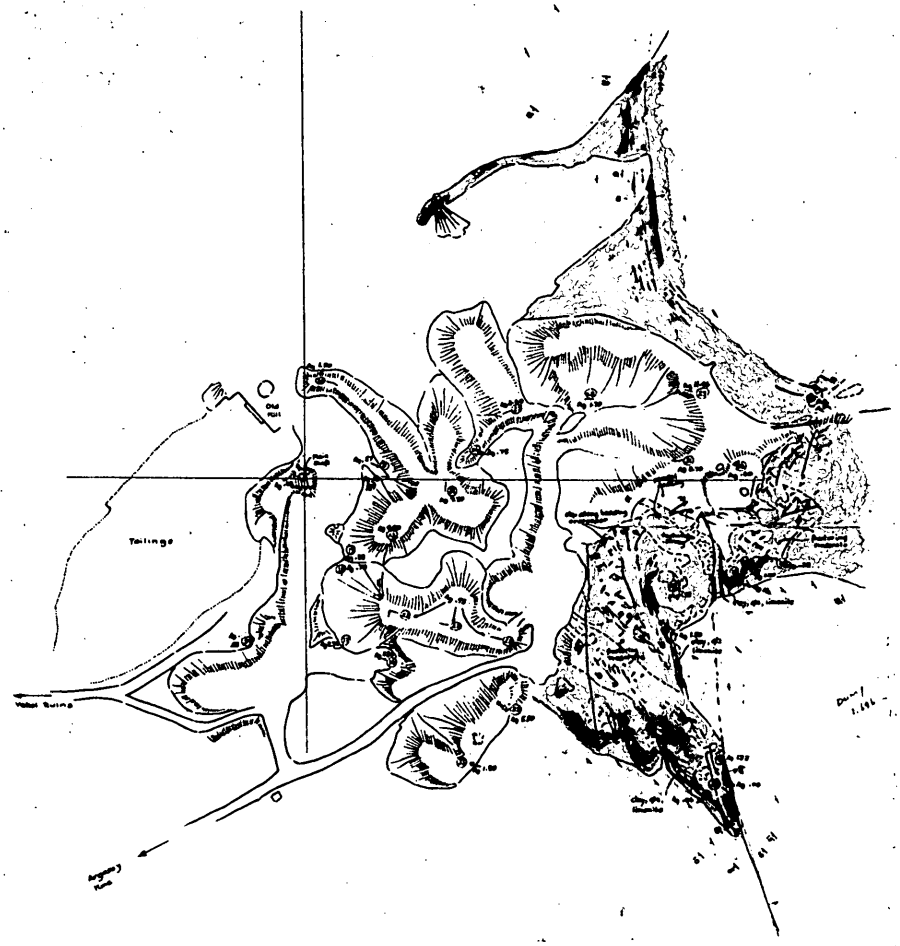
SPECIAL FOR GEOL. DEPT. (C.L.)

Aug. 25, 1966

TAKER NOS.	MARKS, ETC.	SAMPLE GMS.	Cu ppm	Pb ppm	Zn ppm	Ag oz/ton		
	EX 1575-35		250	1900	3000	.09		
	36		28	275	200	.09		
	37 Shale		28	288	200	.04		
	38		32	350	300	.04		
	39		32	250	125	.04		
	40		765	5000	14,000	1.73		
	41		167	1300	1850	1.50		
	42		45	1300	1680	.58		
	43 Shale		35	200	190	Nil		
	44		80	3000	8560	1.00		
	45		130	1200	1430	.22		
	46		40	150	100	.09		
	47 Efau		32	150	100	.13		
	48		32	250	100	.09		
	49		45	1000	800	.18		
	50		102	1900	1650	.18		
	51		102	2000	1650	.40		
	52		36	1400	3460	.22		
	53		157	1500	1260	.26		
	54		483	2400	4570	.22		
	55		46	900	500	.17		
	56		272	1000	970	5.40		
	57		220	3000	14,200	1.70		
	58		455	14,000	15,800	2.00		
	59		35	1000	560	Nil		
	25							
			3,649	45,713	77,255	16.37	→	

FORM 311 M.L.

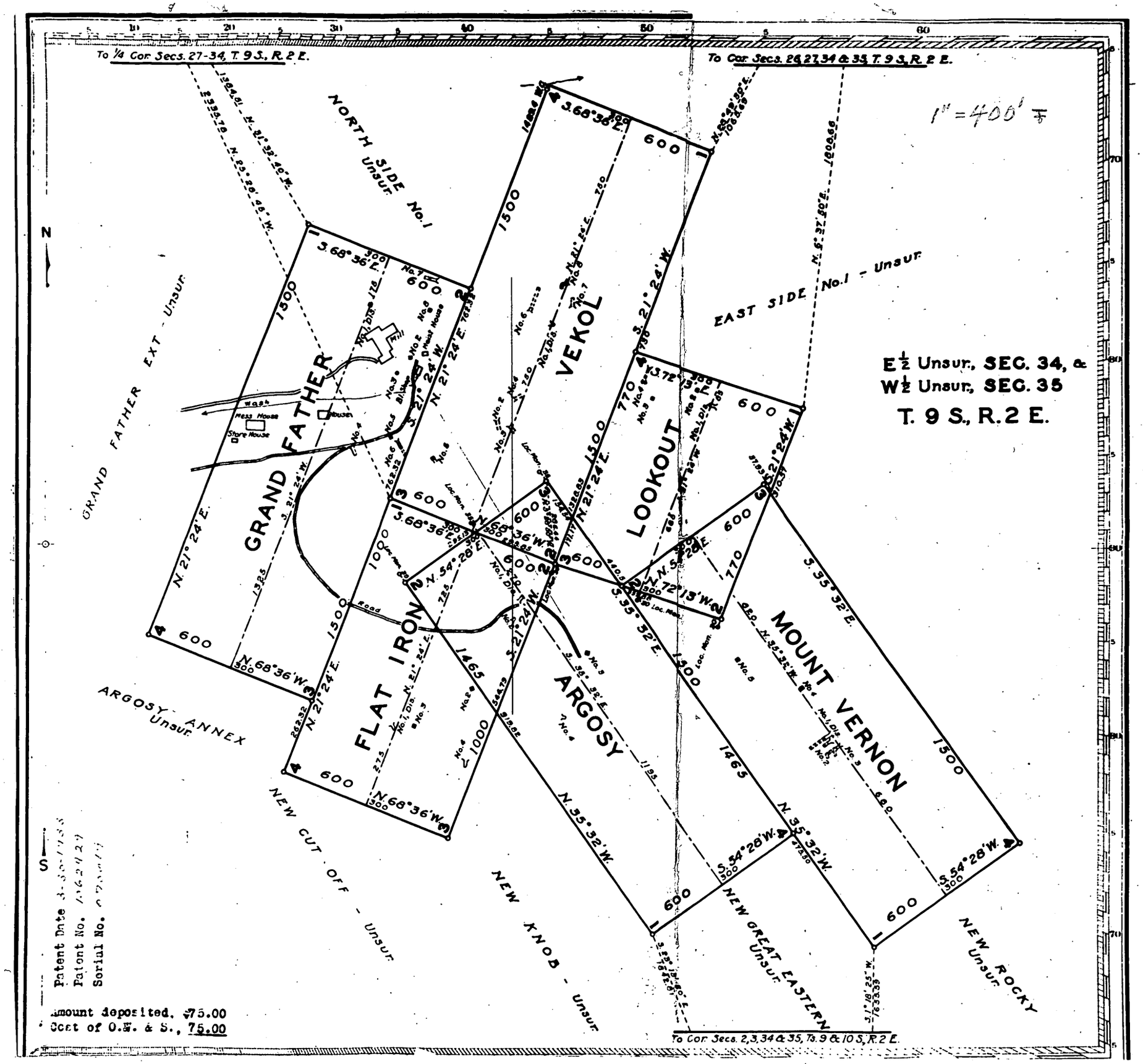
C.G.



EXPLANATION

- LIMESTONE, UPPER LEVELS
- DOLOMITE
- DIORITE – DIABASE
- STRUCTURES
- STRONG MINERALIZATION / ALTERATION
- FRACTURING

DUVAL CORPORATION – EXPLORATION DEPT	STATE ARIZONA
VEKOL MINE	COUNTY PINAL
SURFACE GEOLOGY	T9S, R2E
DRAWN BY C.W.L. / DESIGNED BY C.W.L. / DATE AUGUST 22, 1969	MAP NO.
100 0 100 200	PLATE



Patented 9-26-1933

Mineral Survey No. 4143

ARIZONA Land District.

PLAT

OF THE CLAIM OF

Paul R. Daggs

KNOWN AS THE

VEKOL, MOUNT VERNON, ARGOSY, GRAND FATHER, LOOKOUT, and FLAT IRON lodes

IN Casa Grande *MINING DISTRICT,*
Pinal *COUNTY,* Arizona
Containing an Area of ..... *Acres.*
Scale of 300 *Feet to the inch.*
Variation 14° 40' E.
SURVEYED March 18 - 24 *19* 31 *BY*
Harry E. Jones,
U. S. Mineral Surveyor,

The Original Field Notes of the Survey of the Mining Claim of Paul R. Daggs *known as the*

VEKOL, MOUNT VERNON, ARGOSY, GRAND FATHER, LOOKOUT, and FLAT IRON lodes

from which this plat has been made under my direction, have been examined and approved, and are on file in this Office, and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claims by claimant ..... *or his* ..... *grantors and that said improvements consist of* 16 cuts, 12 tunnels, 13 shafts, 1 well and 2 drifts, together with an intricate system of at least 3 miles of underground development, total value $255,907, of which $172,600 is reserved for 16 unsurveyed claims;

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

PUBLIC SURVEY OFFICE
Phoenix, Arizona.
May 7, 1931.

John D. Adams
Office Cadastral Engineer
at Phoenix, Arizona.

March 5, 1968

Mr. Harry Westling d/b/a
Vekol Mining and Exploration Co.
1198 E. Rodeo Road
Casa Grande, Arizona 85222

Subject: OME-6704

Dear Mr. Westling:

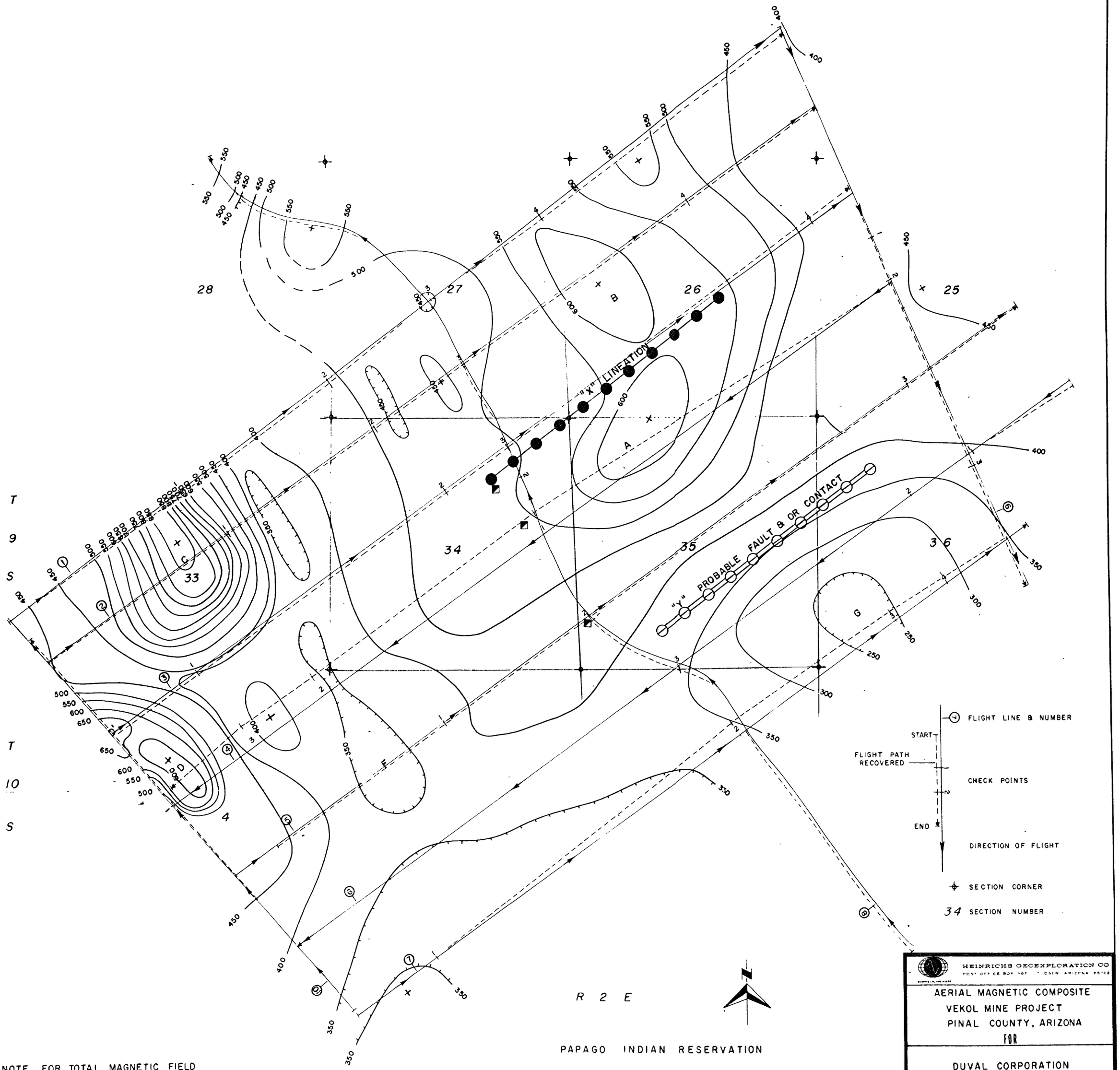
Your application for exploration assistance, dated February 29, 1968, submitted to our office at Washington, D. C., has been assigned Docket No. OME-6704.

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

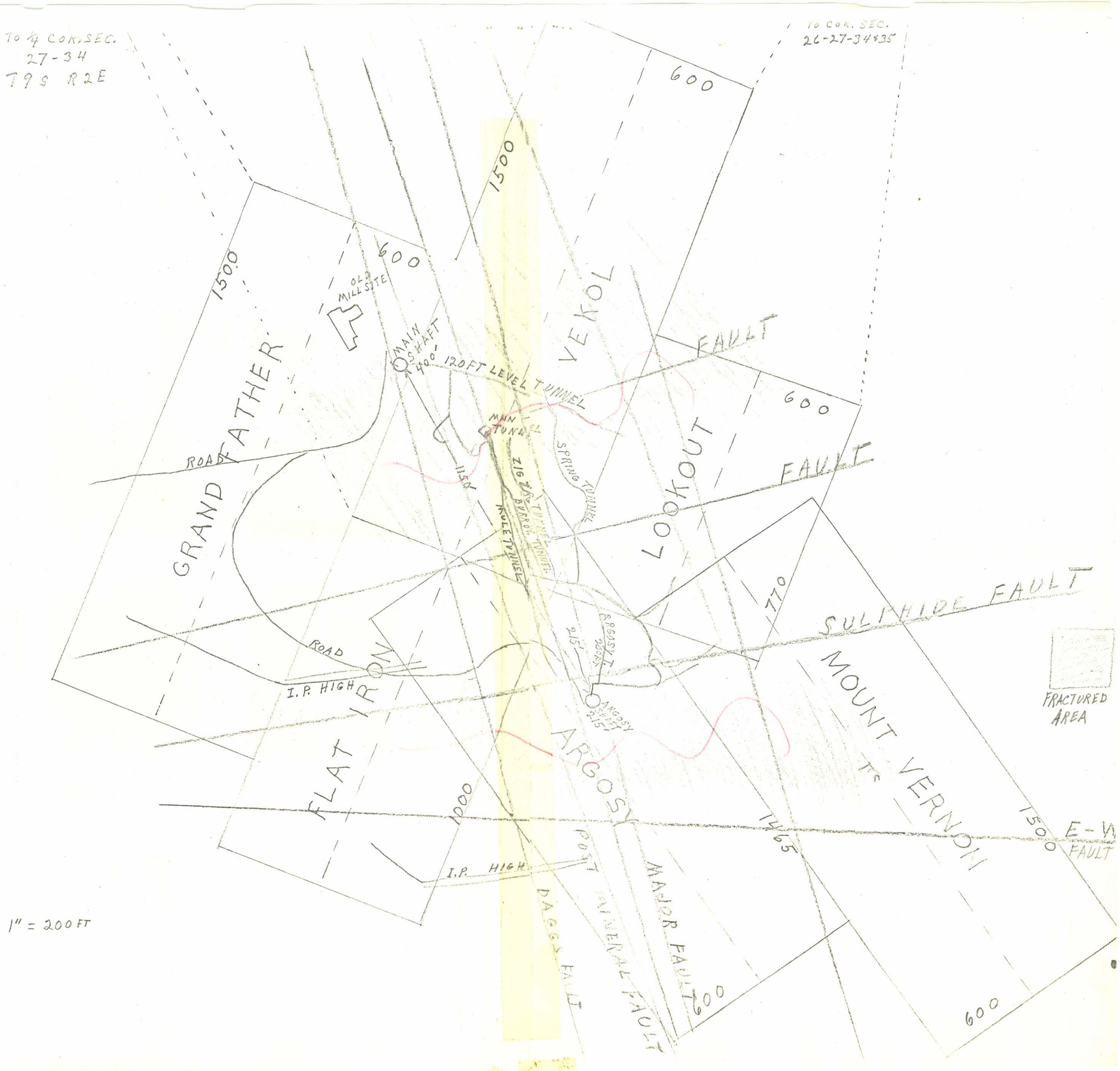
Sincerely yours,

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy to Region III with all attachments



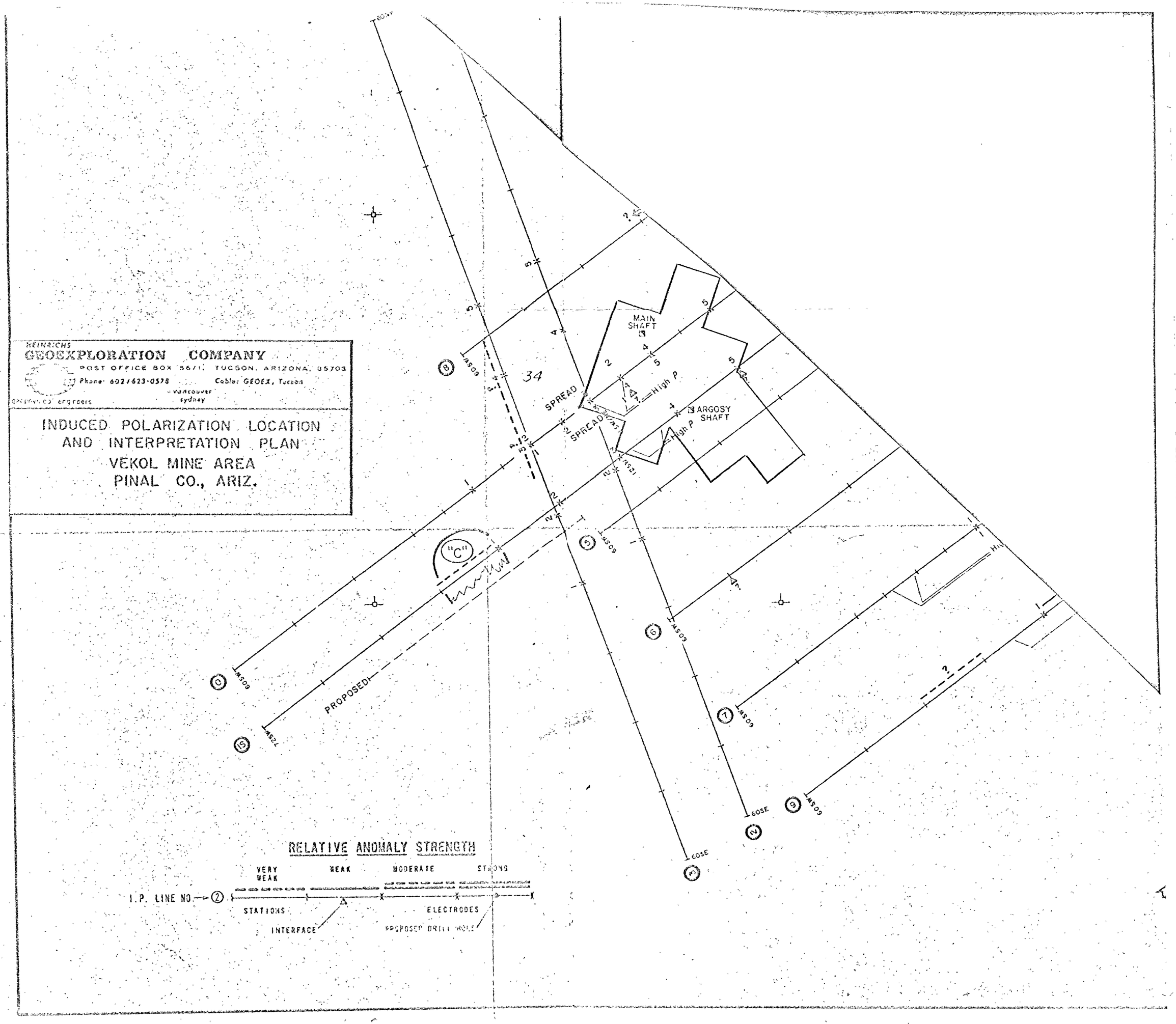
NOTE FOR TOTAL MAGNETIC FIELD STRENGTH ADD 50,000 GAMMAS TO EACH CONTOUR.

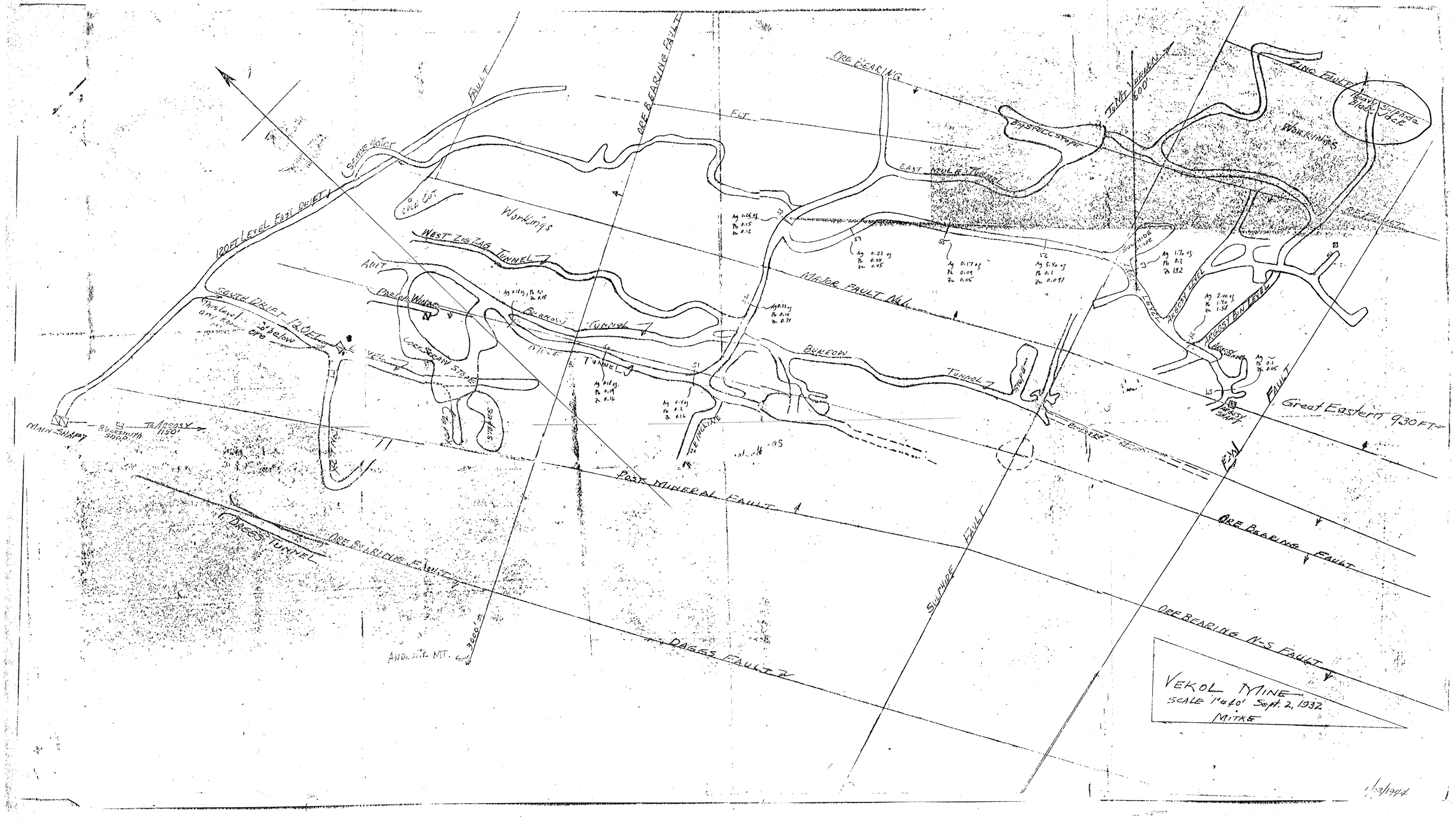

TO 1/4 COR. SEC.
27-34
T9S R2E
TO COR. SEC.
26-27-34&35
600
1500
1500
600
OLD MILL SITE
MAIN SHAFT 400'
120 FT LEVEL TUNNEL
FAULT
600
MAIN TUNNEL
SPRING TUNNEL
ROAD
GRANDFATHER
VEKOL
LOOKOUT
FAULT
1150
216
BURRO TUNNEL
TUNNEL
ADIT TUNNEL
770
SULPHIDE FAULT
ARGOSY TUNNEL
215'
ARGOSY SHAFT 215'
ROAD
I.P. HIGH
FLAT IRON
ARGOS
MOUNT VERNON
FRACTURED AREA
1000
1465
1500
E-W FAULT
I.P. HIGH
POT MINERAL FAULT
MAJOR FAULT
DAGGS FAULT
600
600
1" = 200 FT

FAULT
ORE BEARING FAULT
FLT
ORE BEARING
EAST MULE TUNNEL
Spring Water
120FT LEVEL EAST DRIFT
OPEN CUT
Workings
WEST ZIG ZAG TUNNEL
ADIT
SOUTH DRIFT 120FT LEVEL
This level is 120' below any known ore
BURROW TUNNEL
MULE TUNNEL
MAJOR FAULT No. 1
BURROW TUNNEL
SULPHIDE STOPE
ARGOSY LEVEL
ARGOSY LEVEL
ARGOSY BIN LEVEL
ARGOSY SHAFT
Workings
FAULT
Great Eastern 930 FT
PROPOSED EXTENSION
MAIN SHAFT
BLACKSMITH SHOP
POST MINERAL FAULT
DAGGS TUNNEL
DAGGS FAULT
ANDESITE MT. 3000
SULPHIDE FAULT
E-W FAULT
ORE BEARING FAULT
ORE BEARING N-S FAULT
VEKOL MINE
SCALE 1"=40' Sept. 2, 1932
MITKE
O Proposed Drill Hole
Vekol Mining & Exploration Co.
1/23/1944

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671 TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
vancouver
sydney
geophysical engineers

INDUCED POLARIZATION LOCATION AND INTERPRETATION PLAN
VEKOL MINE AREA
PINAL CO., ARIZ.




VEKOL MINE
SCALE 1"=40' Sept. 2, 1932
MITKE
ORE BEARING FAULT
ORE BEARING
FAULT
EAST
EAST MAIN TUNNEL
TUNNEL
ZINC FAULT
Zinc Block
Sulphide Ore
WORKINGS
ORE BEARING
ANTICLINE STOPE
SULPHIDE STOPE
SULPHIDE FAULT
SULPHIDE LEVEL
JACOBY LEVEL
JACOBY BIN LEVEL
JACOBY SHAFT
Great Eastern 930 FT
FAULT
END
ORE BEARING N-S FAULT
ORE BEARING
BURROW
TUNNEL
STOPE
MAJOR FAULT
WEST ZIGZAG TUNNEL
ADIT
PACKS WHERE
BURROW
TUNNEL
MITKE
TUNNEL
CORKSCREW STOPE
STOPES
ORE
SEINE HOIST
CHUTE CUT
Workings
120 FT LEVEL EAST DRIFT
SOUTH DRIFT 120 FT
Unsolved ore below
MAIN SHAFT
Blacksmith Shop
To JACOBY 1150'
POST MINERAL FAULT
DAGGS TUNNEL
ORE BEARING WEST
DAGGS FAULT
ANDESITE MT.
3000'
Ag 0.16 oz
Pb 0.15
Zn 0.12
Ag 0.22 oz
Pb 0.24
Zn 0.45
Ag 0.17 oz
Pb 0.09
Zn 0.05
Ag 5.40 oz
Pb 0.1
Zn 0.077
Ag 1.70 oz
Pb 0.3
Zn 1.12
Ag 2.00 oz
Pb 1.40
Zn 1.50
Ag 0.1
Pb 0.15
Ag 0.16 oz
Pb 0.15
Zn 0.12
Ag 0.16 oz
Pb 0.19
Zn 0.16
Ag 0.22 oz
Pb 0.14
Zn 0.34
Ag 0.1 oz
Pb 0.2
Zn 0.16