IMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4601

Application (~~Denied~~
(Withdrawn ✓
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
Contract Amendments (latest on top)
Contract with all exhibits and annexes
✓ Owner's Consent to Lien
Subordination Agreement
✓ Leases and assignments of leases
✓ Application and attachments
(3) Envelope for maps

Right Side

Project summary
Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

Final Field Team Report (Tab)
Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
On-site Exam Report(s) (Tab) ✓
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order)
Interim Summary Reports by W. O. Engineers

Right Side

Operator's Semi-Annual Report for Certified Project, Field Team Interim Reports, Operator's Monthly Report with transmittal, narrative, maps, and Field Team review.

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

MF-205
(Combines and supersedes MF-201 and MF-203)
June 1956

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 31 1957

DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator _____
Docket No. DMEA- _____
Contract No. Idm-E _____
Contract Date _____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the ~~United States~~ of America:

Referring to that ~~certain~~ land in the County of Napa, State of California, described as follows: 2/

Lots 1, 14, 15, 16 and 17 of Sec. 33, T. 10 N., R. 6 W., M.D.M.

_____,

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 4th day of January, 1957.

Evelyn McInnis EVELYN McINNIS	[Seal]	P. O. Box 161 Kentfield, California.	[Address]
	[Seal]		[Address]
Marian Minahan MARIAN MINAHAN	[Seal]	1386-Mariposa Street. Vallejo, California.	[Address]
	[Seal]		[Address]
Don Emerson DONALD EMERSON	[Seal]	Forest Lake Resort	[Address]
	[Seal]	Cobb Post Office Lake County, California	[Address]

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

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-120E and MF-203)
June 1956

EXTRA COPY
RECEIVED

DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Napa, State of California, described as follows: 2/

Lots 1, 14, 15, 16 and 17 of Sec. 33, T. 10 N., R. 6 W., M.D.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 4th day of January, 1957.

Evelyn McInnis EVELYN McINNIS	[Seal]	P. O. Box 161 Kentfield, California.	[Address]
	[Seal]		[Address]
Marian Minahan MARIAN MINAHAN	[Seal]	1386-Mariposa Street, Vallejo, California.	[Address]
	[Seal]		[Address]
Don Emerson DONALD EMERSON	[Seal]	Forest Lake Resort	[Address]
	[Seal]	Cobb Post Office Lake County, California	[Address]

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

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

EXECUTIVE COPY
RECEIVED

DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator _____
Docket No. DMEA- _____
Contract No. Idm-E _____
Contract Date _____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Nome, State of California, described as follows: 2/

Lots 1, 14, 15, 16 and 17 of Sec. 33, T. 10 N., R. 6 W., M.D.M.

_____,

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government," in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 4th day of January, 1957.

Evelyn McInnis ~~EVELYN McINNIS~~	[Seal]	P. O. Box 161 Kentfield, California.	[Address]
	[Seal]		[Address]
Marian Minahan ~~MARIAN MINAHAN~~	[Seal]	1386-Mariposa Street. Vallejo, California.	[Address]
Don McCoy	[Seal]		[Address]
~~DONALD MCCOY~~	[Seal]	Forest Lake Resort Cobb Post Office	[Address]
	[Seal]	Lake County, California	[Address]

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

_____

[Corporate Seal]

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

EXPLORATION CONTRACT
DMEA
RECEIVED

DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Napa, State of California, described as follows: 2/

Lots 1, 14, 15, 16 and 17 of Sec. 33, T. 10 N., R. 6 W., M.D.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 4th day of January, 1957.

Evelyn McInnis ~~EVELYN McINNIS~~	[Seal]	P. O. Box 161 Kentfield, California.	[Address]
	[Seal]		[Address]
Marian Minahan ~~MARIAN MINAHAN~~	[Seal]	1386-Mariposa Street. Vallejo, California.	[Address]
	[Seal]		[Address]
Don Emerson ~~DONALD EMERSON~~	[Seal]	Forest Lake Resort ~~Cobb Post Office~~	[Address]
	[Seal]	Lake County, California	[Address]

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

_____

[Corporate Seal]

MF-205 OFFICIAL FILE COPY
(Combines and supersedes MF-201 and MF-203)
June 1956

RECEIVED MAY 31 1957

DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Napa, State of California, described as follows: 2/

Patented mining claims Key West, Key West Millsite, Clearing House, San Juan and St. James of Sec. 32 and 33, T. 10 N., R. 6 W., M.D.M. and Lots 2 and 3 of Sec. 33, T. 10 N., R. 6 W., M.D.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 4th day of January, 1957.

VALLEJO QUICKSILVER MINING CO.,	[Seal]		[Address]
BY: Charles McInnis. Pres.	[Seal]	P.O. Box 161, Kentfield, California	[Address]
CHARLES McINNIS, PRESIDENT.			
	[Seal]		[Address]
Robert L. Leggett	[Seal]	1433 Tennessee Street, Vallejo, California	[Address]
ROBERT L. LEGGETT, SECRETARY			
	[Seal]		[Address]
	[Seal]		[Address]

I, ROBERT L. LEGGETT certify that I am the Secretary (Secretary, etc.) of the corporation named herein; that CHARLES McINNIS who signed this agreement was then President (President or Vice-President, 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.

Robert L. Leggett

ROBERT L. LEGGETT [Corporate Seal]

MF-205
(Combines and supersedes MF-201 and MF-203)
June 1956

DMEA		
RECEIVED		1957
DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Napa, State of California, described as follows: 2/

Patented mining claims Key West, Key West Millsite, Clearing House, San Juan and St. James of Sec. 32 and 33, T. 10 N., R. 6 W., M.D.M. and Lots 2 and 3 of Sec. 33, T. 10 N., R. 6 W., M.D.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 4th day of January, 1957.

VALLEJO QUICKSILVER MINING CO.,	[Seal]		[Address]
BY Charles McInnis. Pres.	[Seal]	P.O. Box 161, Kentfield, California	[Address]
CHARLES McINNIS, PRESIDENT.			
	[Seal]		[Address]
Robert L. Leggett	[Seal]	1433 Tennessee Street, Vallejo, California	[Address]
ROBERT L. LEGGETT, SECRETARY			
	[Seal]		[Address]
	[Seal]		[Address]

I, ROBERT L. LEGGETT certify that I am the Secretary (Secretary, etc.) of the corporation named herein; that CHARLES McINNIS who signed this agreement was then President (President or Vice-President, 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.

Robert L. Leggett

ROBERT L. LEGGETT [Corporate Seal]

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

EXTRA COPY
D M E A
RECEIVED

DATE	INITIALS	CODE

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of San, State of California, described as follows: 2/

Patented mining claims Bay View, Bay View Extension, Glendale Bonds, San Juan and Mt. Jesse of Sec. 32 and 33, T. 10 N., R. 6 W., S.B.B.M. and Lots 2 and 3 of Sec. 33, T. 10 N., R. 6 W., S.B.B.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 20 day of January, 1957.

[illegible] Co.,	[Seal]		[Address]
Charles McInnis, Pres.	[Seal]	P.O. Box 108, [illegible], Colorado	[Address]
[illegible]	[Seal]		[Address]
[illegible]	[Seal]	1080 [illegible] Avenue, Vallejo, California	[Address]
[illegible]	[Seal]		[Address]
	[Seal]		[Address]

I, [illegible] certify that I am the [illegible] (Secretary, etc.) of the corporation named herein; that [illegible] who signed this agreement was then President (President or Vice-President, 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.

[illegible] [Corporate Seal]

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

EXTRA COPY
DMEA
RECEIVED

DATE	INITIALS	OCPT

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator
Docket No. DMEA-
Contract No. Idm-E
Contract Date

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

Referring to that certain land in the County of Nevada, State of California, described as follows: 2/

Patented mining claims Boy Scout, Boy Scout Millsite, Clearing House, San Juan and Mt. Jones of Sec. 32 and 33, T. 18 N., R. 6 W., M.D.B. and Lots 2 and 3 of Sec. 33, T. 18 N., R. 6 W., M.D.B.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. 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;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest 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. 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 lines blank.)

None

1/ Mining or 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 cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. 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 copies of such notice; and

6. 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.

7. Added provision: None (State "None" or "See Annex No.____")

Dated this 9 day of January, 1957.

[illegible] Co.,	[Seal]		[Address]
By Charles McInnis Pres.	[Seal]	P.O. Box 201, Rosedale, California	[Address]
[illegible], President			
	[Seal]		[Address]
[illegible]	[Seal]	1001 Tennessee Street, Vallejo, California	[Address]
[illegible], Secretary			
	[Seal]		[Address]
	[Seal]		[Address]

I, [illegible], certify that I am the [illegible] (Secretary, etc.) of the corporation named herein; that [illegible] who signed this agreement was then President (President or Vice-President, 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.

[illegible] [Corporate Seal]

A G R E E M E N T

THIS AGREEMENT, made and entered into this 14th day of May, 1957, by and between NORMAN B. LIVERMORE, JR., GEORGE S. LIVERMORE, JOHN S. LIVERMORE, H. P. LIVERMORE and ROBERT S. LIVERMORE, First Parties (hereinafter referred to as "Lessors"), and HUGH C. INGLE, JR., Second Party (hereinafter referred to as "Lessee");

W I T N E S S E T H:

That said Lessors, for and in consideration of the payments and royalties herein agreed to be paid, and the performance of the covenants, conditions and agreements herein contained, do by these presents lease unto Lessee the following described real property, hereinafter referred to as "the property," situate in the OAT HILL MINING DISTRICT, NAPA COUNTY, CALIFORNIA, more particularly described as follows, to wit:

Lot 1 of Sec. 32, Twp. 10 N., R. 6 W., M.D.M., containing 39 acres more or less

TO HAVE AND TO HOLD the same unto the exclusive possession of said Lessee for a term of ten (10) years from the date hereof, and said Lessors and Lessee specifically covenant and agree as follows:

I - GRANT OF RIGHT

The Lessee is granted the right to enter upon said premises and to mine and extract quicksilver. This agreement is entered into primarily for the mining and extraction of quicksilver, but it shall also cover any and all other metals, minerals and other values mined, extracted, and sold, provided that Lessors and Lessee shall first agree in writing as to the royalties to be paid hereunder.

II - LESSEE'S CONDUCT OF OPERATIONS

Lessee agrees to conduct all mining activities in a good and miner-like manner and to well and sufficiently timber mine workings

in accordance with good mining practices; to comply with all State and Federal mining and other rules, laws and regulations.

III - BOOKS AND RECORDS

Lessee agrees to keep proper books and records of all mining operations, of all ore extracted and quicksilver produced, and of all transactions and things occurring in connection with the operation of said mine and to permit the Lessors, their attorneys or agents, at all reasonable times to enter upon the property to inspect the work conducted by Lessee, and to examine said books and records to the extent to which they apply in determining royalty due Lessors.

IV - PRODUCTION ROYALTY

In the event the Lessee elects to conduct mining operations on said lands, he agrees to pay unto said Lessors, monthly during the term of this lease, a percentage royalty on the "gross proceeds" received from the property, it being understood and agreed that payments shall be made on or before the 15th day of each ensuing month; provided, however, that in the event of uncertain or exceptional marketing conditions, Lessors and Lessee may modify this term by agreement.

Said percentage royalty shall vary according to the value per ton of ore mined and milled during the previous month according to the following schedule:

Value per ton	Percentage
$30.00 or less	10
30.01 - 40.00	12
40.01 - 50.00	14
50.01 - 60.00	16
60.01 - 70.00	18
70.01 and up	20

For purposes of this agreement "gross proceeds" shall be determined by multiplying the total flasks of quicksilver produced from the ore extracted from the property in any month by the average of the weekly New York price quotations per flask of quicksilver for said month in the E. & M. J. Metal and Mineral Markets Magazine less Ten Dollars ($10.00) per flask, and subtracting therefrom the actual expenses incurred by the Lessee in the sale of the quicksilver, during said month, for freight and insurance, if any.

"Value per Ton" shall be determined by dividing the "gross proceeds" for a given month by the number of tons mined and milled during said month.

V - MINIMUM ROYALTY

It is further agreed that commencing May 1, 1957, Lessee shall pay Lessors a minimum royalty of One Hundred Fifty ($150.00) Dollars per six month period, in advance, the said minimum royalty to continue for the duration of this lease. Such minimum royalties shall be a cumulative credit to Lessee against future production royalties due Lessors. By executing this agreement Lessors expressly acknowledge receipt of the minimum royalty for the six months period commencing May 1, 1957.

VI - LESSEE'S USE OF PROPERTY

The general mining rights herein granted shall include the right to dump mine waste, to dig, bore or excavate mine openings of any nature, including exploratory drill holes and to enter upon and use the surface of said premises in any way which will facilitate mining operations on the adjacent Corona Mine and related properties.

VII - INSURANCE

(a) Workmen's Compensation: Lessee at all times during this agreement shall comply with the laws of the State of California for the protection of employees against injury and disease, shall

any adequate workmen's compensation insurance in this regard and shall save Lessors harmless against any damage by reason of any such claims.

(b) Fire and Extended Coverage: Lessee shall at its sole expense obtain and keep in force at all times during this agreement fire and extended coverage insurance upon the structures, machinery, equipment and personal property on the property (and upon any other structures which Lessee may from time to time during the term hereof erect upon the property) in an amount equal to the fully appraised insurable value thereof.

(c) Public Liability and Property Damage Insurance:

Lessee at all times during this agreement shall procure and maintain in full force and effect bodily injury liability insurance with limits of not less than Two Hundred Thousand Dollars ($200,000.00) per person and Three Hundred Thousand Dollars ($300,000.00) per occurrence insuring against any and all liability of Lessee with respect to the property or arising out of the use and occupancy thereof by Lessee, and Lessee agrees also to procure and maintain insurance against damage to property with a limit of not less than Fifty Thousand Dollars ($50,000.00) per accident.

(d) Delivery of Certificates: If so requested in writing by Lessors, Lessee shall deliver to Lessors certificates of the policies required by provisions of this paragraph VII. The insurance coverage required by paragraph VII (b) shall be subject to approval of Lessors as to form and substance, shall be carried in the joint names of Lessors and Lessee and shall be payable to Lessors and Lessee as their interests may appear.

VIII - HOLD HARMLESS

Lessee shall save Lessors harmless from any loss, claim or liability for property damage or personal injury directly or indirectly caused by or arising from the work or acts performed by

Lessee and/or its employees or agents in connection with this agreement, including but not limited to water pollution or other damage to downstream water users, provided, however, that the foregoing undertaking by Lessee shall not extend to any loss, claim or liability arising by reason of the negligence of Lessors, their agents or employees.

IX - LIENS

Lessee shall discharge and save Lessors harmless from all liens or claims upon the property made or suffered by Lessee during the term of this agreement and in this connection, upon notice Lessors shall, prior to commencement of any operations hereunder, post the property in accordance with California law, notifying Lessors' nonresponsibility.

X - TAXES

Lessee agrees to pay, prior to delinquency, all taxes and assessments assessed against the property following the effective date of this agreement including personal property taxes and mine production taxes, if any, to the State of California, the Counties of Napa and/or Lake, any School District, or any other Government subdivision, together with any interest and/or penalties due in connection with said taxes and/or assessments. If any tax bills payable by Lessee hereunder should be delivered to Lessors by the taxing authorities, Lessors shall promptly forward the same to Lessee and any interest or penalties becoming due as a result of failure of Lessors to so forward the same promptly shall be borne by Lessors.

XI - STOCKPILING OF ORE

Permission is granted to stockpile on the property ores mined and extracted by the Lessee from other lands under his control without the obligation of paying royalty thereon to Lessors, provided, however, that upon termination of this lease any such stockpile

shall revert to and become the property of Lessors if it shall not have been removed from the property within thirty (30) days following such termination.

XII - ACCESS TO PROPERTY

During the term of this agreement Lessors reserve a non-exclusive right of ingress to and egress from the property and the non-exclusive use of all roadways, existing and that may be constructed, on the property. In the enjoyment of such right and the use of such roads Lessors shall not interfere with Lessee's operations on the property.

XIII - TITLE TO PERSONAL PROPERTY

The Lessee further agrees that any and all office buildings or residences constructed on said premises shall become a part of the premises and become the property of Lessors. Any and all items of mining, milling or reduction equipment, including underground and surface pumps, rails, air and water pipes, tools, supplies and other personal property whatsoever which may hereafter be placed on said property by the Lessee, and any and all mill buildings and related structures, shop buildings, change rooms, and storage buildings shall be and remain the sole possession of the Lessee, provided, however, that if Lessee shall not have removed the same within ninety (90) days following the termination of this lease, said equipment, buildings and other property shall revert to and become the property of Lessors.

XIV - RETENTION OF ROYALTIES BY LESSORS

It is specifically agreed that under no circumstances shall any moneys paid as royalties be returned to said Lessee, but upon payment of the same, the whole thereof shall be and become the sole and separate property of Lessors and shall be retained by Lessors and shall not be considered as being in the nature of penalty or forfeiture, and in the event of a suit to enforce any payment

...after becoming due as a royalty or otherwise, or for any other purpose under this lease, Lessors shall be entitled to recover, in addition to the amounts found to be due and their costs of court, a reasonable attorney's fee to be set by the court having jurisdiction of said action.

XV- DEFAULT

In the event Lessee, during the term of this agreement, shall fail to make any payment required by the provisions hereof for a period of ten (10) days after written notice by Lessors, or in the event Lessee shall fail to comply with any of the covenants, conditions or agreements herein contained on its part to be performed for a period of sixty (60) days after such written notice by Lessors (excluding from said sixty (60) day period the period during which Lessee shall diligently attempt to correct or cure the default specified by Lessors in such notice), then Lessors, at Lessors' option, may declare this agreement terminated, and in such event this agreement shall be terminated and at an end, and said agreement and the property shall become forfeited to Lessors, and Lessee shall forfeit all rights under this agreement. All sums theretofore paid and deposited to the credit of Lessors shall be retained by Lessors as their absolute property, and Lessee shall forthwith surrender possession of the property to Lessors. Such notice of default shall be complete when mailed in accordance with paragraph XXI hereof. Such written notice of default shall specify the particulars of the claimed default and make demand upon Lessee for the remedying thereof.

XVI - CANCELLATION BY LESSEE

The Lessee may cancel this lease and be relieved of any future liability thereunder at any time upon thirty (30) days notice in writing and upon the payment of all sums due up to the date of such

[illegible] ation and upon executing and delivering to Les[illegible] [illegible] deed, quitclaiming unto Lessors all of his [illegible] [illegible] interest in and to the property and the whole the[illegible] [illegible] and to this lease.

XVII - ASSIGNMENT

The Lessee herein may, upon procuring the prior wri[illegible] consent of Lessors, assign this lease during the term hereof [illegible] shall not, during the term hereof, sublease the [illegible] or any part thereof or any right or privilege appurte[illegible]

XVIII - RESERVATIONS

Lessors hereby reserve so much of the surface of the [illegible] erty as is not, or may not in the future be, reasonably [illegible] for Lessee's mining operations and other operations incide[illegible] thereto, for use for timber, grazing, hunting, agricultural a[illegible] other purposes not inconsistent with Lessee's operations here[illegible] Lessors reserve the right to sell or lease the timber rig[illegible] the property, provided, however, that timber operations [illegible] property shall not interfere with Lessee's operations here[illegible]

XIX - HUNTING

Except with the prior written consent of Lessors, neither Lessee, nor his associates, agents, employees, or assi[illegible] have any right to hunt or shoot animals or game of any nature [illegible] the property during the term of this agreement.

XX - TERMINATION OF CORONA LEA[illegible]

[illegible] Lessee hereby agrees that should he terminate [illegible] agreement with the Vallejo Quicksilver Mining Co[illegible] Corona Mine he will, at the option of Lessors, surre[illegible] lease to Lessors, except and unless mining operations [illegible] progress on the property or to be commenced [illegible] ninety (90) days following such termination. It is [illegible]

agreed that one of the main purposes of this agreement is to aid the development of the aforementioned Corona Mine.

XXI - NOTICES

All notices or other writings in this agreement provided to be given or made or sent, or which may be given or made or sent, by either party hereto to the other (unless changed by written notice from one party to the other in the manner herein provided) shall be deemed to have been fully given or made or sent when made in writing and deposited in the United States mail, postage prepaid, and duly registered or certified, addressed to:

Lessors: Care of Norman B. Livermore & Sons
155 Montgomery Street
San Francisco 4, California

Lessee: Hugh C. Ingle, Jr.
General Delivery
Middletown, California

XXII - GEOLOGICAL DATA

It is agreed that as, from time to time during the term of this agreement, surveys, reports, assay maps and other maps, drilling data or other geological or production information are developed, copies thereof shall be forwarded to Lessors. Lessee shall not be obligated to furnish Lessors with opinion or evaluation reports, but only with reports of a factual nature, and shall provide Lessors annually with accurate transit surveys of any underground workings driven on the property.

XXIII - WATER

Lessee is granted the right, during the term of this agreement, to use on the property any and all water which Lessors own or have the right to use and which arises from or is appurtenant to the property, and which may be necessary to Lessee's operations, subject, however, to any vested rights of third persons.

XXIV - WAIVERS

It is agreed that a waiver by Lessors of a breach of any of the covenants and/or conditions of this agreement shall not be deemed to be a waiver of any future breach of such covenants and/or conditions, nor a waiver of breach of any other covenant and/or condition of this agreement. None of the covenants, terms or conditions of this agreement can be waived by either Lessors or Lessee except by appropriate written instrument.

XXV - TITLE TO PROPERTY

The Lessors herein make no warranty as to the title to the property. Cost of title insurance, if desired by Lessee, shall be borne by Lessee. Lessors warrant that there are no mortgages, liens or encumbrances on the property.

XXVI - TIME OF ESSENCE

Time is of the essence of this agreement.

XXVII - FIRST REFUSAL

Subject to the provisions of paragraph XVIII hereof Lessors agree that they will not at any time during the term of this agreement sell the property without first giving written notice to Lessee of the terms and conditions of such proposed sale. Lessee shall have sixty (60) days from the date of such notice within which to notify Lessors that Lessee desires to purchase the property upon such terms and conditions. In the event of such notice by Lessee, Lessors agree to sell the property to Lessee and Lessors shall not sell the property to any person other than Lessee provided that Lessee purchases the same from Lessors upon such terms and conditions within a reasonable time after such notice from Lessee. If Lessee shall fail to give such notice, or shall notify Lessors that he does not desire to exercise the rights herein granted, Lessors may sell the property to any other person free and clear of any rights herein granted Lessee, provided, however, that the terms

and conditions of such sale shall be substantially the same as those specified in such notice from Lessors to Lessee. In no event shall Lessors sell the property to any such person upon terms and conditions substantially less favorable to Lessors or substantially more favorable to such person than those contained in such notice from Lessors to Lessee. Lessee's rights under this paragraph shall cease and terminate upon the expiration or sooner termination of this agreement.

XXVIII - SUCCESSION

All rights and benefits hereunder shall inure to and bind the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above written.

(Norman B. Livermore, Jr.)

(George S. Livermore)

(John S. Livermore)

(H. F. Livermore)

(Robert S. Livermore)

LESSORS

(Hugh C. Ingle, Jr.)

LESSEE

JOINDER IN EXECUTION

The undersigned, VIRGINIA PENNOYER LIVERMORE, the wife of Norman B. Livermore, Jr., hereby joins with him in executing this lease agreement, for the purpose of asserting that she does not own, or claim to own, any of the real property herein described, or any interest therein.

IN WITNESS WHEREOF, the said Virginia Pennoyer Livermore has hereunto set her hand, the day and year first hereinbefore written.

(VIRGINIA PENNOYER LIVERMORE)

JOINDER IN EXECUTION

The undersigned, JANET CLIFTON LIVERMORE, the wife of George S. Livermore, hereby joins with him in executing this lease agreement, for the purpose of asserting that she does not own, or claim to own, any of the real property herein described, or any interest therein.

IN WITNESS WHEREOF, the said Janet Clifton Livermore has hereunto set her hand, the day and year first hereinbefore written.

(JANET CLIFTON LIVERMORE)

JOINDER IN EXECUTION

The undersigned, JEAN EVERETT LIVERMORE, the wife of Robert S. Livermore, hereby joins with him in executing this lease agreement, for the purpose of asserting that she does not own, or claim to own, any of the real property herein described, or any interest therein.

IN WITNESS WHEREOF, the said Jean Everett Livermore has hereunto set her hand, the day and year first hereinbefore written.

(JEAN EVERETT LIVERMORE)

RECEIVED MAY 31 1951
DWEX
OFFICIAL FILE COPY

DATE	INITIALS	CODE

[illegible] and sworn [illegible]

[illegible] the persons whose [illegible]

[illegible] witness [illegible]

[illegible] the same.

IN WITNESS WHEREOF, I have hereunto set [illegible] affixed my official [illegible] in the City and [illegible] San Francisco the day and year in this [illegible] above written.

NOTARY PUBLIC
in and for the City and County of
San Francisco, State of California.

My commission expires [illegible]

DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

1605 Evans Avenue
Reno, Nevada

January 8, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Mercury)
Hugh C. Ingle, Jr.
Corona Mine
Napa County, California

Attached are three sets of MF-103, Application for Aid forms relative to above subject. The fourth set has been retained in our files.

S. Ricker

1/11 WSM 400

Attach.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

EXTRA COPY
DMEA
RECEIVED
DATE | CODE

1605 Evans Avenue
Reno, Nevada

January 8, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Mercury)
Hugh C. Ingle, Jr.
Corona Mine
Napa County, California

Attached are three sets of MF-103, Application for Aid forms relative to above subject. The fourth set has been retained in our files.

S. Ricker

Attach.

SRicker:gh
cc: R. M. Smith
File

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

RECEIVED JAN 10 1957 DMEA

Not to be filled in by applicant

Docket No. 4601
Metal or Mineral Mercury
Date Received ~~DEC 27 1956~~ 1-10-57
Estimated Cost No total
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Hugh C. Ingle, Jr.
1310 Coolidge
Tracy, California

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract: Patented mining claims Key West, Key West Millsite, Clearing House, San Juan, and St. James; unpatented mining claims Alliance #1, #2, and #3, and Janie, all in Secs. 32 and 33, T 10 N, R 6 W, M.D.M. Lots 1, 2, 3, 14, 15, 16, and 17 in Sec. 33. Lot 1 in Sec. 32 (pending). See enclosed claim map.

(*b*) State any mine name by which the property is known. Corona Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise lessee with purchase option on all patented claims & on all lots in Sec. 33; pending on Lot 1, Sec. 32. Owner of unpatented claims.

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it none on claims owned.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Vol. 522 ppg. 364, 366, & 368 and Vol. 523 pg. 358 of the Official Records of Napa County, California.

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore ---mercury---

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within ---90--- days and be completed within ---24--- months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Final negotiations with responsible parties to cover

(*b*) How do you propose to furnish your share of the costs? applicant's share of costs await action on this application.

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

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.

Dated ---December 18,--- 1956

Hugh C. Ingle, Jr.
(Applicant)

By

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

4. (a) The only known available map of mine workings is a part of this application. All main under-ground workings were driven either prior to or during the period 1895--1906 when the mine was in full operation, with the exception of the Drain Tunnel (1420 elev.), which was driven around 1928--1930. Some 15,000 tons of ore is reported by the California Division of Mines to have been mined in the period 1939--1943. This latter was mined from the surface or near surface workings (No. 3 Tunnel Level and above). No attempt was made to reopen the drift running northwest from the No. 2 Tunnel Level crosscut, although this crosscut was re-opened. No exploration work was done, mining only being done in the immediate vicinity of the old stopes.

Present work has been confined to a small amount of rehabilitation work to aid inestimating an exploration program and prospecting the surface. The portals of the No. 3 Tunnel and the Bluff Tunnel have been reopened and retimbered, but both are caved near the footwall contact. The portal of the No. 2 Tunnel has been reopened sufficiently for entry; it required no timbering. This adit is also caved near the footwall contact. The applicant has performed the present work, but has had no interest in former operations.

Although the No. 3 Tunnel is caved near the footwall contact, access to most of the workings on and above this level is gained through a raise which comes up on the hanging wall of the open pit on the No. 1 Tunnel level.

(b) Past production of the Corona Mine is approximately 5,000 flasks. Old reports, indicating extreme difficulty in controlling the old Scott type furnace, would imply this figure could have been doubled in a modern furnace.

There is no present production.

There are no ore reserves. Some ore of six to ten lb. grade shows in the walls of the old stopes on and above the No. 3 Tunnel level, but nothing is blocked out and probably only a small tonnage could be proved.

(c) The ore occurs in a silica-carbonate ledge which can be traced on the surface for approximately one mile. The outcrop shows varying widths up to 150 feet; thickness averages about 75 feet. The footwall is sandstone and shale and the hanging wall is serpentine.

A second, and larger, silica-carbonate ledge outcrops parallel to and some 600--800 feet from the hanging wall of the ledge in which the Corona orebodies occur.

Cinnabar is the only ore mineral observed. Marcasite is the main accessory mineral and locally runs as high as 10% of the rock; this high marcasite content was the source of the early day furnace difficulties. Minor minerals identified and occurring in the ledge or in the surrounding rocks include magnetite, chromite, and zircon.

Exploration plans are based on a desire to investigate three areas of the mine which show highly favorable geological structures.

The first is an area on the surface northwest of the Bluff Tunnel. As shown on the accompanying map, the outcrop here appears to have been faulted or to make a radical change in strike or both. Since both of these conditions are favorable for ore occurrences, the structure should be explored. A number of the croppings near the hanging wall in the area just south of the indicated fault show strong mineralization with a very finely disseminated cinnabar, representative pieces assaying approximately 11 lbs. per ton.

The second area is in the vicinity of the large stope and the drift and cross-cuts to the west of this stope on the No. 3 Tunnel level. A system of several small

faults runs through this area and has been a controlling structure on orebodies above the level. No exploration has been done below the level for new orebodies on this structure, and it is therefore worthy of exploration. In addition, the footwall crosscut to the west of the large stope shows a two foot zone of good cinnabar mineralization, making the footwall a favorable site for exploration. The hanging wall should be prospected in the same general area because of the strong nearby showings of mineralization and the occurence of hanging wall orebodies elsewhere in the mine.

The third, and most important, target is the area in which the ledge dip flattens near the No. 2 Tunnel level. This structure is ideal for formation of orebodies and has been explored in only two small areas, and very incompletely at these places. The No. 2 Tunnel drift to the west of the portal crosscut reportedly does not enter the ledge until it reaches the vicinity of the first stopes shown on the map. The structure shown on the cross sections should first be verified and then explored thoroughly.

(d) A surfaced county road passes within approximately four miles of the mine. A dirt county road runs through the mine property and connects with the surfaced road. The dirt road is well maintained to within a mile and a half of the mine. The last mile and a half is not maintained and would be impassable in the winter months without a reasonable amount of maintenance.

The nearest railhead is Calistoga, some 27 miles by road from the mine. Motor truck and bus transportation is available to Middletown, some nine miles by road from the mine.

Nearest residence point is Middletown.
Minor supplies could be obtained from Middletown, Calistoga, Santa Rosa (38 miles), or Napa (45 miles). Major items could be obtained from the San Francisco Bay area, some 100 miles by road. Sawed timber is available some 15 miles from the mine.

(e) Experienced miners are available in the nearby areas, the supply depending on the degree of activity in nearby mines.

Materials, supplies, and equipment would be readily obtainable from points listed under 4(d), subject to the usual delays encountered in ordering. Water is available at the mine, being overabundant and widespread in winter and dropping to a flow of approximately five gallons per minute from the best spring in late summer and fall. Flow from this spring passes by the portal of the No. 2 Tunnel. A strong flow of water runs throughout the year in a creek less than one mile by road from the mine. Mine water flows in varying volume throughout the year from the No. 2 and Drainage Tunnels, but is probably too acid to be of any use.

Nearest three phase high voltage electric power line is at the Aetna Mine, some two and a quarter miles by airline from the Corona.

5.(b) To explore the surface area northwest of the Bluff Tunnel, described in 4 (c), it is proposed to bulldoze the surface and expose the hanging and footwalls and the indicated fault insofar as possible. Approximately ten days dozer work would be necessary. 1500 feet of diamond drill holes would then be fanned from favorable locations to explore the ledge in general, the foot and hanging walls, and the fault.

To explore the area adjacent to the No. 3 Tunnel level, described in 4(c), it is proposed to first reopen the old crosscut and equip it with rail, pipe, etc. Such as was necessary of the big stope on this level would then be cleaned out and made safe so as to allow tramming and drilling and rail, pipe, etc. laid to reach the old drift running west from this stope. The old drift and hanging wall crosscut would also be cleaned and equipped. The crosscut would be extended 90 feet to the expected location on this level of the raise which reaches the surface on the hillside above the No. 1 Tunnel open pit, as shown on the map. This crosscut would partially explore the hanging wall. If the raise is where indicated and open,

it should also provide easy access to the No. 2 Tunnel level. Principal exploration of the ledge would be by 870 feet of diamond drilling through favorable structures mentioned in 4 (c). Besides the crosscut extension and diamond drilling, work involved would be laying 200 feet of rail on the dump, rehabilitating 250 feet of uncaved, untimbered tunnel, rehabilitating and retimbering 50 feet of uncaved, timbered tunnel, rehabilitating and retimbering 95 feet of caved, timbered tunnel and stope.

To explore the flattened structure near the No. 2 Tunnel level it is proposed to reopen and requip the No. 2 Tunnel crosscut to the short y drift which branches to the west some 35 feet from the end of the crosscut. This crosscut and its south branch would also be reopened and the drift shown in red on the map driven some 775 feet western in the manner indicated to a point southerly from the old double drift beyond the winze station. A crosscut would connect with this old double drift. Other crosscuts would be driven at judicious points (probably as shown in red) to facilitate the exploration. Crosscutting would aggregate 240 feet. 4830 feet of diamond drill holes would be fanned across the ledge from judicious locations chosen to provide the best exploration from a geological standp oint. These locations would be determined from information obtained after the drift is commenced.

5(d) The applicant is a 1948 graduate of the Mackay School of Mines, University of Nevada, with a B.S. in Mining Engineering.

With the exception of two years military service during the Korean War, the applicant has operated an antimony mine, served as field engineer for a 300 ton per day low-grade open pit gold mining and milling operation, served as general superintendent for a 100 ton per day under-ground and open-pit manganese mining and milling operation, and superintended a metallurgical research laboratory since leaving school. For the past four years he has been employed by the Taylor-~~Kn~~ Knapp Co., California Division, in the latter two capacities.

Prior to military service in World Warll, the applicant spent a number of summers in mining and junior engineering jobs.

The applicant will supervise operations and will have men well qualified in geology and mining available for consultation.

CORONA MINE

It lies at the head of Pope Valley, 8 miles south of Middletown, at 1460' altitude, and is a recent location on the serpentine belt near Oat Hill. There are three crosscut tunnels tapping the vein; the upper one is 90' long; the next, 60' lower, is 287' long, and the last one, 194' still lower, is 400' long. All of them show a very hard, silicious rock, rich in cinnabar. The vein formation is 90' between walls, and consists of alternate thin strata of sandstone and "alta". The course is E. & W., and the dip 55° S. The country rock south of the vein is serpentine, and north is a soft gray sandstone. The company is building a 20 ton fine-ore furnace, to cost about $10,000. Some 600 tons of rich ore lie on the dumps. Vallejo Quicksilver Mining Company, owner; H. C. Davey, of Calistoga, superintendent.

THE QUICKSILVER RESOURCES OF CALIFORNIA. THE CALIFORNIA STATE MINING BULLETIN NO. 27

CORONA MINE and 33, JUNE, 1903

Mayacmas District. In Secs. 32, T. 10 N., R. 6 W. (See report State Mining Bureau of Cal., XIII, page 597.) The Vallejo Quicksilver Mining Company, owner; J. B. McCauley, president and superintendent, Oathill, Napa County. The mine is at the head of James Creek, on the contact of a serpentine belt and the Oathill sandstone formation. (See Fig. 25.) The ore occurs in a zone of black chert rock, lying between a sandstone foot wall and probably a serpentine hanging wall. (see below). The general strike of the zone os N. 45° W. Three ore shoots show at the surface. The development consists mainly in a level which enters the hill running very nearly west and crosscutting the sandstone foot wall for about 400 feet. The sandstone is here mixed with some shales. At 400 feet, the tunnel cuts the vein and follows it about 800 feet to the southeast, and 1300 feet to the northwest. The tunnel cuts the vein at the southeasterly ore shoot, with about 130 feet of backs. The workable orebody is here from 10 to 15 feet wide, the cinnabar forming in fissures running through the opaline rock. Underlying the latter is a white talc, wherein pieces of white and gray rock are found, determined as phthanite, indicating that originally a body of shales overlaid the sandstone and were silicified, probably by the same solution which formed the overlying chert beds. (See Fig. 26.) This ore shoot has in the past produced some rich ore, but at present no work is being done upon it; the development work being centralized on the middle ore shoot, which the tunnel cuts at a depth of 350 feet below the surface. A vertical shaft, 100 feet deep, has been sunk from the tunnel level on this shoot. The tunnel is driven northwest to cut the third ore shoot. Part of the tunnel is run in the sandstone foot wall, determining its persistency, but no crosscut has been run into the hanging wall. A very soft decomposed material overlying the ore body was crosscut to a width of 35 feet, without finding unaltered material; hence the assumption of a serpertine hanging wall rests on surface indications. The black chert wherein the ore makes is from 40 to 45 feet wide; it has a very irregular bedding system, which, if any, may be said to be a little more prominent across the vein, but the higher mineralized portions seem to follow the trend of the ledge. The central ore shoot has been opened for a length of 160 feet, and has been persistent in depth from the surface to the present depth of 450 feet. The cinnabar forms occasionally in such hard and compact material that it can scarcely be understood how it found access to its place of deposition. There is no apparent difference between the barren and the cinnabar-bearing chert; the former may be in its general texture a little more compact. A special feature of this mine is the very great amount of sulphide of iron accompanying the cinnabar. The furnace, of 50 tons capacity, is very much like an ordinary Scott furnace; the ore is so highly pyritous that very little fuel is required. This feature has the objection that the heat in the furnace is very irregular, and generally far too high, entailing a great loss of mercury.

CORONA MINE MAY,1918

Vallejo Quicksilver Mining Company, owner; J. B. McCauley, president; 409 Carolina St. Vallejo. It is in Secs. 32 and 33, T. 10 N., R. 6 W., 9 miles southeast of Middletown, between the OatHill mine on the northeast and Twin Peaks mine on the south; elevation 2200 feet (barometric reading). The Corona was opened up in 1895, but closed down in 1906, following a heavy winter, being driven out by water in excess of the pumping capacity. They also had furnace troubles on account of the large amount of pyrite occurring with the cinnabar. The pyrite rendered the ore self-burning, making it difficult to regulate the furnace temperatures, and the condensing. A white powder (probably sulphate of mercury) formed as an incrustation in the condensers, the result of reaction between the released quicksilver and SO_3 gas. This incrustation had to be broken out and retorted. The furnace, of the Scott type, with the walls built in part of volcanic tuff quarried nearby, is of 50 tons capacity. The mine has since been idle except for some production made in 1916 by retorting ore taken out in the course of prospecting work during that year. Figures of the total output of the Corona are not available, but it is claimed to have been approximately 5000 flasks.

The Corona mine is on the contact of the Oat Hill sandstone and a serpentine belt (see Plate X). According to Forstner[1], who visited the mine when it was open and in operation:

"The ore occurs in a zone of black chert rock ....." (see earlier report Bull. No. 27).

See also QUICKSILVER RESOURCES OF CALIFORNIA, from CALIFORNIA JOURNAL OF MINES AND GEOLOGY, REPORT XXXV, OF THE STATE MINERALOGIST, OCTOBER, 1939 and CALIFORNIA JOURNAL OF MINES AND GEOLOGY, STATE MINERALOGIST'S REPORT, VOL. 42 NO. 3, JULY, 1946.

6. Summary of proposed program

Bulldozer exploration work, 10 days @$124.20/day	$ 1,242.00
Surface diamond drilling 1500' @ $7.50/ft.	11,250.00
Laying rail on tunnel dumps 400' @ $2.47/ft.	988.00
Cleaning out, laying rail, etc., open, untimbered tunnel 580' @ $7.19/ft.	4,170.20
Cleaning out, laying rail, retimbering, open, timbered tunnel 50' @ $28.58/ft.	1,429.00
Cleaning out, laying rail, retimbering, caved, timbered tunnel 195' @ $52.03/ft.	10,145.85
Driving new, timbered tunnel 90' @ $64.59/ft.	5,813.10
Driving new, untimbered tunnel 1015' @ $51.62/ft.	52,394.30
Underground diamond drilling 5700' @ $7.50/ft.	42,750.00
Mucking out No. 2 tunnel portal	200.00
	$130,382.45
Analytical work & sample preparation (assays @ $4.00/ea.)	3,644.00
Capitalized equipment	26,665.00
New building	2,500.00
Materials & supplies in addition to direct operating supplies	1,900.05
Road rehabilitation, bulldozer 5 days @ $124.20/day	621.00
Building rehabilitation	600.00
Contingencies	2,000.00
	$ 168,312.50

(a)

1500 feet surface diamond drilling @ $6.00/ft.	9,000.00
5700 feet underground diamond drilling @ $6.00/ft.	34,200.00
15 days exploration and rehabilitation bulldozer work @ $100.00/day	1,500.00
	$44,700.00

(b) & (c) Crew

4 miners @ $2.00/hr.
1 foreman @ $500.00/mo.
1 accountant @ $240.00/mo.
1 engineer-superintendent @ $500.00/mo.

Cost Estimates

Prices shown on all supplies and equipment include sales tax and delivery charges.

Laying rail on dumps

Labor	$ .56/ft.
Rail, 12#, @ $11.90/100#	.95/ft.
Fishplates & bolts @ $1.00/set	.10/ft.
Spikes, 3/8" x 3", @ $18.60/100#	.05/ft.
Ties, 4" x 6" x 30", @ $68.00/1000bd.ft.	.12/ft.
Supervision & Engineering	.25/ft.
Accounting	.06/ft.
Payroll taxes, Insurance, & Fringe benefits	.21/ft.
Overhead	.17/ft.
	$ 2.47/ft.

Rehabilitating & equipping open, untimbered tunnel

Labor	$ 1.60/ft.
Rail, fishplates, bolts, spikes, ties as above	1.22/ft.
2" air line @ $50.20/100ft.	.50/ft.
1" water line @ $23.90/100ft.	.24/ft.
8" vent pipe @ $37.00/25ft.	1.48/ft.
Misc. pipe fittings	.10/ft.
Supervision & Engineering	.75/ft.
Accounting	.18/ft.
Payroll taxes, Insurance, & Fringe benefits	.62/ft.
Overhead	.50/ft.
	$ 7.19/ft.

Rehabilitati[illegible] retimbering & equipping open, [illegible]mbered tunnel

Labor	$ 8.00/ft.
Supplies as above	3.54/ft.
Timber @ $68.00/1000 bd. ft.	6.80/ft.
Supervision & Engineering	3.75/ft.
Accounting	.92/ft.
Payroll taxes, Insurance, Fringe benefits	3.09/ft.
Overhead	2.48/ft.
	$ 28.58/ft.

Rehabilitating, retimbering, & equipping caved tunnel

Labor	$ 18.29/ft.
Supplies & timber as above	10.34/ft.
Supervision & Engineering	8.56/ft.
Accounting	2.10/ft.
Payroll taxes, Insurance, Fringe benefits	7.05/ft.
Overhead	5.69/ft.
	$ 52.03/ft.

Driving New, untimbered tunnel

Labor	$ 17.30/ft.
Supplies as above, except timber	3.54/ft.
Powder @ $23.20/100#	4.18/ft.
Caps @ $25.85/1000	.16/ft.
Fuse @ $11.60/1000ft.	.50/ft.
Steel, integral carbide bit, @ ave. price $21.00/piece	.51/ft.
Fuel, diesel @ $.17/gal.	2.30/ft.
Misc.	1.00/ft.
Supervision & Engineering	8.10/ft.
Accounting	1.98/ft.
Payroll taxes, Insurance, and Fringe Benefits	6.66/ft.
Overhead	5.39/ft.
	$ 51.62/ft.

Driving new, timbered tunnel

Labor	20.00/ft.
Supplies as above, incl. powder, etc.	11.19/ft.
Timber	6.80/ft.
Misc.	1.00/ft.
Supervision & Engineering	9.37/ft.
Accounting	2.30/ft.
Payroll taxes, Insurance, & Fringe benefits	7.71/ft.
Overhead	6.22/ft.
	$ 64.59/ft.

Diamond drilling (supervision, etc.)

Supervision & Engineering	$ .68/ft.
Accounting	.17/ft.
Payroll taxes, Insurance, & Fringe benefits on above	.20/ft.
Overhead	.45/ft.
	$ 1.50/ft.

600
1.50
4.50

Bulldozing (supervision, etc.)

Supervision & Engineering	$ 7.58/day
Accounting	3.71/day
Payroll taxes, Insurance, & Fringe benefits on above	2.83/day
Overhead	10.08/day
	$ 24.20/day

Materials and supplies in addition to direct operating supplies

2 Pipe wrenches, 24"	$ 15.80
2 Pipe wrenches, 12"	6.00
1 Pipe reamer	15.40
1 Pipe cutter	3.00
12 Shovels	43.44
12 Picks	31.75
6 Doublejacks	33.60
6 Singlejacks	25.20
6 Bars, pry	60.00
6 Axes	36.00
1 Rail spike puller	20.00
3 Snatch blocks for slusher	144.00
6 Sheave anchors	45.00
3 Air hoses, 50 ft. lengths	201.90
3 Water hoses, 50 ft. lengths	132.69
5 Bayonet fittings for air locomotive	92.70
600' slusher cable, 3/8"	60.00
600' Slusher cable, 5/16"	54.00
6 Mine rail switches	300.00
8 Mine lamps	364.80
1 Stretcher	48.00
1 Wool blanket	8.50
1 First aid kit	10.19
Mechanics tools, misc.	75.00
	$1826.97
sales tax	73.08
	$1900.05

(d) Operating equipment

Compressor, 315 Diesel	$ 12,144.00
Mine Cars, 5 Side Dump @ $293	1,465.00
Mine Cars, 2 End Dump @ $200	400.00
Trammer, Air	2,816.00
Sluching Hoist, Double drum, Air	1,328.00
Mucking Machine, parts kit, & hose	3,721.00
Jackdrills, 2 @ $823.60	1,648.00
Truck, 4-wheel drive	750.00
Pickup	750.00
Receiver, Air	500.00
Blower, Ventilation, incl. motor	400.00
Air Grinder	198.00
Slucher Scraper	250.00
Rail Bender (Jim Crow)	50.00
Change Room Water Heater	60.00
Water Tank	100.00
Mine Lamp Charger	85.00
	$ 26,665.00

(e)

Cabin to be used for change room

Labor	$ 200.00
Building and plumbing materials	400.00
	$ 600.00

(f) Combination shop, supply and equipment warehouse, and timber shed.

Labor	$ 1000.00
Building materials	1500.00
	$ 2500.00

(g) Overhead shown under 6 (b) & (c) is based on the following estimated monthly costs.

Office rent	$ 50.00
Office supplies	10.00
Office, changeroom, shop heat & lights	40.00
Telephone	60.00
Insurance on equipment	44.00
Transportation expense	96.00
Road maintenance	200.00
Repairs & equipment maintenance	165.00
	$ 665.00

One third of this overhead is charged against diamond drilling or bulldozing and two thirds against drifting, etc.
Payroll taxes, Insurance, and Fringe Benefits shown under 6 (b) & (c) are broken down in the following manner.

Social Security	2.7%
Federal Disability	1.0%
Workmen's Compensation Insurance with pnewmonicosis surcharge	10.45%
Union Health & Welfare Plan	3.4%
Public Liability	1.35%
Vacations	6.1%

(h) Estimate for contingencies, as shown under total figures at beginning of 6 is $2000.00

THIS AGREEMENT, made this 12th day of December, 1955, between VALLEJO QUICKSILVER MINING COMPANY, a California Corporation, as Lessor, and HUGH C. INGLE, JR., of Tracy, California, as Lessee;

W I T N E S S E T H :

That said Lessor, for and in consideration of the payments and royalties herein agreed to be paid, and the performance of the covenants, conditions and agreements herein contained, does by these presents lease unto the said HUGH C. INGLE, JR., the following described mining claims and real property situate in the CAT HILL MINING DISTRICT, NAPA COUNTY, CALIFORNIA, more particularly described as follows, to-wit;

1. Those certain mining claims known as KEY WEST and KEY WEST MILL SITE (Mineral Certificate No. 128), SAN JUAN AND ST. JAMES (Patent No. 1072293), and CLEARING HOUSE (Patent No. 1141911), same being quicksilver mining claims and commonly known as the Corona Mine, the said patents having heretofore been recorded in the office of the County Recorder of Napa County, State of California, to which record reference is hereby made for further particulars.

2. Also that certain real property situated in said mining district in said County and State, more particularly described as Lots 2 and 3 of Sec. 33, Twp. 10 N., R 6 W, M.D.M., containing 39.05 acres more or less.

TO HAVE AND TO HOLD the same unto said Lessee for a term of fifteen (15) years from the date hereof, and said Lessee specifically covenants and agrees as follows;

- I -

To enter upon said mine and premises and to work and mine the same in a good and miner-like manner and to well and sufficiently

timber said mine in accordance with good mining practices; to comply with all State and Federal mining rules, laws and regulations; to suffer no liens to be recorded against said property, and to keep the same free from all claims of any kind or character made, done or suffered by the said Lessee, and to pay as and when due, all taxes of every kind and nature which may hereafter be assessed against said property commencing with the tax year 1955-56, and to forward the receipts therefor to the Lessor at least five (5) days before the payment thereof would otherwise become delinquent; and to post and keep posted on behalf of said Lessor, notices of non-responsibility so as to keep said property free from the claims of laborers, material men, and others; and to maintain a public liability insurance policy in favor of Lessor in the amount of $25,000.00 for claims arising from dangerous condition of the premises. This provision shall in no way be construed to cause the Lessee to be liable for income taxes due on royalties paid to the Lessor.

-II-

To keep proper books and records of all mining operations and all transactions and things occurring in connection with the operation of said mine and to permit the Lessor, its attorneys or agents, to examine said books and records at all reasonable times, to the extent to which they apply in determining royalty due the Lessor.

-III-

To pay unto said Lessor monthly during the term of this lease, ten (10%) per cent royalty on the gross amount received, less transportation charges, for all ores mined and minerals produced from said premises hereby demised. It being understood and agreed that payments shall be made on or before the 15th day of each month,

commencing December 15, 1955; provided, however, due to uncertain or exceptional marketing conditions, Lessor and Lessee may modify this term by agreement.

It is further agreed that commencing February 15, 1956, Lessee shall pay to Lessor a minimum royalty of One Hundred ($100.00) Dollars per month, the said minimum to continue for a period of one (1) year subsequent to said date; such minimum royalty to apply as an advance payment if not paid on ore actually mined and such payment and royalty to apply on the purchase price hereinafter referred to.

-IV-

The Lessee shall have the right and option, and he is hereby granted the right and option to purchase said property for the sum of $40,750.00 within the first ten (10) years of this lease, or $50,750.00 if the option is exercised after ten (10) years, and within the fifteen (15) year term of this lease; it being understood that all royalties hereafter paid shall be applied on said purchase or option price, and upon completion of the payment thereof, said Lessor agrees to make, execute and deliver unto said Lessee good and sufficient conveyances conveying to him the property herein described, free and clear of all liens or claims made, done or suffered by the said Lessor. Lessor agrees to guarantee clear title to said property, and to bear all legal and other costs, should any be necessary, to clear the same.

-V-

As a further consideration of this lease and option, the Lessee agrees to actively develop, work and mine said property so as to employ and work thereon, commencing January 1, 1957, not less than two hundred fifty (250) shifts of mine labor during each six (6) month period. Said Lessee further agrees that any and all buildings, ore bins, trestles, bridges and other similar items, which are classified as permanent improvements, shall henceforth

become fixtures and part of the mine proper. Any and all items of mining, milling and reduction equipment shall remain in the sole possession of the Lessee.

-VI-

It is specifically agreed that under no circumstances shall any moneys paid on account of said purchase price or as royalty, be returned to said Lessee but upon payment of the same, the whole thereof shall be and become the sole and separate property of the Lessor and shall be retained by said Lessor as and for rental and as a consideration for said option, and shall not be considered as being in the nature of penalty or forfeiture, and in the event of a suit to enforce any payment hereafter becoming due as a royalty or otherwise, or for any other purpose under this lease and option, said Lessor shall be entitled to recover in addition to the amounts found to be due and its costs of Court, a reasonable attorneys fee, to be set by the Court having jurisdiction of said action.

-VII-

In the event of default or failure on the part of said Lessee to comply with any of the terms, conditions or covenants in this lease and option contained, said Lessor shall thereupon become entitled to the sole, immediate and exclusive possession of said property and each and every part thereof, and may dispossess all persons occupying the same, with or without force and with or without process of law.

-VIII-

Said Lessor agrees to refrain from declaring a default or forfeiture on the part of said Lessee until thirty (30) days after notice in writing of such intention to declare such default or forfeiture is given said Lessee by depositing the same in the United States Postoffice at Vallejo, California, postage thereon prepaid, addressed to the Lessee at 1310 Coolidge, Tracy, California,

During said thirty (30) day period, said Lessee may purge himself of any default which may have theretofore occurred.

-IX-

The Lessee may cancel this lease at any time upon thirty (30) days advance notice in writing and upon the payment of all sums due up to the date of such cancellation, and upon executing and delivering to the said Lessor his quitclaim deed, quitclaiming unto said Lessor all of his right, title and interest in and to said property and the whole thereof, and in and to this lease and option.

-X-

The Lessee herein shall have the right of assignment of both the lease and option during the term hereof, with Lessor's consent.

-XI-

Time is of the essence of this agreement and all rights and benefits hereunder shall inure to and bind the heirs, executors, administrators and successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in duplicate, the day and year first above written.

THE VALLEJO QUICKSILVER MINING COMPANY, a California Corporation
Lessor

BY: _____

_____

_____
Lessee

RECEIVED JAN 10 1957 D.M.E.A.

LEASE

THIS AGREEMENT, made this 1st day of October, 1956, by and between EVELYN McINNES, MARIAN MINAHAN and DONALD EMERSON, as Lessors and HUGH C. INGLE, JR., as Lessee;

W I T N E S S E T H:

That said Lessors, for and in consideration of the payments and royalties herein agreed to be paid, and the performance of the covenants, conditions and agreements herein contained, do by these presents lease unto the said HUGH C. INGLE, JR., the following described mining claims and real property, situate in the OAT HILL MINING DISTRICT, NAPA COUNTY, CALIFORNIA, and more particularly described as follows, to-wit:

> All that certain real property, situated in said mining district, Napa County, California, and more particularly described as Lots 1, 14, 15, 16 and 17, Section 33, TWP 10 N., R 6 W. M.D.M., containing 88.59 acres, more or less.

TO HAVE AND TO HOLD the same unto said lessee for a term of fourteen (14) years and three (3) months from the date hereof, and the said lessee specifically covenants and agrees as follows:

I.

To enter upon said mine and premises and to work and mine the same in a good and miner-like manner and to well and sufficiently timber said mine in accordance with good mining practices; to comply with all State and Federal mining rules, laws and regulations; to suffer no liens to be recorded against said property, and to keep the same free from all claims of any kind or character made, done or suffered by the said lessee, and to pay as and when due, all taxes of every kind and nature which may hereafter be assessed against said property, commencing with the tax year 1955-56, and to forward the receipts thereof to the lessors at least five (5) days before the payment thereof would otherwise become delinquent; and to post and keep posted on behalf of said lessors, notices of nonresponsibility so as to keep said property free from

the claims of laborers, material men, and others; and to maintain a public liability insurance policy in favor of lessors in the amount of ~~$25,000.00~~ 100,000 for claims arising from dangerous condition of the premises. This provision shall in no way construed to cause the lessee to be liable for income taxes due on royalties paid to the lessors.

II.

To keep proper books and records of all mining operations and all transactions and things occurring in connection with the operation of said mine and to permit the lessors, their attorneys or agents, to examine said books and records at all reasonable times, to the extent to which they apply, in determining royalty due the lessors.

III.

To pay unto said lessors monthly during the term of this lease, ten (10%) per cent royalty on the gross amount received, less transportation charges, for all ores mined and minerals produced from said premises hereby demised. It being understood and agreed that payments shall be made on or before the 15th day of each month, commencing October 15, 1956; provided, however, due to uncertain or exceptional marketing conditions, lessors and lessee may modify this term by agreement.

It is further agreed that commencing October 15, 1956, lessee shall pay to lessors a minimum royalty of Thirty ($30.00) Dollars per month, ~~[illegible]~~ such minimum royalty to apply as an advance payment if not paid on ore actually mined and such payment and royalty to apply on the purchase price hereinafter referred to.

IV.

The lessee shall have the right and option, and he is hereby granted the right and option to purchase said property for the sum of $10,000.00 within the first ten (10) years of this lease, or

$15,000.00 if the option is exercised after ten (10) years, and within the fourteen (14) years, three (3) months term of this lease; it being understood that all royalties hereafter paid shall be applied on said purchase or option price, and upon completion of the payment thereof, said lessors agree to make, execute and deliver unto said lessee good and sufficient conveyances conveying to him the property herein described, free and clear of all liens or claims made, done or suffered by the said lessors. Lessors agree to guarantee clear title to said property, and to bear all legal and other costs, should any be necessary, to clear the same.

V.

As a further consideration of this lease and option, the lessee agrees to actively develop, work and mine said property so as to employ and work thereon, commencing January 1, 1959, not less than two hundred fifty (250) shifts of mine labor during each six (6) month period. Said lessee further agrees that any and all buildings, ore bins, trestles, bridges and other similar items, which are classified as permanent improvements, shall henceforth become fixtures and part of the mine property. Any and all items of mining, milling and reduction equipment shall remain in the sole possession of the lessee.

It is further understood and agreed that the requirements under this provision shall be satisfied in the event the work therein specified is performed, either in the mining property, the subject of this lease, or on the adjacent mining property, the subject of that certain lease dated September 18, 1955, between the VALLEJO QUICKSILVER MINING COMPANY, a California corporation, as lessor and HUGH C. INGLE, JR., as lessee.

VI.

It is specifically agreed that under no circumstances shall any moneys paid on account of said purchase price or as royalty, be returned to said lessee but upon payment of the same, the whole

thereof shall be and become the sole and separate property of the lessors and shall be retained by said lessors as and for rental and as a consideration for said option, and shall not be considered as being in the nature of penalty or forfeiture, and in the event of a suit to enforce any payment hereafter becoming due as a royalty or otherwise, or for any other purpose under this lease and option, said lessors shall be entitled to recover in addition to the amounts found to be due and their costs of court, a reasonable attorney's fee, to be set by the court having jurisdiction of said action.

VII.

In the event of default or failure on the part of said lessee to comply with any of the terms, conditions or covenants in this lease and option contained, said lessors shall thereupon become entitled to the sole, immediate and exclusive possession of said property and each and every part thereof, and may dispossess all persons occupying the same, with or without force and with or without process of law.

VIII.

Said lessors agree to refrain from declaring a default or forfeiture on the part of said lessee until thirty (30) days after notice in writing of such intention to declare such default or forfeiture is given said lessee by depositing the same in the United States Post Office at Vallejo, California, postage thereon prepaid, addressed to the lessee at 1210 Coolidge, Tracy, California. During said thirty (30) days period, said lessee may purge himself of any default which may have theretofore occurred.

IX.

The lessee may cancel this lease at any time upon thirty (30) days advance notice in writing and upon the payment of all sums due up to the date of such cancellation, and upon executing and delivering to the said lessors their quitclaim deed, quitclaiming unto said lessors all of their right, title and interest in and to said property and the whole thereof, and in and to this lease and option.

X.

The lessee herein shall have the right of assignment of both the lease and option during the term hereof, with lessors' consent.

XI.

Time is of the essence of this agreement and all rights and benefits hereunder shall inure to and bind the heirs, executors, administrators and successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in quadruplicate, the day and year first above written.

Lessors:

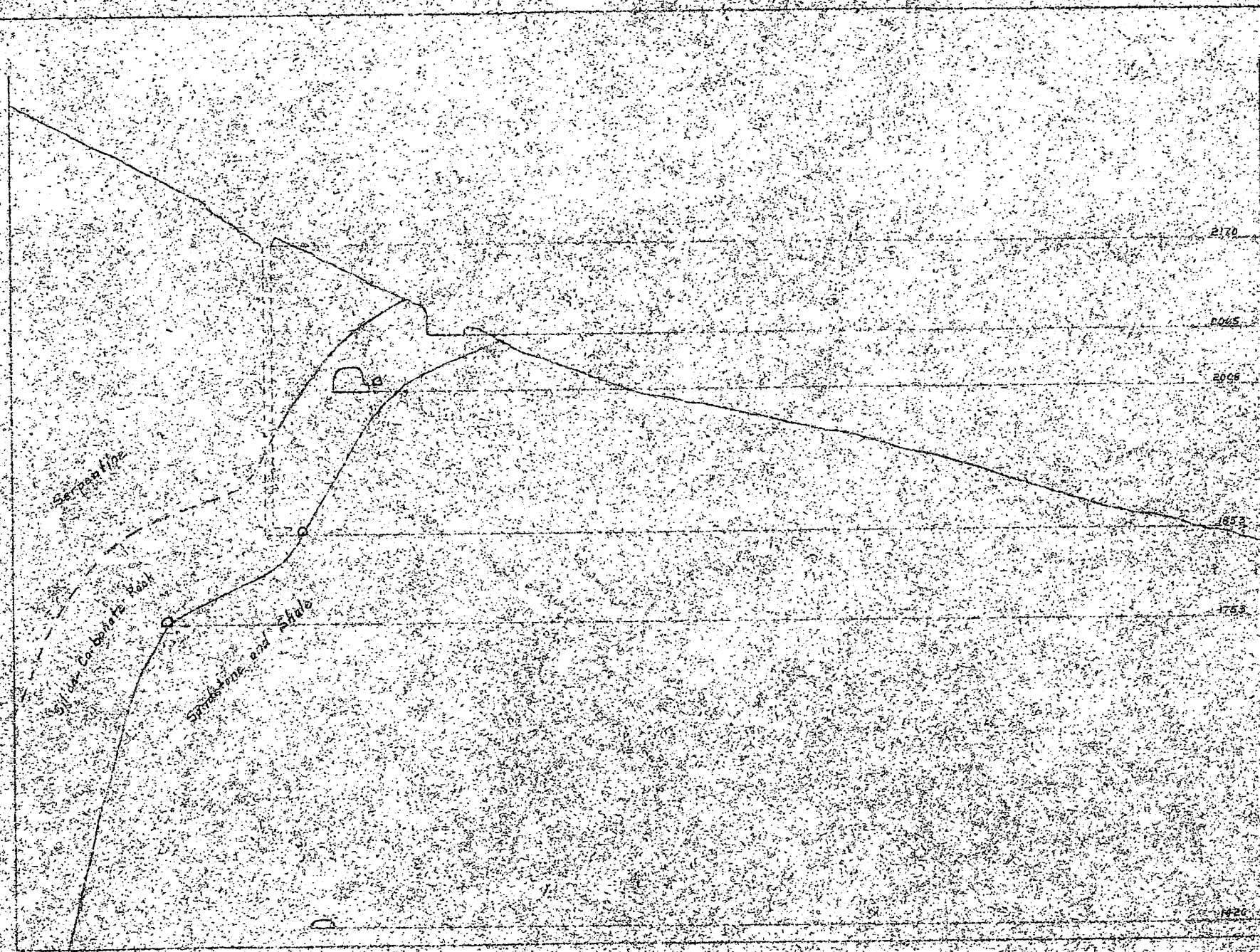
EVELYN McINNIS.

MARIAN MINAHAN.

DONALD EMERSON.

Lessee:

HUGH C. INGLE, JR.



CORONA MINE
SECTION D-D'
Scale 1"=150'
H.C. Ingle, Jr. Nov 17, 1956

RECEIVED
JAN 10 1957
D.M.E.A.

5/6/57

JH

Please make sure this does not get filed before the correction is made

5/6/57 Happens mr. take care of this too WBy

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 5/3

REFERRED TO:

1. ~~H. Berry~~
2. Mr. Dalbridge
3. ~~Code 400~~
4.

FOR:

---------- Action	---------- Recommendation
---------- Approval	---------- Record of ----------
---------- Comment	---------- Referring to ----------
---------- Conference	---------- Reply for signature of ----------
---------- Consideration	---------- Rewriting
---------- Filing	---------- Signature
---------- Instructions	---------- Suggestions
---------- Investigation	---------- Your information
---------- Initials	
---------- Mailing	
---------- Previous correspondence	

REMARKS:

Hazel this is correction for field team reports which have been received and I thought you would want to see it.

Check (X) before the items needing attention.

Copy made for USBM & USGS

C C

Initials of sender.

GPO 16—63815-1 E57

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 3 1957

DATE	INITIALS	CODE
5/3	C	220
		130
6	WSM	400

May 1, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4601 (Mercury)
Hugh C. Ingle
Corona Mine
Napa County, California

Please refer to report on subject property forwarded under cover of our memorandum dated April 23, 1957. The elevation of fault, north~~east~~ west corner of Figure 2, should be 2200' ± instead of 2000' ± as shown. We would appreciate it if you would make the correction.

S. Ricker

S. Ricker

5/6/57
This has been done upstairs. Ltr to Open. Comm. is fine.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-15	Hopkins	400
8-15	Martin	400
8/19	Jeffords	120
8/19	Bowman	110
"	Mittendorf	100
8/20	P.	220
		225

AUG 19 1957

Mr. Hugh C. Ingle
P. O. Box ~~151~~
Middletown, California

Re: Docket No. DMEA 4601 - Mercury
Corona mine
Napa County, California

Dear Mr. Ingle:

Reference is made to your letter of August 1, 1957, to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, enclosing a portion of the information requested in his letter of May 21, 1957, and requesting that your application be held in abeyance pending completion of your arrangements to finance your share of an exploration project.

We wish to cooperate with you fully in allowing you ample time to furnish the requested information and to complete your financial arrangements; however, we cannot indefinitely postpone action on your application. As we have no assurance of your completing your financial arrangements in the near future we are, therefore, considering your application as having been withdrawn and are placing it in our inactive files.

We regret the necessity of taking such action; however, it is taken without prejudice to your proposed project. If at some future time you desire to reopen this case, you may do so by filing a new application, referring to the subject application by the DMEA docket number, and furnishing the information previously requested together with any other data that you think may be helpful.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

JHopkins/dlm 8-15-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-16	Hopkins	400
8-16	Martin	400
		160

August 16, 1957

MEMORANDUM

To: A. B. Dakan, Director
Division of Oper. Control and Statistics

From: W. S. Martin, Director
Division of Iron and Ferro-Alloys, DMEA

Subject: Withdrawal of Application
Docket No. DMEA 4601
Hugh C. Ingle
Corona Mine
Napa County, California

The subject application is being considered withdrawn and placed in the inactive files, because the Applicant's plans are indefinite and we have no assurance that its financial arrangements will be completed in the near future.

Attachment

W. S. Martin, Director
Division of Iron and Ferro-Alloys

8623

DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

August 8, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4601 (Mercury)
Hugh C. Ingle
Corona Mine
Napa County, California
(Your letter, dated August 2, 1957)

Enclosed are two copies of a letter from the Applicant dated August 1, 1957, explaining status of subject Docket. Also enclosed are two copies each of bids from three diamond drill contractors and one bulldozing operator.

We can see no disadvantage in holding the application in abeyance as requested. Would be pleased to have your suggestions if you wish us to take any further action at this time. Perhaps a letter to the Applicant that we are considering the application as being withdrawn may be a preferable course to pursue.

S. Ricker

Attachments

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 12 1957

DATE	INITIALS	CODE
8/13	Q.	220
8/13	WBM	400

52 8/8/57

P. O. Box 39
Middletown, Calif.
August 1, 1957

Mr. S. Ricker
Executive Officer, DMEA Field Team
Region II
1001 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA-L601 (Mercury)
Corona Mine
Napa County, California

Dear Mr. Ricker:

Principal purpose of this letter is to request that you hold in abeyance any further action on my loan application. The company which was interested in backing the proposed project has withdrawn all support. Information given us indicated that the proposed work in Area No. 3 was to be limited to such an extent that the overall chance of discovering sufficient ore for a substantial operation would be greatly reduced. Further, the anticipated unit cost allowance appeared to fall far short of expected actual costs. Consequently, the past three months were spent in intensively sampling and studying geologically the No. 3 Level and above and the surface for possibilities of developing sufficient low-grade ore to warrant some sort of operation which could help carry the burden of exploration costs. The results were negative, and therefor the company decided to abandon the project.

I shall attempt to interest other parties in the project and inform you as soon as there is any change in the situation. Further action, one way or the other, should be forthcoming within the next two months.

I am enclosing the letters on diamond drilling and bulldozing requested in your letter of May 21, 1957. I have been awaiting the subordination agreement from Livermores, but despite repeated promises of prompt action by them, it has not arrived.

Yours very truly,

Hugh C. Ingle, Jr.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 12 1957

DATE	INITIALS	CODE

DEAR SIRS:

MY CHARGE PER HOUR FOR MULTIGRAPH WORK IS $ 12.00 PER HR.

IT IS AN E-5 16 EQUAL TO A CAT -7.

SINCERELY YOURS,

Ernie Diener

ERNIE DIENER
P.O. BOX 74
LAKE TAHOE,
CALIF.

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 12 1957

DATE	INITIALS	CODE

MITCHELL DIAMOND DRILL COMPANY

DIAMOND DRILL CONTRACTING
DIAMOND DRILL RENTALS
BRIDGE AND DAM SITE TESTING
MINERAL EXPLORATION

39 EL SERENO COURT • SAN FRANCISCO 16, CALIFORNIA • JUNIPER 4-5549

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 12 1957

DATE	INITIALS	CODE

February 21, 1956

Mr. Hugh C. Ingle Jr.
1310 Coolidge
Tracy, California

Dear Mr. Ingle:

Please excuse my delay in answering your letter of February 13, but I have been away from the city on business.

Regarding a quotation for your planned drilling program near Middletown, Lake County, California, I cannot quote you a firm price without first inspecting the drill sites, and local conditions. However in this area a rough estimate would be around $6.00 per foot, not including the reaming and cementing clause.

I have done work in this area for the Bureau of Mines and from this experience may I suggest that a hole of the depth you plan 800'+feet be started with a larger size core than "EX".

We would be able to commence the work aproximately two weeks following your notification of award.

As to the time estimate for the work, I cannot truthfully give you even an estimate until first inspecting local conditions, and then it would be most difficult, due to the fact that we cannot anticipate the conditions of the formations to be encountered.

Thanking you for your inquiry, and if we can be of futher service kindly advise.

Yours truly,

W. C. Mitchell

W. C. Mitchell Diamond Drill Company.

wcm/o

"MINERAL EXPLORATION • TEST BORINGS • GROUT HOLE DRILLING"

CONTINENTAL DRILLING COMPANY

DIAMOND DRILLING CONTRACTORS

2810 NORTH FIGUEROA

LOS ANGELES 65, CALIFORNIA

TELEPHONE CAPITOL 2-7146

R. F. THIES
MANAGER

June 11, 1957

Mr. Hugh C. Ingle, Jr.
P. O. Box 351
Middletown, California

Dear Mr. Ingle:

I have yours of June 5th regarding our quotation for core drilling a mercury mine near Middletown, California.

Cost of drilling as follows:

$6.00 per lineal foot for AX size hole, plus
2.00 per lineal foot for any cased hole
Cement, and drilling our cement at $7.50 per hour.

Yours very truly,

CONTINENTAL DRILLING COMPANY

RF Thies

RFT/ee

R. F. Thies, Manager

OFFICIAL FILE COPY
OMEA
RECEIVED AUG 12 1957

DATE	INITIALS	Comments

DIAMOND BITS, DRILLS
AND
DRILLING EQUIPMENT

Telephone SUTTER 1-6850

DIAMOND TOOLS FOR
INDUSTRIAL AND
SCIENTIFIC PURPOSES

Processed Diamond Bit & Tool Company
INCORPORATED
66 RITCH STREET
San Francisco 7, California

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 12 1957

DATE	INITIALS	CODE

June 8, 1957

Hugh C. Engle Jr.
P.O. Box 351
Middletown, California

Dear Sir:

As per your telephone request of June 5th we are submitting a tentative quotation on the proposed diamond drilling program on your property near Middletown, California.

It is our understanding that the formation will be Silicon Carbonate and Seppentine. You propose approximately 1,500 lineal feet of surface drilling and 5,700 lineal feet of underground drilling with a maximum depth in any one hole 300 feet. There is water available within a mile and you will have a pipe line, for air, in the underground workings. We will furnish the necessary air for our drilling operations and haul our own water.

Our tentative price is $7.25 per lineal foot for size AX Diamond Drilling.

Should you decide to go ahead with this program we would send a man to examine the property and present a firm quotation on the drilling desired.

If there are any further questions on this matter kindly call on us.

Very truly yours,

W. J. Shea

W. J. Shea

WJS:ws

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7-31	Hopkins	400
7-31	Martin	400
8/2	Martin	130
"	Johnson	110
"	Butterworth	100
8/2		220
		400

AUG - 2 1957

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 4601 - Mercury
Hugh C. Ingle
Corona Mine
Napa County, California

Dear Mr. Ricker:

Reference is made to your memorandum dated May 23, 1957, transmitting most of the material requested in our letter of May 6 and your letter of April 23, 1957, to the Applicant.

Two months have elapsed since this material was received and we believe it would now be advisable for you to ask the Applicant again when we may expect the additional material necessary to process the subject application. Also, unless further interest in the project is shown by a reply to your inquiry, you may advise the Applicant that under the circumstances we are considering the application as being withdrawn.

Sincerely yours,

W. S. Martin

APPROVED:

ACTING Chairman, Operating Committee (JHB)

P. F. Yopes (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

JHopkins/dlm 7-31-57
cc to: Code 400
Admr. R. File
Oper. Comm
FT REG. II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

May 28, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4601 (Mercury)
Hugh C. Ingle
Corona Mine
Napa County, California

Supplemental to our telegram of May 21, 1957, we are enclosing two copies of a letter dated May 24, 1957 from the Operator.

Enclosed are the following documents as noted in Mr. Ingle's letter:

4 copies of Consent to Lien and Subordination Agreement from Vallejo Quicksilver Mining Co.

4 copies of Consent to Lien and Subordination Agreement from Evelyn McInnis, et al.

4 copies of Lease from Norman Livermore, et al.

It would appear that Mr. Ingle is working hard to obtain the necessary requested documents. Shall forward additional material as it is received.

New address see ltr from applicant dated 5/24/57.

Encls.

S. Ricker

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 31 1957

DATE	INITIALS	CODE
5/31	ZWD	220
6/3	NSM	400

P.O. Box 351
Middletown, California
May 24, 1957

Mr. S. Ricker
Executive Officer, DMEA Field Team
Region II
1605 Evans Avenue
Reno, Nevada

Re. Docket No. DMEA-4601 (Mercury)
Corona Mine
Napa County, California

Dear Mr. Ricker:

Enclosed find four copies of the Livermore lease for Lot 1, Sec. 32, T. 10 N., R. 6 W., M. D. M. Note that no option to purchase was granted.

Also enclosed are four copies of subordination agreement from Vallejo Quicksilver Mining Company and four from Evelyn McInnis, et al. The latter you did not ask for; if they are unnecessary, please return.

The subordination forms from the Livermores have not been returned as yet, but I assume they will arrive shortly and I will forward them promptly to you.

You did not request any subordination papers on my unpatented claims. If they are necessary, please so inform me.

I would like to have my official address changed at this time to:

P. O. Box 351
Middletown, California

All future correspondence should be directed to this address.

Yours very truly,

Hugh C. Ingle, Jr.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 31 1957

DATE	INITIALS	CODE
6/3	WSM	400

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 23 1957

DATE	INITIALS	CODE
5/23	ZWZ	220
5/23	WSM	400

1605 Evans Avenue
Reno, Nevada

May 21, 1957

Mr. Hugh C. Ingle, Jr.
1310 Coolidge
Tracy, California

Re: Docket No. DMEA-4601 (Mercury)
Hugh C. Ingle, Jr.
Corona Mine
Napa County, California

Dear Mr. Ingle:

Will you please refer to our letter of April 23, 1957 and promptly give us your plans relative to referenced docket? In addition to the information requested in our letter in order to continue processing your application, we shall require at least three bids from drilling contractors on the proposed surface and underground drilling work. We would also like to have the size and manufacturer's name of the bulldozer that will be used for trenching and the hourly rental rate.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:ft
cc: Opr. Com., DMEA, Wash., D.C.
RMSmith
File
Chron

DI-17

SPECIAL

CPO 10-01580-1

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International Letter Telegram

The filing time shown in the date line on domestic telegrams is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

1201

19

OA378 SSL372

O REA399 NL PD=RENO NEV 21=

GEORGE C SELFRIDGE=

1957 MAY 21 PM 6 35

CHAIRMAN OPERATING COMMITTEE DEFENSE MINERALS

EXPLORATION ADMIN INTERIOR BLDG WASHDC=

WSM

REURTEL DOCKET DMEA 4601 HUGH C INGLE HAVE NOT YET BEEN ABLE TO CONTACT INGLE BUT DO NOT ANTICIPATE ANY PROMPT ACTION ON HIS PART IN OBTAINING REQUESTED DATA=

S RICKER EXECUTIVE OFFICER DMEA FIELD TEAM REGION TWO=

JWM 5/22

4601=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

MAY 22 6 49 AM '57

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D.C.

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 22 1957

DATE	INITIALS	CODE

A Form 7
2-56)

I RIOR

DMEA

OFFICIAL FILE COPY

Date	Surname	Code
5-17	Hopkins	400
5-17	Martin	400
5/17	Selfridge	130
	Lamb	130
	Kilsgaard	130
5/17	Brown	110
	Pellenton	100
5/20	C	220
		400

14X1401(01) Revolving Fund
Defense Production Act, Interior, (Transfer to Office of Secretary)

MAY 17 1957

MR. SPANGLER RICKER, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION II
1605 EVANS AVENUE
RENO, NEVADA

RE DOCKET DMEA 4601 HUGH C. INGLE. PLEASE ADVISE IF YOU ANTICIPATE THAT APPLICANT CAN SOON PROVIDE ADDITIONAL INFORMATION AND FORMS REQUESTED IN OUR LETTER TO YOU MAY 6, 1957 AND YOUR LETTER TO APPLICANT APRIL 23, 1957.

Kilsgaard

George C. Selfridge
(by ls)
CHAIRMAN, OPERATING COMMITTEE

JHOPKINS:foc

5-17-57
cc to: Docket
Code 400
Admr. R. File
Oper. Comm.
FT. REG. II - CONFIRMATION
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

Form 7
-56)

OFFICIAL FILE COPY

Date	Surname	Code
5-3	Hopkins	400
5-3	Martin	400
5/6	Selfridge	130
		130
		130
5/6	[illegible]	110
"	[illegible]	100
5/7	[illegible]	220
		400

MAY - 6 1957

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 4601 - Mercury
Hugh C. Ingle
Corona Mine
Napa County, California

Dear Mr. Ricker:

Reference is made to the field examination report dated April 16, 1957, and the Field Team's recommendation of a proposed exploration project on the subject property consisting of trenching, diamond drilling, drifting and crosscutting or raising.

To enable us to continue processing this application please request the applicant to submit bids from at least three drilling contractors for the proposed surface and underground diamond drilling work. Also, request him to furnish the size and manufacturer's name of the bulldozer that will be used for trenching and the hourly rental rate. We will also appreciate receiving your estimate of the volume expressed in cubic yards of material to be excavated, and the cost.

Sincerely yours,

George C. Selfridge
(By esf)
Chairman, Operating Committee

APPROVED:

Frank D. Lamb (By esf)
Member, Bureau of Mines

N. E. Nelson (By esf)
Member, Geological Survey

JHopkins:am 5-3-57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT REG II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

May 3, 1957
Re: DMEA 4601
Hugh C. Ingle
Corona Mine
Napa County, Calif.
Applicant's Estimate $168,312.50
Recommended Estimate $64,105.00
Mercury

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report

The applicant requested assistance in the rehabilitation and exploration of an old mine, credited with the production of 5,000 flasks of mercury.

The cinnabar occurs, principally, on the foot and hanging walls of a long silica-carbonate zone, particularly where the dip flattens.

In the opinion of the examiners, the chances of finding ore shoots similar to the 4 that produced the ore are good, and they recommend a well planned work program more in keeping with the probable potential of the zone than is the proposal of the applicant.

I concur with the recommendation of the examiners and the Field Team.

N. E. Nelson

FILE COPY
DMEA
RECEIVED MAY 6 1957

DATE	INITIALS	CODE
5/6	JWD	220
5/6	WSA	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957

DATE	INITIALS	CODE
5/1	C	220
5/1	WSM	400
April 30, 1957		

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: Assistant Chief, Branch of Base Metals

Subject: Review of Field Team examination report, Docket No. DMEA 4601 (Mercury), Hugh C. Ingle, Corona Mine, Napa County, California. $64,105.00

After examining the property, the Field Team has recommended a modified program to explore two areas of the Corona mine for mercury mineralization at an estimated total cost of $64,105.00. The proposed exploration would be done in two projects, each in two stages.

Reserves are estimated to be 26,000 tons averaging 8 to 10 pounds of mercury per ton and the examiners believe that the probability of a significant discovery in each of the projects is fair.

As this appears to be a worthwhile project with reasonable costs, I concur with the recommendation of the Field Team that the exploration project at the Corona mine be approved.

The application is returned herewith.

J. W. Pennington

J. W. Pennington

Attachment

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U.S.G.S.
F. D. Lamb
F i l e s

OFFICIAL FILE COPY
DMEA
RECEIVED APR 25 1957

DATE	INITIALS	CODE
4/26	W-504	400

1605 Evans Avenue
Reno, Nevada

April 23, 1957

Mr. Hugh C. Ingle, Jr.
1310 Coolidge
Tracy, California

Re. Docket ~~No. DMEA-4601~~ (Mercury)
Mr. Hugh C. Ingle, Jr.
Corona Mine
Napa County, California

Dear Mr. Ingle:

As you know, the above-referenced property has been examined by our engineers. Further action cannot be taken until we have your lease on the Norman B. Livermore and Sons property and Consent to Lien and Subordination Agreements from Norman B. Livermore and Sons as well as Consent to Lien and Subordination Agreements from the Vallejo Quicksilver Mining Company.

Three sets of Consent to Lien and Subordination Agreement forms are enclosed.

Very truly yours,

S. Ricker
Executive Officer, DMEA Field Team
Region II

Encls.
SRicker:ft
cc: Opr. Com., DMEA, Wash., D.C.
RMSmith
File
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

April 23, 1957

Memorandum

To: Operating Committee, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4601 (Mercury)
Hugh C. Ingle
Corona Mine
Napa County, California

In accordance with your letter of January 23, 1957, we are enclosing four copies of a report by J. D. Warne, Bureau of Mines, and D. B. Tatlock, Geological Survey, in which is recommended a DMEA exploration project on subject property. Total estimated cost is $64,105.00.

Roscoe Smith and I concur in the recommendation.

Also enclosed are two copies of a letter to the Applicant relative to Lease and Consent to Lien and Subordination Agreements.

S. Ricker

Encls.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 25 1957

DATE	INITIALS	CODE
4/25	JWG	220
		130
4/30	C	220
4/30	WSM	400

Reviewed by
DMEA OPERATING COMMITTEE
4-29-57
(date)

BUREAU OF MINES
WASHINGTON, D.C.
APR 25 9 57 AM '57

OFFICIAL

~~EXTRA COPY~~

DMEA

RECEIVED APR 23 1957

DATE	INITIALS	CODE

1605 Evans Avenue
Reno, Nevada

April 23, 1957

Mr. Hugh C. Ingle, Jr.
1310 Coolidge
Tracy, California

Re. ~~Docket No. DMEA-4601~~ (Mercury)
Mr. Hugh C. Ingle, Jr.
Corona Mine
Napa County, California

Dear Mr. Ingle:

As you know, the above-referenced property has been examined by our engineers. Further action cannot be taken until we have your lease on the Norman B. Livermore and Sons property and Consent to Lien and Subordination Agreements from Norman B. Livermore and Sons as well as Consent to Lien and Subordination Agreements from the Vallejo Quicksilver Mining Company.

Three sets of Consent to Lien and Subordination Agreement forms are enclosed.

Very truly yours,

S. Ricker
Executive Officer, DMEA Field Team
Region II

Encls.
SRicker:ft
cc: Opr. Com., DMEA, Wash., D.C.
RMSmith
File
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

OFFICIAL FILE COPY
DMEA
RECEIVED APR 25 1957

DATE	INITIALS	CODE
		130 ~~210~~
		220

On-Site Report

APPLICATION REPORT

DMEA-4601 (Mercury)
Mr. Hugh C. Ingle, Jr.
Corona mine
Napa County, California

by

J. D. Warne
U. S. Bureau of Mines

D. B. Tatlock
U. S. Geological Survey

April 16, 1957

Reviewed by
DMEA OPERATING COMMITTEE
4-29-57
(date)

CONTENTS

	Page
Introduction	1
Conclusions and Recommendations	2
Location and Accessibility	2
Property and Ownership	3
History and Production	3
Development	4
General Geology	4
Ore Deposits	7
Sampling	10
Ore Reserves	11
Exploration	12
Exploration Costs	16

ILLUSTRATIONS

Figure 1 . . . . . Index map

2 . . . . . Geologic map

3 . . . . . Corona mine, No. 3 tunnel stopes

4 . . . . . Property map

INTRODUCTION

Mr. Hugh C. Ingle, Jr., 1310 Coolidge, Tracy, California, applied to the Defense Minerals Exploration Administration, docket DMEA-4601, for Government assistance in a $168,312.50 program to explore for mercury at the Corona mine, Napa County, California. The applicant wishes to explore known ore shoots at depth and to explore for additional ore shoots along the strike of the mineralized zone.

A field examination was requested by the Operating Committee, and was made by J. D. Warne, U. S. Bureau of Mines, and D. B. Tatlock, U. S. Geological Survey, on February 12 and 13, 1957, accompanied by the applicant. The topography and the geology were partly mapped by stadia and plane table on February 14 and 15 by Tatlock and the applicant. The accessible underground workings were mapped by Tatlock on February 20 and 21. The surface mapping has not been completed owing to wash-outs on the county access road which will not be restored for several weeks.

A contract cannot be prepared until a lease and option agreement from Norman B. Livermore and Sons is received covering Lot 1 at the northwest end of the mine area. All other land is either under lease and option or has been staked by the applicant.

CONCLUSIONS AND RECOMMENDATIONS

Cinnabar is disseminated through, and fills fractures in, silica-carbonate rock, forming shoots along zones of relatively gentle dip. Reserves total 26,000 tons averaging 8 to 10 lbs. Hg/ton, or about 3,000 flasks.

It is recommended that the Government participate in exploring the property by two separate projects, each in two stages, at a total cost of $64,105.00, of which the Government's share would be $48,078.75.

Project I at the northwest end of the mine area consists of eight days of bulldozing, 1,200 feet of surface diamond drilling, and 500 feet of drifting and crosscutting.

Project II at the southeast end of the mine area consists of 430 feet of crosscut rehabilitation, 500 feet of drifting and crosscutting, and 800 feet of diamond drilling.

The probability of a significant discovery in each of the project areas is fair. The property is easily accessible throughout the dry season.

LOCATION AND ACCESSIBILITY

The Corona mine is in the eastern Mayacmas Quicksilver district in secs. 32 and 33, T. 10 N., R. 6 W., M.D.B.&M., Napa County, California.

It is accessible by automobile on a paved county road leading (southeastward) 4.6 miles from Middletown, California, then (southward) via a dirt county access road 4.5 miles to the head of James Creek.

PROPERTY AND OWNERSHIP

Property included in the application (Fig. 4) follows:

Property Description	Owner
San Juan, St. James, Clearing House, Key West, and Key West Mill Site (patented claims)	Vallejo Quicksilver Mining Co. 1433 Tennessee Street Vallejo, California
Lots Nos. 2 and 3, Sec. 33, T. 10 N., R. 6 W., M.D.B.&M. (39.05 acres). Napa County, California	" " " "
Lots Nos. 1, 14, 15, 16, and 17, Sec. 32, T. 10 N., R. 6 W., M.D.B.&M. (88.59 acres) Napa County, California	Evelyn McInnis, Marian Minahan, and Donald Emerson P. O. Box 161 Kentfield, California
Alliance Nos. 1, 2, and 3, and Janie (unpatented claims), Secs. 32 and 33, T. 10 N., R. 6 W., M.D.B. & M., Napa County, Calif.	Hugh C. Ingle, Jr. 1310 Coolidge Tracy, California
Lot No. 1, Sec. 32, T. 10 N., R. 6 W., M.D.B.&M, Napa County, California	Norman B. Livermore & Sons San Francisco, California

HISTORY AND PRODUCTION

The Corona Mine was operated by the Vallejo Quicksilver Mining Company, Vallejo, California, from 1895 to 1906, and by the Twin Peaks Mining Co., Oakland, California, intermittently from 1941-1943. A total production of 5,000 flasks of mercury is reported.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 25 1957
DATE | INITIALS | CODE

DEVELOPMENT

The Corona mine is developed by four crosscut adits (tunnels No. 1, 2, and 3, and the Bluff tunnel) driven southwesterly into the mineralized zone at depths of 70 to 150 feet below the surface exposures. The adits total about 1,200 feet in length. In addition to these, the Drain tunnel, about 2,500 feet long, intersects the mineralized zone 700 feet below the outcrop, but no ore was mined from it.

The main underground development consists of a drift that extends about 1,300 feet northwest from the No. 2 tunnel. Several winzes, sublevels, and stopes are connected to this main drift.

At the time of the examination the only accessible workings were the stopes above the No. 3 tunnel level (fig. 3).

GENERAL GEOLOGY

The Corona mine is in an area of high relief near the southeast end of the Mayacmas quicksilver district. It is about two miles northwest of the Aetna mine and three and one-half miles southeast of the Mirabel mine which lie along the same regional structure and which have yielded a combined total of more than 100,000 flasks of quicksilver. It is about one mile southwest of the Oat Hill mine which has yielded more than 160,000 flasks from a different geologic setting.

The mine is on the foot wall of an elongate serpentine body which strikes N 60° W and dips, on an average, about 45° SW. The serpentine extends 2 miles along the strike and averages about 1,700 feet in width. It is strongly sheared parallel to its elongation, especially along its margins which have been hydrothermally altered to silica-carbonate rock, the host rock for all of the ore bodies. The serpentine concordantly intrudes graywacke and shale of probable Early Cretaceous age which crops out continuously along the foot wall and in two small areas along the hanging wall. The sedimentary rocks are locally hydrothermally altered forming a white to light gray rock in which feldspar grains are altered to clay, and ferromagnesian minerals are either partly or wholly decomposed.

Pyroclastic rocks of Tertiary age, chiefly fine- to coarse-grained, well-bedded andesitic and rhyolitic tuffs, overly the older rocks to the northwest and southwest. A few small bodies of silica-carbonate rock protrude through the tuffs one to two thousand feet northwest of the main serpentine body indicating that serpentine is probably continuous to the northwest beneath the pyroclastics.

The silica-carbonate rock along the footwall of the serpentine body contains all of the known and inferred ore bodies. It strikes about N 60° W and dips from 20° to 70° SW. It is dominantly opaline silica. Its contact with the underlying sedimentary rocks is a thrust fault, the silica-carbonate rock being thrust over the sedimentary rocks and locally, at the northwest end of the mine area, over the tuffs. Its contact with the overlying serpentine, although gradational, is fairly sharp, generally from 5 to 20 feet wide.

The average thickness of the silica-carbonate rock, as exposed on the surface, is about 75 feet. It is broken by three sets of joints, one roughly parallel to the strike but perpendicular to the dip of the body, another at right angles to the strike and nearly vertical, and a third less prominent set parallel to the strike and dip of the body.

A northeast-trending, steeply-dipping fault cuts the silica-carbonate rock at the northwest end of the mine area. Numerous faults of small displacement, about half of which are gouge-filled, cut the silica-carbonate rock parallel to all the joint planes. Many of these faults undulate as they pass from one joint plane to another.

ORE DEPOSITS

All of the ore bodies at the Corona mine are in silica-carbonate rock along the foot wall of the northwest-trending serpentine body. Cinnabar, the only ore mineral seen, occurs as crystals disseminated through the silica-carbonate rock, as crystalline coatings on fracture surfaces and as fine disseminations in clay gouge. Some cinnabar is a bright red, pulverulent powder which coats fracture faces and fills small vugs. This may be of seconadry origin, formed through ground-water action on primary cinnabar. Gangue minerals are pyrite, marcasite, opal, dolomite, undetermined clay minerals, limonite, and locally a black liquid hydrocarbon. Locally the ore contains more than 10 percent pyrite, which in the past made it difficult to treat in the furnace.

There were at least four ore shoots in the Corona mine; all plunged southwest down the dip of the silica-carbonate rock. The largest ore shoot was in the vicinity of the No. 1 and No. 3 tunnels (fig. 2), and in 1902, according to Forstner[/] was "opened

---

/Forstner, William, The quicksilver resources of California: Calif. Min. Bur. Bull. 27, p.79, 1903.

---

for a length of 160 feet and has been persistent from the surface to the present depth of 450 feet." On the No. 3 tunnel level this ore

body was stoped for a length of 105 feet and an average width of 50 feet. The open cut at the surface is of comparable size, and a stope of only slightly smaller size is between the surface pit and the No. 3 level stope. It is estimated that 35,000 tons was mined from these stopes. Probably the entire silica-carbonate rock ledge could have been stoped to the depth of the No. 3 tunnel level at today's price of quicksilver.

A second ore shoot, parallel to the largest shoot, was mined from the surface about 150 feet east of the open pit. This is probably a part of the same shoot cut by the foot-wall drift on the No. 2 tunnel level (1,853 feet). At the surface this shoot extends about 90 feet along the strike, is about 40 feet thick, and has been mined to a depth of 53 feet below the highest outcrop.

A third ore shoot, about 700 feet southeast of the largest shoot, in the vicinity of the No. 2 tunnel, extended 340 feet down the dip of the silica-carbonate body; it was 20 to 40 feet wide and about 10 feet thick.

A fourth ore shoot, about 400 feet northwest of the largest shoot, in the vicinity of the Bluff tunnel, was mined for a stope length of 160 feet, mostly below the Bluff tunnel level (2,105 feet). It was about 10 feet wide and 10 feet thick.

Cinnabar is exposed at the surface in silica-carbonate rock in a few small discontinuous outcrops 100 to 300 feet northwest of the Bluff tunnel. The foot wall of the silica-carbonate body dips 25 to 35 degrees southwest in this area. From a study of the cross sections and from knowledge of the occurrence of ore shoots in other quicksilver mines with a similar structural setting (e.g., Abbott mine, DMEA-292), it is hypothesized that it is along flattenings in the silica-carbonate body that ore shoots are most likely to occur. In the Corona mine the axes of the flattenings lie nearly horizontal along the trend of the silica-carbonate body. Within the zones of flattening ore occurs along both the foot and hanging walls and also well within the silica-carbonate body.

The cinnabar-bearing surface exposures northwest of the Bluff tunnel are in a zone of flattening which probably extends to a depth of at least 150 feet as evidenced by the depth of the stope in the Bluff tunnel. The northeast-trending fault northwest of the Bluff tunnel may provide an ore control along its intersection with the silica-carbonate body. This is a favorable setting for an ore shoot.

The silica-carbonate zone between the No. 2 and No. 3 tunnels has not been explored except along the foot-wall contact. On the surface the zone is covered by serpentine flow debris for about

300 feet west of the No. 2 tunnel. At the west end of the covered area the silica-carbonate zone begins to widen toward the southeast forming what is probably a local bulge in the zone. This bulge corresponds with the change in the trend of the foot-wall drift on the 1,853 level. The relatively gentle dip of the silica-carbonate body in this area (fig. 2, Sec. C-C') combined with the bulge provides a favorable setting for ore, as the ore shoots in the vicinity of the No. 3 tunnel are in a similar setting.

There are cinnabar-bearing silica-carbonate rock fragments on the dump at the portal of the caved drain tunnel indicating that the silica-carbonate zone is mineralized at the 1420-foot level. It is probable that the silica-carbonate body flattens not far below the drain tunnel level.

SAMPLING

Eight samples were taken from accessible surface and underground locations shown in figure 2. Analyses and descriptions of samples are as follows:

Sample No.	Lb. Hg/ton	Description
1	2.6	Chip sample from foot-wall zone in unmapped crosscut.
2	2.7	Grab of broken material in bottom of small stope off unmapped crosscut.
3	2.8	Grab of broken material from bottom of big stope on No. 3 tunnel level.
4	74.0	Grab of broken mineralized material in bottom of small square set stope between No. 1 and No. 3 tunnel levels.

Sample No.	Lb. Hg/ton	Description
5	74.7	Specimen sample of pink mineralized gouge from short crosscut at bottom of inclined stope to surface.
6	15.0	Specimen of mineralized silica-carbonate rock, surface ledge NW of Bluff tunnel.
7	5.6	Grab at end of Bluff tunnel dump.
8	47.7	Specimen of high-marcasite material from surface at Flynn's discovery, SE of No. 1 tunnel portal.

ORE RESERVES

Ore Reserve Table

Class	Tons	Lbs.Hg/ton	Flasks
Measured	1,000	7	100
Indicated	None	--	--
Inferred	25,000	9	2,900

A few hundred tons of ore averaging 5 to 10 lbs. Hg/ton is on the floors, backs, and walls of old stopes between the No. 3 tunnel level and the surface. A few tens of tons, averaging 5 to 7 lbs. Hg/ton, could be selectively bulldozed from silica-carbonate rock outcrops 100 to 300 feet northwest of the Bluff tunnel.

It is inferred that one or more ore shoots totaling about 15,000 tons and averaging 5 to 15 lbs. Hg/ton will be found in the silica-carbonate zone 200 to 400 feet west of the No. 2 tunnel above and below the 1,853 level.

It is also inferred that one or more ore shoots totaling about 10,000 tons and averaging 5 to 10 lbs. Hg/ton will be found in the silica-carbonate zone 100 to 300 feet west of the Bluff tunnel

above and below the 2,105 level.

It is probable that more ore bodies are present along flattenings in the silica-carbonate zone on and above the 1,753-foot level and even below the Drain tunnel (1,420 feet) level.

EXPLORATION

Applicant's Proposal

The applicant proposed the following work:

(1) To explore the silica-carbonate zone northwest of the Bluff tunnel by 10 days of bulldozer work and 1,500 feet of surface diamond drilling.

(2) To explore the area in the vicinity of the No. 3 tunnel on the 2,008 level by 395 feet of rehabilitation work, 90 feet of crosscutting, and 870 feet of underground diamond drilling.

(3) To explore the silica-carbonate zone between the No. 2 and No. 3 tunnels on the 1,853 level by 430 feet of rehabilitation work in the No. 2 tunnel, 775 feet of drifting to the northwest, 240 feet of crosscutting, and 4,830 feet of underground diamond drilling.

The applicant estimated the cost of the proposed work to be $168,312.50.

This program is larger than can be justified by the inferred reserves in the area the applicant wishes to explore.

DMEA Proposal:

In conference with the applicant the program was modified to explore the silica-carbonate zone only at the northwest and southeast ends of the mine area.

The proposed modified program consists of two separate projects to be carried out concurrently.

Project I - Explore the silica-carbonate zone northwest of the Bluff tunnel between the surface and the Bluff tunnel level (2,105 feet) by eight days of bulldozing, 1,200 feet of diamond drilling, and 500 feet of drifting and crosscutting. The work is to be in two stages with Stage II contingent upon Stage I.

Stage I:

(1) Eight days of bulldozing to explore the foot and hanging walls of the silica-carbonate body and to expose the northeast-trending fault which cuts and offsets the silica-carbonate body.

(2) 1,200 feet of surface diamond drilling from one or more locations on the hanging-wall side to explore the silica-carbonate body at depths of 50 to 250 feet and to explore the northeast-trending fault at similar depths.

Stage II:

(3) Drift from Bluff tunnel northwesterly for 300 feet along silica-carbonate zone to intersect northeast-trending fault. The applicant will rehabilitate the Bluff tunnel at his expense.

(4) Crosscut or raise a total of 200 feet at favorable points along Item 3 drift.

Project II - Explore the silica-carbonate zone at the southeast end of the mine area at a depth of 150 to 200 feet below the surface by 500 feet of drifting and crosscutting and 800 feet of diamond drilling after rehabilitating the No. 2 tunnel. The work is to be in two stages. Stage II is to be undertaken only with the prior written approval of the Government.

Stage I:

(1) In No. 2 tunnel rehabilitate 430 feet to northwest end of short Y-drift.

(2) From northwest end of short Y-drift continue drift northwesterly 300 feet near hanging-wall side of silica-carbonate body.

Stage II:

(3) Crosscut or raise a total of 200 feet at favorable points along Item 2 drift.

(4) Diamond drill a total of 800 feet from two or more locations in the drift or crosscuts to determine the extent of possible ore bodies below the level.

In Project II it is recommended that a new drift be driven through the silica-carbonate rock rather than attempt to rehabilitate the old drift along the foot-wall contact. The contact zone is extremely difficult to hold and might well exceed new work in cost.

Exploration of the Corona mine is difficult because the silica-carbonate body in which the ore shoots occur dips moderately to steeply southwest while the surface slopes 20 to 30 degrees northeast. Exploration of the silica-carbonate zone from the hanging-wall side by drilling would require extremely long holes drilled through sheared serpentine. Access to surface drill sites would be difficult and costly. To explore through the foot wall would require an adit at least 1,200 feet long to intersect the flattening on the 1,753-foot level (fig. 2, Sec. B-B'). No underground exploration below the No. 2 tunnel level (1,853 feet) can be justified by the reserves inferred at the present time.

Summary of Recommended Work

	Project I	Project II
Rehabilitation	--	430 feet
Drifting	300 feet	300 feet
Timbering	500 feet	500 feet
Crosscutting and raising	200 feet	200 feet
Diamond drilling	1,200 feet	800 feet
Bulldozing	8 days	--

Estimated Cost of Recommended Projects

Estimated costs submitted by the applicant are used where applicable in the recommended program; however, his total unit costs are considered too high. Estimated time to complete the program is 12 months.

1. Independent Contracts

a. Bulldozing, 8 days @ $125.00/day	$1,000.00	
b. Diamond drilling, 2000 ft. @ $7.00/ft.	14,000.00	
c. Rehabilitation work, 430 ft. @ $12.50/ft. (to be performed by operator)	5,375.00	
Total.		$20,375.00

2. Labor and Supervision

a. Supervisor-Engineer, 12 mos. @ $550.00/mo.	$6,600.00	
b. Underground labor, drifting and crosscutting, 1000 ft. @ 4 ft. advance/shift, 250 shifts, employing 3 miners @ $16.00/shift. Cost/shift--$48.00, cost/ft.--$12.00, 1000 ft. @ $12.00/ft.	12,000.00	
Total.		$18,600.00

3. Operating Materials and Supplies

Drifting and crosscutting 1,000 ft.

	Cost per ft.
Explosives, powder, and detonators	$3.60
Timber-supports (as required)	7.00
Rail, with assembly parts	0.95
Ventilation pipe	0.75
Drill steel and bits	1.14
Water and air pipe	0.86
Fuel and lubricants	1.00
	$15.30

Total, 1000 ft. @ $15.30/ft. $15,300.00

4. Operating Equipment

Drifting and crosscutting 1,000 ft.

1 Compressor	$12,144.00
7 Mine cars	1,865.00
Air trammer	2,816.00
Slusher hoist	1,328.00
Mucking machine	3,721.00
2 Jackdrills	1,648.00
Pickup	750.00
Truck	750.00
Air receiver	500.00
Blower	400.00
Grinder	198.00
Jim Crow	50.00
Lamp charger	85.00
Slusher scraper	250.00
Msc. change room equipment	160.00
Total:	$26,665.00

5 yrs. depreciation of $26,665.00,
$444.00/mo., 12 mos.=$5,328.00*
(*use $5.33/ft.), 1000 ft. @ $5.33/ft. . . . . $ 5,330.00

5. Initial Rehabilitation

Access road rehabilitation	$500.00
Building rehabilitation	100.00

Total rehabilitation . . . . . $ 600.00

6. New buildings, improvements, etc.,.

Tool and core shed	$400.00	
Total.		$ 400.00

7. Miscellaneous

200 samples, to be analyzed for mercury, at $3.00/ea.	$600.00	
Core boxes and sample supplies	400.00	
Payroll taxes, insurance, etc.,. (12.5 percent of $12,000.00)	1,500.00	
Total		$ 2,500.00

8. Contingencies

Delays due to inclement weather, road repairs, etc.,.	$1,000.00 ?	
Total		$ 1,000.00
Total estimated cost of the proposed work.		$64,105.00

Unit Cost Summary

Bulldozing, 8 days @ $125.00/day	$1,000.00
Diamond drilling, 2000 ft. @ $7.00/ft.	14,000.00
Rehabilitation, 430 ft. @ $12.50/ft.	5,375.00
Drifting and crosscutting	
Labor, 1000 ft. @ $12.00/ft.	12,000.00
Supplies, 1000 ft. @ $8.30/ft.	8,300.00
Timber, 1000 ft. @ $7.00/ft.	7,000.00
Operating equipment, 1000 ft. @ $5.33/ft.	5,330.00
Total drifting and crosscutting cost per foot--$25.63	
Other costs	
Supervisor-Engineer, 12 mos.	$6,600.00
Initial rehabilitation	600.00
New buildings, improvements, etc.,.	400.00
Miscellaneous	2,500.00
Contingencies	1,000.00 ?
Estimated total cost of project:	$64,105.00

Cost Summary

	Project I	Project II	Other
Bulldozing	$1,000.00		
Rehabilitation		$5,375.00	
Drifting	7,689.00	7,689.00	
Crosscutting	5,126.00	5,126.00	
Timbering	3,500.00	3,500.00	
Diamond drilling	8,400.00	5,600.00	
Supervisor-Engineer			$6,600.00
Initial rehabilitation			600.00
New bldgs., improvements, etc.			400.00
Miscellaneous			2,500.00
Contingencies			1,000.00
	$25,715.00	$27,290.00	$11,100.00

Total estimated cost of the DMEA project. $64,105.00

Government participation at 75 percent $48,078.75

The contract should stipulate that diamond drill holes should be size "AX" or larger to insure a maximum core recovery. Timbering provided for drifts and crosscuts should be set forth in the contract as a separate item, in quantities only as required.

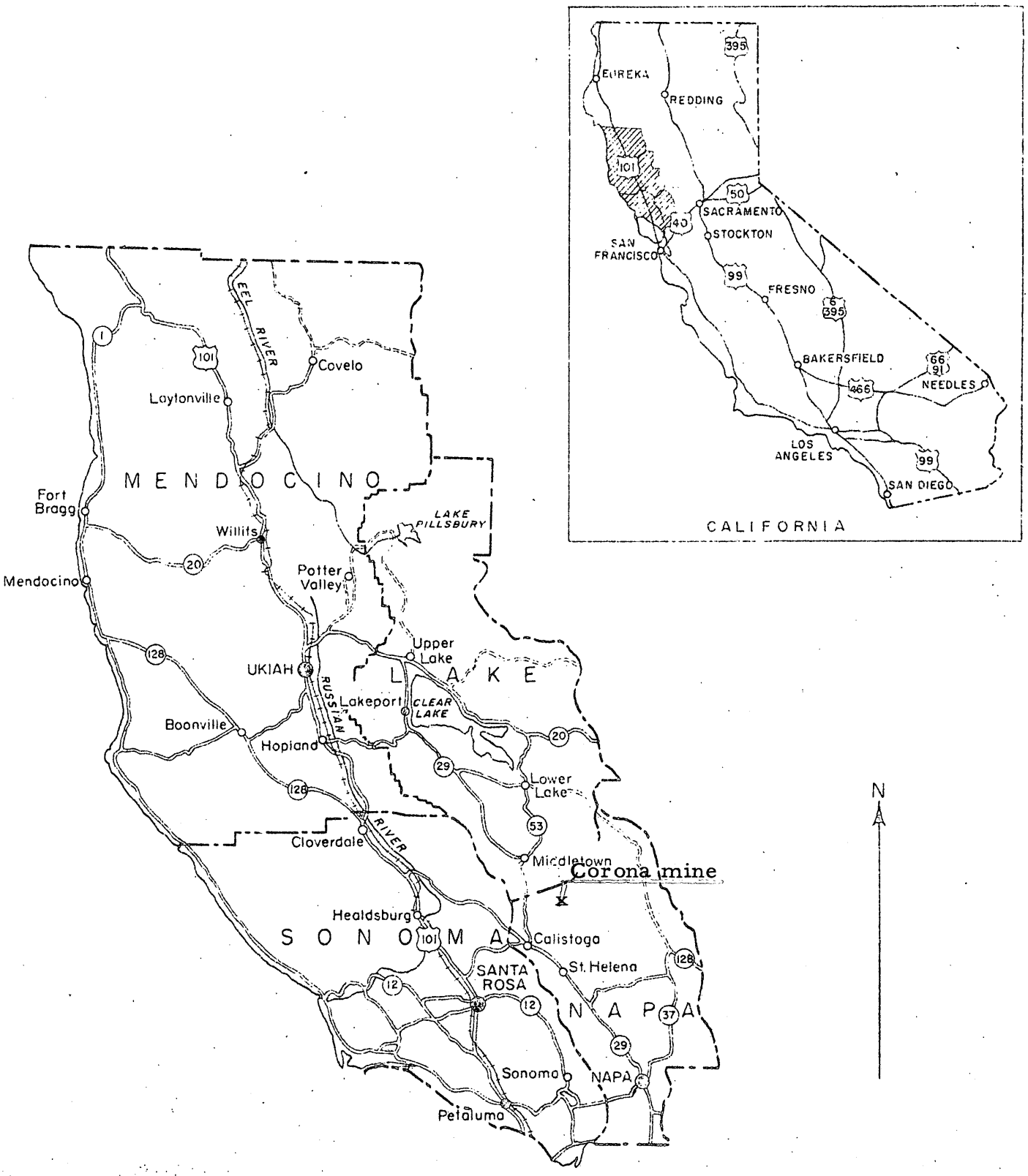


Figure 1. INDEX MAP OF LAKE, MENDOCINO, NAPA, AND SONOMA COUNTIES, CALIFORNIA

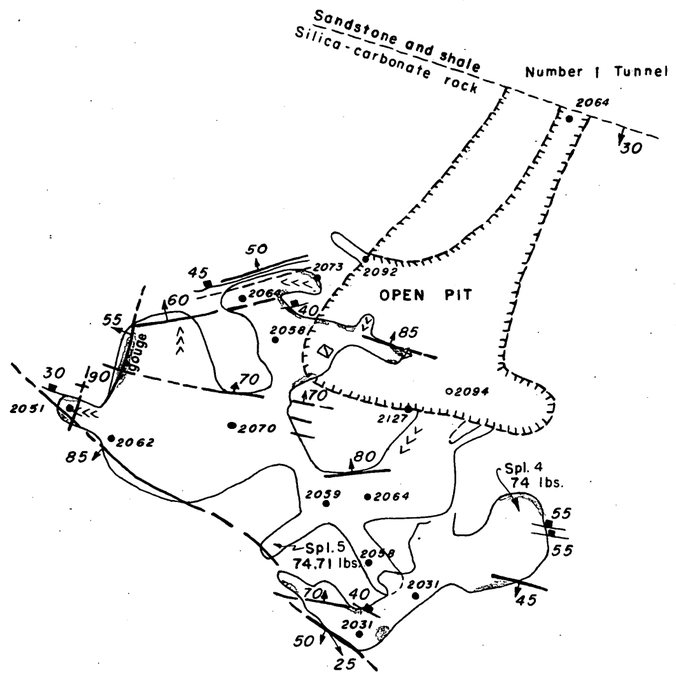
0 20 40 60 Miles

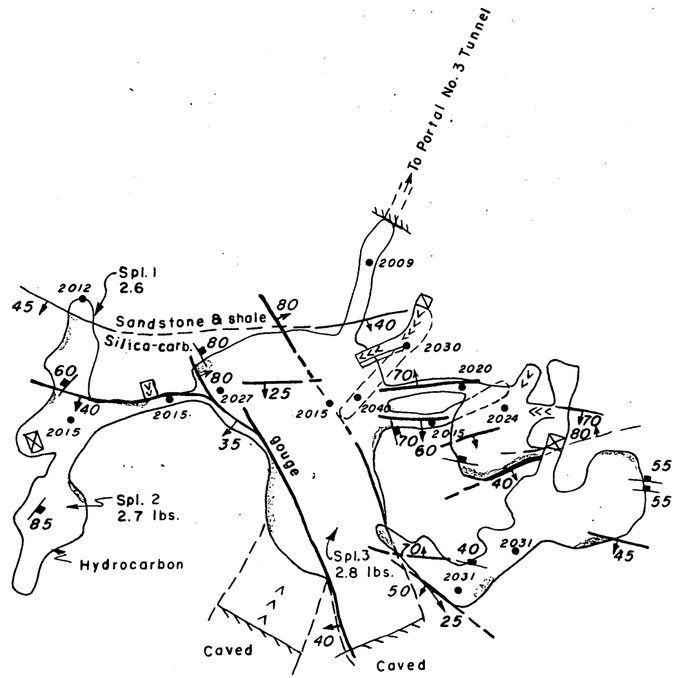
OFFICIAL FILE COPY
D M E A
RECEIVED APR 25 1957
DATE | INITIALS | CODE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 4601
(MERCURY)

Cinnabar - exposures of ore grade
Workings are in silica-carbonate rock





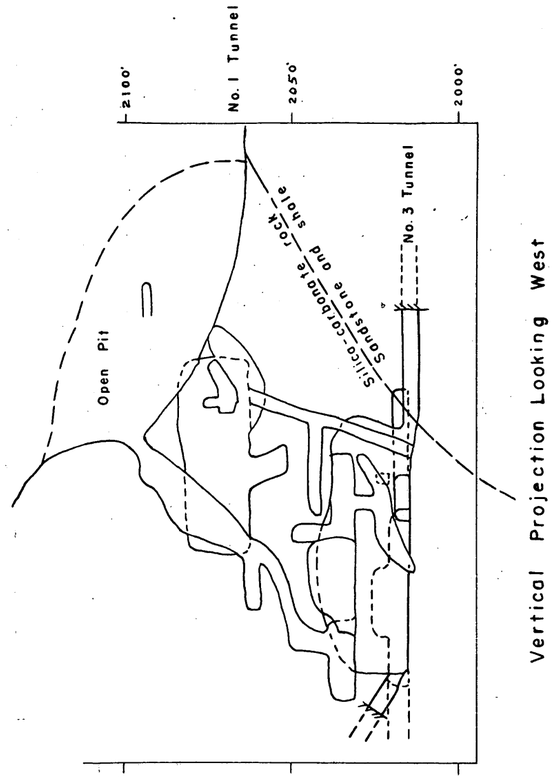


Figure 3. Stopes Above No. 3 Tunnel, Corona Mine, Napa County, California

Mapped by D. B. Tatlock
February 21, 1957

0 40 80

SCALE: 1 inch = 40 feet

N

OFFICIAL FILE COPY
D M E A
RECEIVED APR 25 1957

DATE	INITIALS	CODE

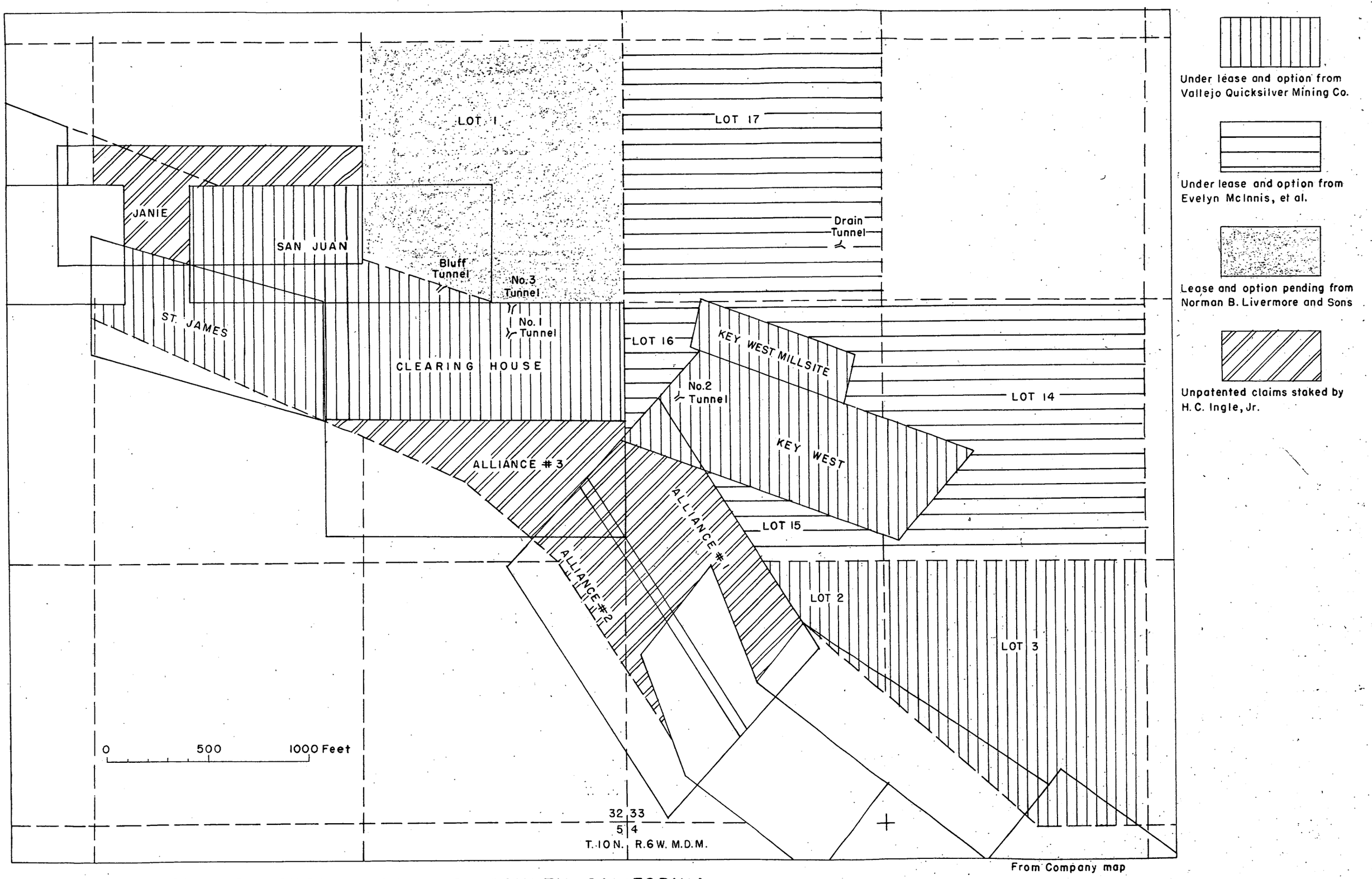


Figure 4. PROPERTY MAP, CORONA MINE, NAPA COUNTY, CALIFORNIA

OFFICIAL FILE COPY
D M E A
RECEIVED APR 25 1957

DATE	INITIALS	CODE

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/18	Chapman	400
1/18	Martin	400
1/23	Selfridge	130
	[illegible]	110
"	Matthews	100
1-24	CW	220

JAN 23 1957

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 4601 - Mercury
Hugh C. Ingle
Corona Mine
Napa County, Calfiornia

Dear Mr. Ricker:

The above docketed application for exploration assistance is being referred to your office for a field examination of the property.

Copies of memoranda dated January 11 and 14, 1957, by N. E. Nelson, Geological Survey, and A. D. McMahon, Bureau of Mines, respectively, relating to the project are enclosed. Also enclosed is an extra copy of the application for the use of the Field Team.

Please obtain any necessary information about the pending lease, from Norman B. Livermore and Sons, mentioned on the Property Map.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

(S) James Paone (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

TLChapman:am 1-18-57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT REG II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

Enclosures

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/18	Chapman	400
1/18	Martin	400
1/23	Gellrudge	130
	[illegible]	110
"	Whitenburg	100
		220

Nelson
Paore

JAN 23 1957

Mr. Hugh C. Ingle
1310 Coolidge
Tracy, California

Re: Docket No. DMEA 4601 - Mercury
Corona Mine
Napa County, California

Dear Mr. Ingle:

The above docketed application for exploration assistance for mercury ores has been reviewed by the Defense Minerals Exploration Administration and referred to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada, for a field examination of the property.

Any assistance you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittenderf

Administrator

TLChapman:am 1-18-57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT REG II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 15 1957

DATE	INITIALS	CODE
1/15	CW	220
1/15	WSM	400

January 14, 1957

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: Commodity Specialist, Branch of Base Metals

Subject: Review of Application, Docket No. DMEA 4601, Mercury, Hugh C. Ingle, Jr., Corona Mines, Napa County, California. $168,312.50

The applicant has requested Government assistance in an exploration program consisting of surface trenching and diamond drilling, rehabilitation of underground workings, underground diamond drilling, drifting and crosscutting. It is planned to investigate three areas which are believed to show favorable geological structures.

According to reports by the California Division of Mines production from the Corona mine through 1939 was 4,626 flasks and it was worked intermittently from 1941 to 1943. The workings consist of about 2 miles of drifts, crosscuts and adits although less than 10 percent of the openings were accessible during 1941 and 1942.

An investigation of the outcrops and underground target areas with a less elaborate program may be warranted. Referral to the Field Team is recommended.

A. D. McMahon

A. D. McMahon

Attachment
Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U. S. G. S.
F. D. Lamb
F i l e s

Copy retained

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 15 1957

DATE	INITIALS	CODE
1-15	CW	220
1/16	WSM	400

January 11, 1957

Re: DMEA 4601
Hugh C. Ingle, Jr.
Corona Mine
Napa County, California
$168,312.50 Mercury

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application

The applicant requests assistance in rehabilitation work and building and exploration in an old-time mine, credited with the production of approximately 5,000 flasks of mercury.

Three sets of ore bodies were explored and mined. The ore bodies occur in a wide zone of silica-carbonate rock between a hanging wall of serpentine and a footwall of sandstone and shale. The zone is said by the applicant, to be traceable for a mile and has been followed down a rolling footwall for 800 feet. The ore bodies, as shown in maps and sections, have greater dip than strike lengths. In the area of the largest ore shoots the mineralization appears to be related to cross faults.

The work proposed would reopen many feet of the old workings and open up by drifts and crosscuts areas believed to have been tested less thoroughly than warranted. Diamond drilling would be used in testing the zone on either side of the long new drift in the zone.

That the zone has not been adequately explored is not too evident. Small ore bodies may have been missed, but in view of the large amount of dead work already done, the proposed work program may not be commensurate with the probable potential.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

Copy retained 400

Property
Map mentions
pending lease from
Norman B. Livermore, Esq.
WSG
1/11/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

January 10, 1957

Mr. Hugh C. Inglo, Jr.
1910 Coolidge
Tracy, California

Subject: DMEA-4601

Dear Mr. Inglo

Your application for exploration assistance, dated December 18, 1956 submitted to our office at Reno, has been assigned Docket Number DMEA-4601 and referred to the Iron and Ferro-Alloys Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

(Sgd) Allen S. Dakan

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:

Region II. Reno, Nevada

~~Code 400~~

6416

U. S. Government Messenger Envelope

Standard Form No. 65 (Rev. 1/46)

1. Use blocks consecutively
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS
E W Ellis Rm 4445	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	
	RUN STOP	

Send surplus envelopes to supply room for reissue.

Use other side

Use RUN and STOP only when messenger service between Government buildings in Washington is required. Your mail room has RUN and STOP information.

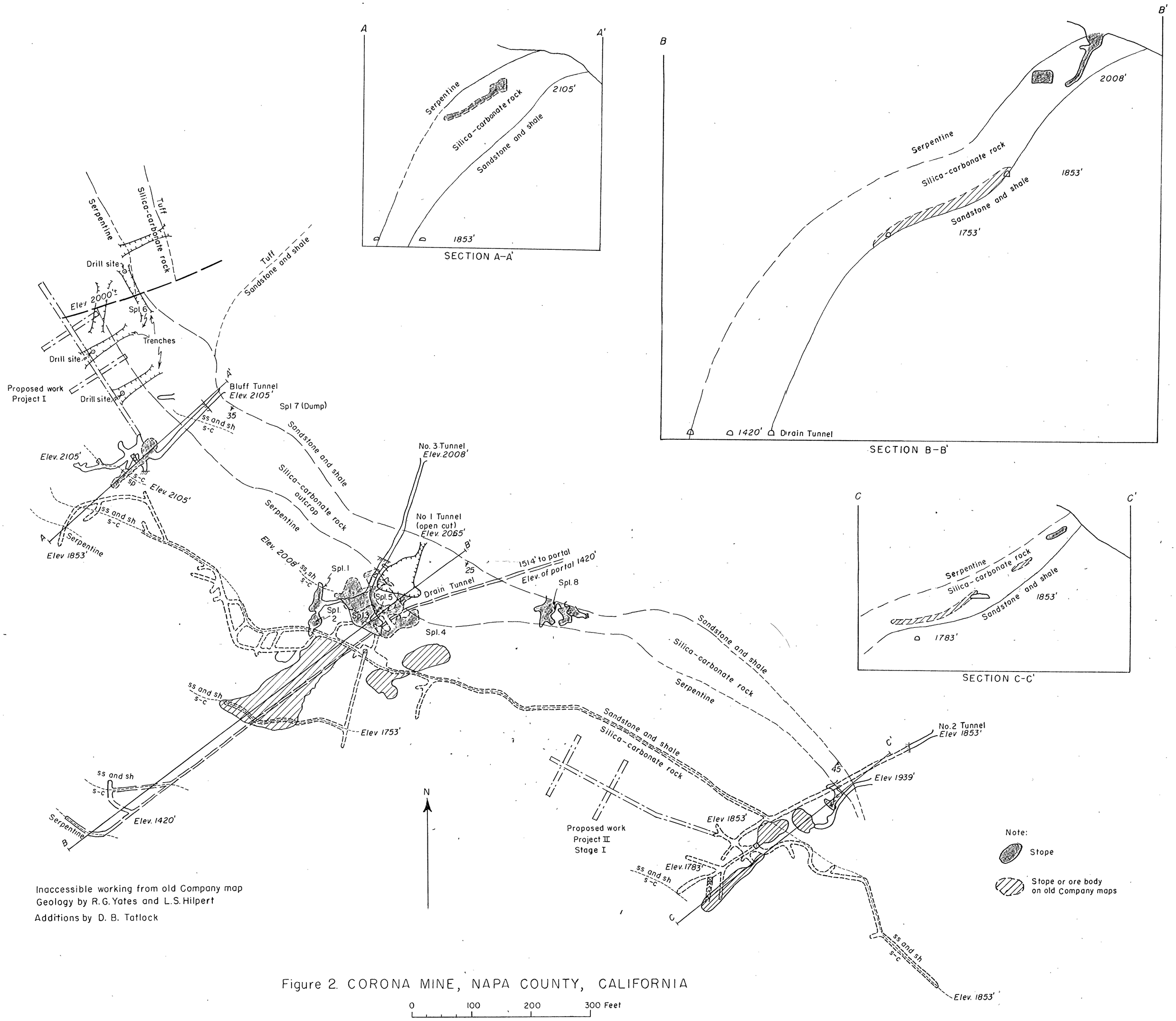
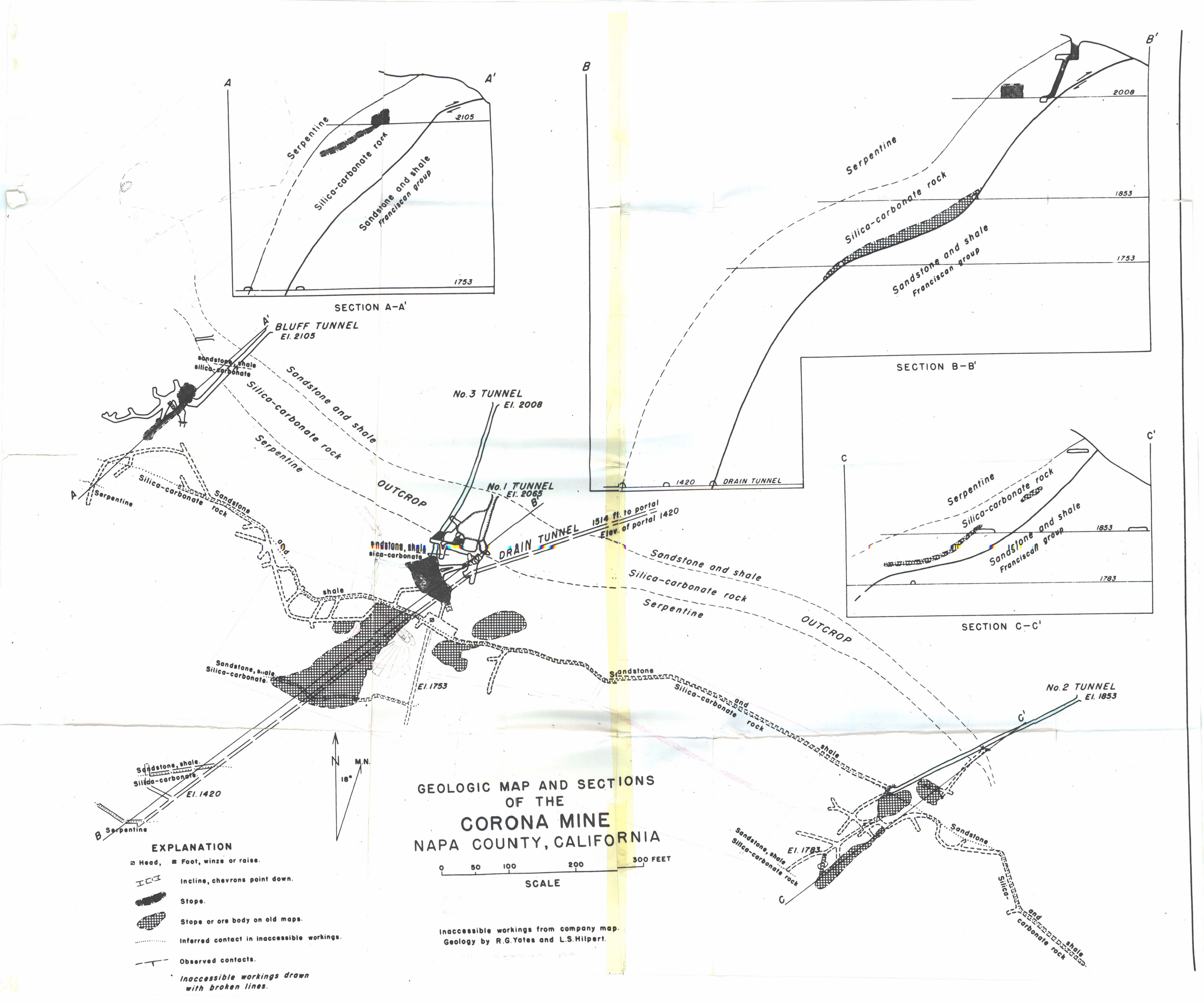
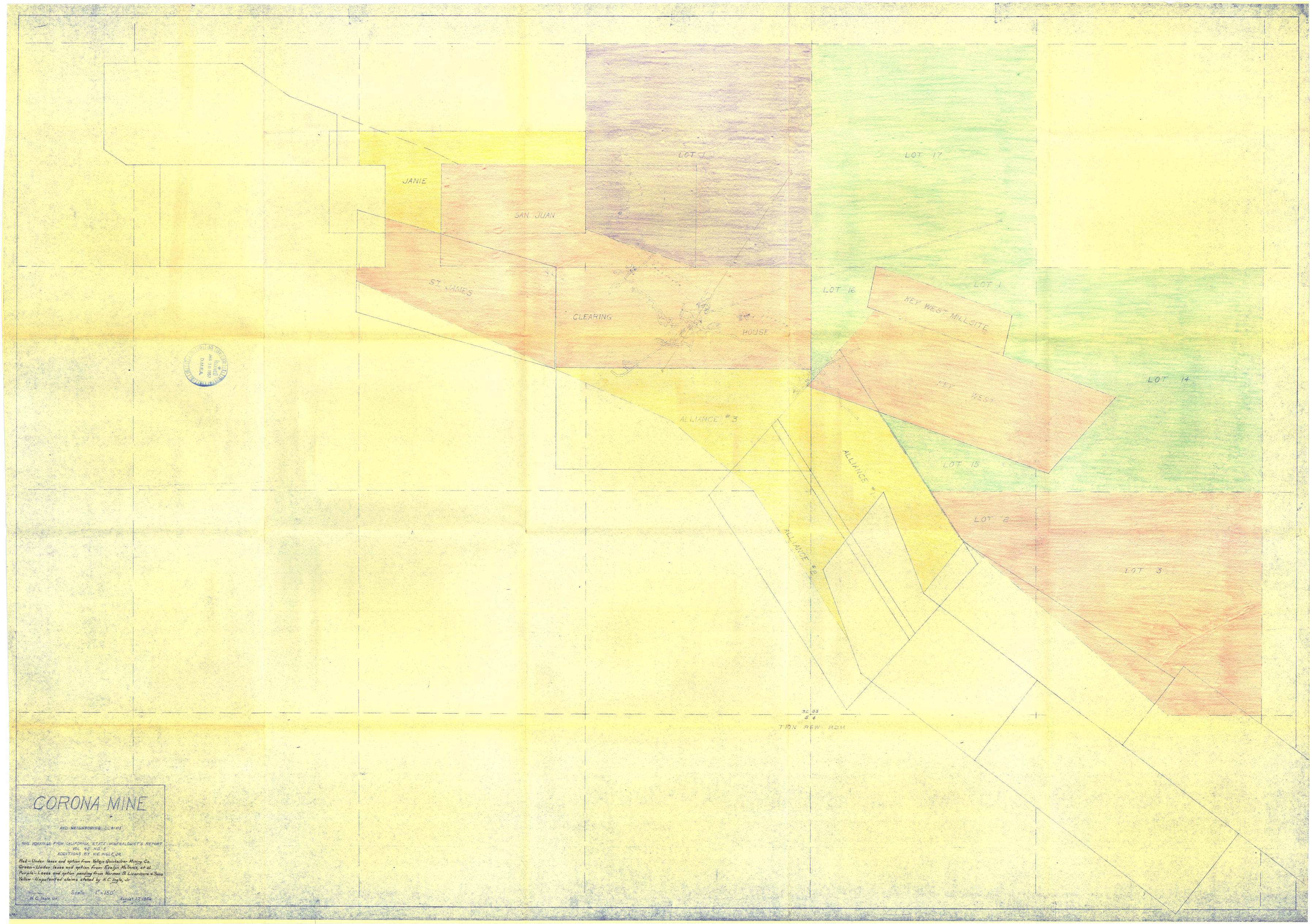


Figure 2. CORONA MINE, NAPA COUNTY, CALIFORNIA


A
A'
Serpentine
Silica-carbonate rock
Sandstone and shale
Franciscan group
2105
1753
SECTION A-A'
B
B'
2008
1853
1753
SECTION B-B'
C
C'
1853
1783
SECTION C-C'
BLUFF TUNNEL
El. 2105
sandstone, shale
silica-carbonate
Sandstone and shale
Silica-carbonate rock
Serpentine
OUTCROP
No. 3 TUNNEL
El. 2008
No. 1 TUNNEL
El. 2065
DRAIN TUNNEL
1514 ft. to portal
Elev. of portal 1420
1420
DRAIN TUNNEL
Sandstone
shale
El. 1753
No. 2 TUNNEL
El. 1853
El. 1420
El. 1783
N
M.N.
18°
GEOLOGIC MAP AND SECTIONS
OF THE
CORONA MINE
NAPA COUNTY, CALIFORNIA
0 50 100 200 300 FEET
SCALE
EXPLANATION
Head, Foot, winze or raise.
Incline, chevrons point down.
Stope.
Stope or ore body on old maps.
Inferred contact in inaccessible workings.
Observed contacts.
Inaccessible workings drawn with broken lines.
Inaccessible workings from company map.
Geology by R.G. Yates and L.S. Hilpert.


JANIE
SAN JUAN
LOT 1
LOT 17
ST JAMES
CLEARING
HOUSE
LOT 16
LOT 1
KEY WEST MILLSITE
KEY WEST
LOT 14
ALLIANCE #3
ALLIANCE #1
LOT 15
ALLIANCE #2
LOT 2
LOT 3
32 33
5 4
T10N R6W MDM
CORONA MINE
AND NEIGHBORING CLAIMS
MINE WORKINGS FROM CALIFORNIA STATE MINERALOGIST'S REPORT
VOL. 42 NO. 5
ADDITIONS BY H.C. INGLE JR.
Red—Under lease and option from Vallejo Quicksilver Mining Co.
Green—Under lease and option from Evelyn McInnis, et al.
Purple—Leases and option pending from Norman B. Livermore & Sons
Yellow—Unpatented claims staked by H.C. Ingle, Jr.
H.C. Ingle Jr.
Scale 1" = 150'
August 17, 1954